

SCS ENGINEERS



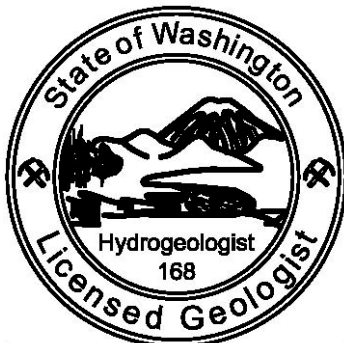
2016 Annual Monitoring Report Olympic View Sanitary Landfill

Presented To:

Olympic View Sanitary Landfill, Inc.
10015 SW Barney White Road
Bremerton, Washington 98366
(818) 252-3202

Presented From:

SCS ENGINEERS
2405 140th Avenue NE, Suite 107
Bellevue, Washington 98005
(425) 746-4600



Daniel A. Venchiarutti

March 21, 2017
File No. 04204027.20

Offices Nationwide
www.scsengineers.com

Daniel A. Venchiarutti, LG, LHG
Project Director
SCS ENGINEERS

Gregory D. Helland, LG, LHG
Project Director
SCS ENGINEERS

Table of Contents

1.0	Introduction.....	1
2.0	Site Description.....	3
2.1	Location.....	3
2.2	Background	3
2.3	Topography and Climate.....	3
2.4	Local and Regional Hydrogeology	4
3.0	2016 Monitoring Activities.....	5
3.1	Groundwater	5
3.1.1	Groundwater Monitoring Network	5
3.1.2	Monitoring Schedule	6
3.1.3	Parameters and Analytical Methods.....	6
3.1.4	Field Monitoring and Sampling Procedures.....	7
3.2	Leachate	8
3.2.1	Leachate Monitoring Locations	8
3.2.2	Monitoring Schedule	8
3.2.3	Parameters and Analytical Methods.....	8
3.2.4	Leachate Monitoring Field Procedures.....	9
3.3	Landfill Gas	9
3.3.1	Landfill Gas Monitoring Network	10
3.3.2	Monitoring Schedule	10
3.3.3	Monitored Parameters	10
3.3.4	Landfill Gas Monitoring Field Procedures and Instrumentation.....	10
3.3.5	Field Conditions	10
4.0	2016 Monitoring Results.....	11
4.1	Groundwater	11
4.1.1	Groundwater Elevation and Flow	11
4.1.2	Groundwater Quality.....	12
4.1.3	Spatial Distribution and Temporal Trends.....	12
4.1.4	Groundwater Geochemistry	15
4.1.5	Statistical Prediction Limit Evaluation	16
4.1.6	Point of Compliance and Cleanup Level Exceedances	17
4.2	Leachate Monitoring Results.....	19
4.2.1	Leachate Quality.....	19
4.2.2	Leachate Generation Rates	19
4.3	Landfill Gas Monitoring Results.....	20
4.3.1	Perimeter Gas Probe	20
4.3.2	Structure Monitoring	21
4.3.3	Barometric Pressure Conditions	21
5.0	Summary and Conclusions	22
5.1	Groundwater	22
5.1.1	Groundwater Quality.....	22
5.1.2	Evidence for Natural Attenuation.....	23

5.2	Leachate	24
5.3	Landfill Gas	25
6.0	References.....	26

List of Tables

Table 1	Groundwater Well Construction Details
Table 2	Summary of Analytical Parameters
Table 3	Groundwater Elevations
Table 4A	Detections and Field Measurements – Compliance Monitoring Wells
Table 4B	Detections and Field Measurements – Performance Monitoring Wells
Table 4C	Detections and Field Measurements – Downgradient Monitoring Wells
Table 4D	Detections and Field Measurements – Upgradient Monitoring Wells
Table 4E	Detections and Field Measurements – Leachate and Leak Detection Locations
Table 5	2016 Groundwater and Leachate VOC Detections
Table 6A	Summary of 2016 Significant Parameters Trends by Well Type
Table 6B	Summary of 2016 Trends in Groundwater Monitoring Wells (2005 – 2016)
Table 7	Fourth Quarter 2016 Prediction Limit Exceedances
Table 8	2016 Annual Groundwater Cleanup Level Statistical Evaluation Summary
Table 9	Groundwater Quality Criteria and Site-Specific Cleanup Level Exceedances
Table 10	2016 Leak Detection System Volumes
Table 11	Fourth Quarter 2016 Landfill Gas Measurement Results
Table 12	LFG Monitoring Results - 2016

List of Figures

Figure 1	Site Location Map
Figure 2	Groundwater Monitoring Network and Leachate Monitoring Locations
Figure 3	Subsurface LFG Monitoring Probes and Building Monitoring Locations
Figure 4A	Groundwater Elevation Map – First Quarter February 2016
Figure 4B	Groundwater Elevation Map – Second Quarter May 2016
Figure 4C	Groundwater Elevation Map – Third Quarter August 2016
Figure 4D	Groundwater Elevation Map – Fourth Quarter November 2016
Figure 5	Historical Groundwater Elevations
Figure 6A	Total Arsenic Concentration Map – November 2016
Figure 6B	Total Iron Concentration Map – November 2016
Figure 6C	Total Manganese Concentration Map – November 2016
Figure 6D	Vinyl Chloride Concentration Map – November 2016
Figure 7	Leachate Generation Volumes (2007 – 2016)
Figure 8	Barometric Pressure during LFG Migration Monitoring – November 2016

Appendices

Appendix A	Fourth Quarter 2016 Field Documentation
Appendix B	Fourth Quarter 2016 Data Validation and Analytical Data Reports
Appendix C	2016 Annual Time Series, Trend Test, and Prediction Limit Evaluation
Appendix D	Fourth Quarter 2016 Groundwater Geochemical Evaluation
Appendix E	Landfill Gas Monitoring Results

1.0 INTRODUCTION

This report summarizes the results of the 2016 quarterly post-closure environmental monitoring conducted at the Olympic View Sanitary Landfill (OVSL), located in Bremerton, Washington. Monitoring events for the current compliance period were performed during February, May, August and November of 2016. Quarterly environmental monitoring at the OVSL includes sampling and analysis of groundwater and leachate pond leak detection liquid, and monitoring landfill gas (LFG). Leachate influent monitoring is also conducted at the OVSL on an annual basis.

The current OVSL monitoring program meets the regulatory requirements for both corrective action and post-closure detection and assessment monitoring. Quarterly groundwater and LFG monitoring was performed at the facility in accordance with the OVSL Environmental Monitoring Plan (EMP, Engineering Management Support, Inc., 2010) and the updated site-specific Sampling and Analysis Plan (SCS Engineers, 2013). The plans were developed in consultation with the Washington Department of Ecology (Ecology) and reflect a refined understanding of the site conditions based on the results of a Remedial Investigation/Feasibility Study (RI/FS) per WAC 173-340 (Model Toxics Control Act, MTCA). The OVSL monitoring program also meets the requirements of the Criteria for Municipal Solid Waste Landfills (WAC 173-351-430) which is administered by the Kitsap County Public Health District (KPHD).

SCS Engineers (SCS) and SCS Field Services (Field Services) performed quarterly environmental monitoring at the OVSL from February through December 2016. The following information describes the quarterly monitoring activities included in this report:

- Quarterly measurement of depth-to-water in groundwater monitoring wells within the monitoring well network
- Quarterly collection and analysis of groundwater samples at select monitoring wells within the monitoring network
- Quarterly collection and analysis of a leachate pond/leak detection system sample
- Collection and analysis of a leachate influent samples (during the fourth quarter monitoring event)
- Quarterly measurement of LFG concentrations at perimeter soil gas monitoring probes and building monitoring locations

This report includes:

- A site location description and background section
- A discussion of monitoring activities including a summary of sampling techniques and locations within the groundwater and LFG monitoring network
- Construction details for groundwater monitoring wells
- A discussion of groundwater including groundwater elevations, flow direction, and flow velocity for the reporting year
- A summary of the monitoring analytical program and presentation of the analytical results and findings for the reporting year
- A summary of the LFG monitoring results for the reporting year

- A geochemical evaluation of water quality samples collected in November 2016
- A statistical trend analysis and concentration time series plots of groundwater monitoring results
- A statistical evaluation and comparison of groundwater results to calculated prediction limits
- A comparison of groundwater monitoring results to site-specific cleanup levels and other applicable criteria
- Field documentation from the 2016 monitoring events
- The fourth quarter 2016 data validation report and associated analytical laboratory reports
- A summary of historical LFG monitoring measurements

Previously issued analytical laboratory data reports for the first three quarters of the 2016 monitoring will not be reissued with this report and can be found in the respective quarterly monitoring reports. Similarly, LFG migration monitoring results for the first three quarters of the 2016 compliance period are reported separately in their respective quarterly monitoring reports.

In order to conserve paper resources, the complete 2016 annual report is presented on an enclosed data CD attached to the rear cover of the document. However, for the convenience of the reviewer, hard copies of select materials are included in this report.

2.0 SITE DESCRIPTION

2.1 LOCATION

The closed OVSL facility is located on approximately 436 acres in Sections 3 and 10, Township 23N, Range 1W of the Willamette Meridian, in Kitsap County, Washington. The facility is situated on an upland area approximately 10 miles southwest of the city of Bremerton. The facility address is 10015 SW Barney White Road, Bremerton, Washington. A site location map is shown on Figure 1. The closed refuse fill area covers approximately 65 acres of the property. A site plan is presented on Figure 2.

2.2 BACKGROUND

The OVSL facility accepted municipal solid waste between 1967 and 2003. Landfill closure was completed in 2004, in accordance with Washington Administrative Code (WAC) 173-351. Landfill closure activities included construction of a LFG monitoring system, an active LFG collection and treatment system, a leachate collection and treatment system, a storm water drainage control system, and a final landfill cover.

The final landfill cover consists of (top to bottom):

- 12-inches of vegetative topsoil and cover soil
- geotextile fabric
- 12-inch drainage layer
- Geonet composite 60-mil flexible membrane liner
- 6-inch thick, low permeability soil

The active LFG collection system consists of a total of 81 well heads (69 vertical wells, 4 horizontal wells, and 8 interconnections to the leachate collection system) connected to a gas treatment flare station. The leachate collection system consists of subgrade collection piping and a leachate collection lagoon. A storm water drainage system controls storm water erosion and minimizes off-site migration of sediment-laden water (WMW 2008). Drainage and erosion protection improvements include vegetation, a landfill toe under-drain, down chutes, culverts, and drainage ditches.

2.3 TOPOGRAPHY AND CLIMATE

The site is located in the Southern Upland of the Kitsap Peninsula adjacent to the Union River-Gorst Creek trough. Site topography ranges from approximately 150 to 360 feet above mean sea level (MSL). The land surface generally slopes to the west-southwest towards the Union River, which is situated approximately a half mile west of the site.

Kitsap County's climate is characterized as maritime, with long, mild, wet winters and short, cool, dry summers. Climatically, and due to the local relief, there can be significant variations in total annual precipitation and average temperatures over short distances.

2.4 LOCAL AND REGIONAL HYDROGEOLOGY

The regional near-surface geology in the vicinity of the OVSL is dominated by glacio-fluvial and glacio-lacustrine deposits associated with the Vashon glaciation. A Remedial Investigation Report for completed for the OVSL (Parametrix 2007) identified the following main stratigraphic units in the vicinity of the Site:

- Organic Soils and Peat (Qw)
- Alluvium (Qal)
- Vashon Recessional Outwash (Qvr)
- Vashon Lacustrine Recessional Outwash (Qvrl)
- Vashon Till (Qvt),
- Vashon Advance Outwash (Qva)
- Vashon Advance Lacustrine Deposits (Qval)
- Pre-Vashon Deposits (Qpvu)

With the exception of the Vashon Till (which has not been confirmed to be present at the site), all of these units appear to be present beneath the OVSL.

Information provided in the site conceptual model indicates that organic soils/peat, alluvium, outwash, glacio-fluvial, glacio-lacustrine, and flood plain deposits outcrop along the west-central portions of the OVSL facility. Groundwater is present beneath the site at elevations ranging between approximately 140 and 260 feet above MSL (depths-to-water ranging between near-surface and approximately 80 feet below ground surface). The groundwater flow direction beneath the landfill is generally toward the west.

3.0 2016 MONITORING ACTIVITIES

3.1 GROUNDWATER

3.1.1 Groundwater Monitoring Network

Quarterly groundwater monitoring is conducted at the OVSL in accordance with the January 2001 Agreed Order, EMP as modified through subsequent technical discussions with Ecology, and the site-specific Sampling and Analysis Plan (SAP). The monitoring also meets the post-closure landfill monitoring requirements under WAC 173-351-430.

The groundwater monitoring network at the OVSL includes four categories of monitoring wells that are sampled either quarterly or semi-annually, as well as those that are only used for water level measurements. The four well categories designated at the Site include the following:

- Upgradient (background) monitoring wells are used to assess the quality of groundwater upgradient of the landfill Site.
- Performance monitoring wells are used to assess groundwater quality at the edge of the waste management unit.
- Compliance monitoring wells are used to assess groundwater quality at the MTCA Point-of-Compliance (POC).
- Downgradient monitoring wells are used to assess groundwater quality leaving the Site.

A monitoring well identifier and type summary is provided on the table below. The locations of these groundwater monitoring wells are illustrated on Figure 2.

Monitoring Wells at the OVSL by Type			
Upgradient	Performance	Compliance	Downgradient
MW-13A	MW-2B1	MW-15R	MW-29A (S)
MW-13B	MW-4	MW-34A	MW-32
MW-16	MW-19C	MW-34C	MW-33A (S)
MW-35	MW-20	MW-39	MW-33C
	MW-23A	MW-42	MW-36A
	MW-24	MW-43	

(S) = semiannual monitoring

A indicates a shallower well completion

B indicates an intermediate well completion

C indicates a deeper well completion

Well completion depths range from approximately 9 to 230 feet below ground surface (bgs). Screen lengths vary from 5 to 20 feet, with a 10-foot average well screen length. Completion depth differences are differentiated using the following letter indicators: “A” is a shallower monitoring well completion, “B” indicates an intermediate well completion, and “C” indicates a deeper monitoring well completion. Construction details for the monitoring wells are provided on Table 1.

Each of the groundwater monitoring wells designated for routine sampling is outfitted with a dedicated sampling pump (QED Well Wizard) suitable for low-flow purging and sampling. Low-flow sampling with dedicated pumps minimizes pump-introduced artifacts and eliminates cross contamination between wells. The dedicated bladder pumps are positioned with their inlets located within the screened interval of the well. Well construction, development, and pump installation are reported in detail in the *Report of 2005 Gas Probe and Monitoring Well Installations at OVSL* (SCS Engineers 2006), the *Remedial Investigation Report, OVSL, Kitsap County* (Parametrix 2007) and the *Groundwater Monitoring Well Installation Report, OVSL* (SCS Engineers. 2009).

3.1.2 Monitoring Schedule

Groundwater monitoring was conducted on a quarterly basis in 2016, with sampling events completed in February, May, August, and November 2016. In accordance with the SAP, monitoring wells MW-29A and MW-33A were sampled on a semiannual basis during May and November 2016.

3.1.3 Parameters and Analytical Methods

The analytical program for groundwater quality monitoring during the 2016 reporting period included the following Appendix I and II parameters:

Analytical Program	Parameter
Field Measurements	temperature, specific conductivity, pH, dissolved oxygen, turbidity, and static water level
Geochemical Indicator and General Parameters	chloride, sulfate, nitrate, calcium, sodium, bicarbonate, alkalinity, magnesium, potassium, iron, and manganese (Total suspended solids as of Sept. 2013)
Total Metals*	antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, nickel, selenium, silver, thallium, vanadium, and zinc
Volatile Organic Compounds	as listed in WAC 173-351 Appendix I
Leachate Indicator Parameters	ammonia, total organic carbon (TOC), and total dissolved solids (TDS)

* Consistent with the 2013 revisions to WAC 173-351, both dissolved and total Appendix I metals data were reported for a minimum period of eight quarters between September 2013 and December 2015. Beginning in 2016, Appendix I metals data have only been reported as a total fraction.

Laboratory methods are derived from several industry-standard publications. Methods for Chemical Analysis of Water and Wastes (MCAWW, EPA 1983) describe methods used for nitrate, nitrite, chloride, sulfate, and ammonia analyses. *Standard Methods for the Examination of Water and Wastewater* (APHA 1999, revised 2014) describe the methods used for analysis of alkalinity (total and bicarbonate), TDS, total suspended solids (TSS), and TOC. Metals and

VOC analyses are described in EPA publication number SW-846, Test Methods for Evaluating Solid Wastes, Physical and Chemical Methods (EPA revised 2007). The method for measuring arsenic is described in Method 200.8, Determination of Trace Elements in Waters and Wastes by Inductively Coupled Plasma-Mass Spectrometry (EPA 1994).

All laboratory analyses were completed by TestAmerica labs in Denver, Colorado and Buffalo, New York; and by Analytical Resources Incorporated in Tukwila, Washington. The laboratories are accredited in accordance with WAC 173-50, Accreditation of Environmental Laboratories.

3.1.4 Field Monitoring and Sampling Procedures

Field activities conducted at the site consist of surveying well conditions, obtaining field measurements (depth-to-water, pH, specific conductivity, turbidity, temperature, and dissolved oxygen), collecting groundwater samples for laboratory analysis, and packaging and shipping the samples to the relevant laboratories. These activities are conducted as described in the revised 2013 site-specific SAP.

As part of the routine groundwater monitoring program, static water levels were measured and recorded each quarter in the wells within the groundwater monitoring network prior to initializing sampling procedures. Static water levels are collected from both monitoring wells where water quality samples are collected and additional monitoring wells used only for determining the potentiometric groundwater surface. Depth-to-water measurements (measured to the nearest 0.01 ft.) were obtained using an electronic water level indicator. Static water level measurements were recorded and documented on field sampling and measurement forms included in Appendix A (for November 2016).

Prior to sample collection, groundwater monitoring wells were purged in order to ensure representative groundwater conditions at each location. Both purging and sampling of the monitoring wells were conducted using low-flow/low-volume well sampling techniques. Once the pumping was initiated, flow rates were confirmed by volumetric discharge measurements (by measuring the total volume discharged per cycle using a graduated cylinder and verifying the number of pump cycles per minute specified by the controller). Field measurements for pH, temperature, specific conductivity, dissolved oxygen, and turbidity were conducted using a closed, in-line flow-through cell and a portable turbidity meter. When water quality parameters stabilized and there had been no change in the pumping water level, sample collection would begin. Field parameters were measured as described in *Standard Methods for the Examination of Water and Wastewater* (APAH 2014). Before initiating the purge process, the multiparameter field meters were calibrated in accordance with manufacturer's guidelines. Field data obtained during the well purging procedure was recorded on field sampling and measurement forms included in Appendix A (for November 2016).

Non-disposable sampling equipment that was exposed to well water (e.g., electronic water level tape) was decontaminated between wells as outlined in the SAP. Decontamination of equipment was completed before leaving each well, thereby minimizing potential cross contamination. Disposable sampling equipment and disposable personal protective equipment (PPE) were removed and disposed of after each use and prior to leaving each well.

3.2 LEACHATE

Leachate generated from three separate closed municipal waste storage cells is collected and pumped to an arterial force main that discharges to a one-acre leachate pond situated near the western end of the landfill (refer to Figure 2). The force main outfall is located on the north end of the leachate lagoon. Accumulated leachate is treated by aeration. When the leachate elevation in the pond approaches the elevation of the former pond outlet, leachate is removed via pumping and hauled to nearby wastewater treatment plants.

3.2.1 Leachate Monitoring Locations

Per the EMP and SAP, leachate monitoring is performed at three locations at the facility. Influent leachate sampling station L-INF is situated immediately downstream of the force main outfall on the north end of the leachate collection pond. The OBWL-TD sampling station is located at the Old Barney White Landfill Toe Drain collection sump, which subsequently connects to the leachate pond. Sampling station LP-LCD is located at the pump discharge outlet which periodically returns any accumulated liquids that collect beneath the leachate pond liner system back into the main lagoon.

The locations of the leachate monitoring stations are illustrated on Figure 2.

3.2.2 Monitoring Schedule

The current SAP provides for annual monitoring of the L-INF and OBWL-TD stations and quarterly monitoring of the LP-LCD station. Leachate samples were collected from L-INF and OBWL-TD during the fourth quarter of 2016. The LP-LCD was sampled quarterly throughout 2016.

3.2.3 Parameters and Analytical Methods

A summary of the analyzed parameters for the leachate samples collected at the OVSL is presented in the table below.

Quarterly LP-LCD Analytical Program	Parameter
Field Measurements	temperature, specific conductivity, pH, dissolved oxygen, and turbidity
Geochemical Indicator Parameters	chloride, sulfate, nitrate/nitrite, calcium, sodium, bicarbonate, alkalinity, magnesium, potassium, iron, and manganese
Leachate Indicator Parameters	ammonia, TOC, and TDS

Annual L-INF and OBWL-TD Analytical Program	Parameter
Field Measurements	temperature, specific conductivity, pH, dissolved oxygen, and turbidity
Geochemical Indicator Parameters	chloride, sulfate, nitrate/nitrite, calcium, sodium, bicarbonate, alkalinity, magnesium, potassium, iron, and manganese
Total Metals	antimony, barium, beryllium, cadmium, chromium, cobalt, copper, lead, nickel, selenium, silver, thallium, vanadium, and zinc
Volatile Organic Compounds	as listed in WAC 173-351 Appendix I
Leachate Indicator Parameters	ammonia, total organic carbon (TOC), and total dissolved solids (TDS)

Laboratory methods are the same methods used for groundwater samples. All laboratory analyses were completed by TestAmerica labs in Denver, Colorado and Buffalo, New York.

3.2.4 Leachate Monitoring Field Procedures

Field activities consisted of obtaining field parameter measurements, collecting leachate samples for laboratory analysis, and packaging and shipping the sample to the laboratory. The L-INF and OBWL-TD samples consisted of individual grab samples that were collected directly from their respective sampling stations using a peristaltic pump. New disposable plastic tubing was used during the collection of each sample, and was subsequently discarded between sampling locations. The LP-LCD sample was obtained from an inline sampling port attached to the liquid return line that drains back into the leachate pond. All the leachate samples were collected directly into pre-labeled laboratory containers suitable for the chemical parameters being analyzed. Field instruments were calibrated in accordance with manufacturer's guidelines.

Field-measured parameters including temperature, specific conductivity, pH, and dissolved oxygen were measured as described in *Standard Methods for the Examination of Water and Wastewater* (APAH 2014). Field information obtained during leachate sampling was recorded on Field Information Forms included in Appendix A (for November 2016).

3.3 LANDFILL GAS

Landfill gas monitoring activities at the OVSL consist of obtaining field measurements of primary gas composition (methane, carbon dioxide, and oxygen) at 10 subsurface soil gas detection probes (several with multiple screened intervals) and four locations inside two onsite structures on or immediately adjacent to the landfill.

LFG monitoring is conducted to provide an assessment of the subsurface soil gas conditions at the OVSL and monitor compliance with regulatory criteria for subsurface methane concentrations. At the subsurface gas detection probes (LFG probes) relative soil gas pressure was also measured in the field. LFG monitoring procedures are detailed in the 2013 SAP.

3.3.1 Landfill Gas Monitoring Network

Monitoring was conducted at 10 perimeter LFG probes (GP-7 through GP-16) and two onsite structures as illustrated on Figure 3. Five of the LFG probes (GP-9 through GP-13) consist of multiple, vertically discrete monitoring zones. Probes with dual monitoring zones are designated with an “S” for the shallow zone, and a “D” for the deep zone. Probes with three monitoring zones are designated with an “S” for the shallow zone, “M” for the middle zone, and “D” for the deep zone. Data are not reported for probes where the screened interval is found to be submerged by groundwater. Details of all the LFG probes and boring logs can be found in *Report of 2005 Gas Probe and Monitoring Well Installations at OVSL* (SCS Engineers 2006).

3.3.2 Monitoring Schedule

Monitoring at the LFG probes and facility structures was conducted during March, June, September, and November 2016. LFG monitoring results are reported in Section 4.

3.3.3 Monitored Parameters

Field measurements of methane, carbon dioxide, and oxygen were obtained from each of the LFG probes and within the facility structures. In addition, subsurface soil gas pressure and groundwater levels were measured in the probes during each of the LFG monitoring events.

3.3.4 Landfill Gas Monitoring Field Procedures and Instrumentation

Field monitoring was conducted in accordance with 2013 SAP. The LFG probes and building locations were monitored in the field (for all parameters) using a GEM-2000 portable multi-gas analyzer. This portable gas analyzer measures methane and carbon dioxide with a dual wavelength infrared cell with a reference channel. Oxygen is measured with an electro-chemical cell. Pressure was measured with a transducer.

The gas analyzer was calibrated prior to each monitoring event. LFG monitoring activities are documented in the Field and Calibration Logs included in Appendix A.

3.3.5 Field Conditions

General weather conditions were noted during and preceding each quarterly LFG monitoring event. Atmospheric pressure fluctuations can influence gas concentrations and pressure in LFG probes. To assist in interpreting the monitoring data, barometric conditions were recorded during and prior to monitoring. The barometric trends for November 2016 are included in this report.

4.0 2016 MONITORING RESULTS

4.1 GROUNDWATER

4.1.1 Groundwater Elevation and Flow

Eight monitoring wells (MW-4, MW-9, MW-11, MW-13, MW-29A, MW-40A, MW-41A and MW-43) could not be accessed, were obstructed, had low conductivity groundwater, or were dry for at least one quarter during 2016. Recorded depth-to-water levels are summarized in field documentation included in Appendix A.

Depth-to-water measurements collected through 2016 were used to calculate groundwater elevations in feet relative to MSL. The 2016 records have been compiled and are presented on Table 3. Groundwater elevation surface maps (derived from static depth-to-water measurements collected at the OVSL monitoring wells) for each quarter during the reporting period are presented in Figures 4A through 4D. A hydrograph showing the past 10 years of recorded groundwater elevations is presented on Figure 5. Groundwater elevations at the OVSL ranged from 138.28 (MW-33A in February) to 261.13 (MW-13 in November) ft. MSL over the 2016 reporting period. Groundwater elevations remained relatively stable throughout the year. The potentiometric groundwater elevation surface across the OVSL does not show significant seasonal fluctuations. These results remain consistent with data reported during previous compliance years.

The groundwater flow direction during the reporting period was consistent with that previously reported at the site. Locally, the groundwater flow direction is to the west/northwest. The average hydraulic gradient across the site remained fairly consistent from quarter to quarter.

Calculated 2016 Hydraulic Gradient and Flow Velocities – East Side				
	Q1	Q2	Q3	Q4
Well Pair	MW-35/MW-24			
Hydraulic Gradient (ft./ft.)	0.0320	0.0312	0.0331	0.0336
Flow Velocity (ft./day)	2.77	2.71	2.87	2.91
Calculated 2016 Hydraulic Gradient and Flow Velocities – West Side				
	Q1	Q2	Q3	Q4
Well Pair	MW-20/MW-38			
Hydraulic Gradient (ft./ft.)	0.0143	0.0141	0.0145	0.0136
Flow Velocity (ft./day)	7.33	7.24	7.45	7.00

Eastern Hydraulic Conductivity = 26 ft/day (Parametrix 2007)
 Western Hydraulic Conductivity = 154 ft/day (Parametrix 2007)
 Porosity = 30% (Parametrix 2007)

4.1.2 Groundwater Quality

4.1.2.1 Chemical Analysis

Water quality data for the OVSL are summarized in Tables 4A through 4D. These tables present the data results, segregated by well type, of detected analytes and measured field parameters from all four quarters of 2016. Each table presents the data for a monitoring well category (Compliance, Performance, Downgradient, and Upgradient). A table (4E) summarizing the detected analytes and field parameters for the annual L-INF and OBWL-TD leachate and the quarterly LP-LCD leak detection monitoring stations is also provided. In addition, a summary table of VOC detections in groundwater and leachate is presented on Table 5.

4.1.2.2 Data QA/QC

Analytical data from the TestAmerica and ARI laboratories were subjected to a quality assurance/quality control (QA/QC) program and evaluation. The program included field and in-house components. The field portion consisted of the collection and analysis of trip blanks, field replicates, and matrix spike/matrix spike duplicates. The in-house evaluation provided a detailed review of laboratory data which included sample handling, analysis hold times, and laboratory performance analyses (duplicates, blanks, matrix spikes, matrix spike duplicates and surrogate recoveries).

Due to an express shipment delay, laboratory analyses for nitrate/nitrite and TDS in sample MW-24 were completed slightly outside their recommended holding times. In addition, several EPA method 8260 parameters were reportedly detected in a laboratory blank, and the affected sample batch was flagged with B (parameter detected in blank) and J (reported results are an estimated value) data qualifiers. However, notwithstanding the reported laboratory data qualifiers, the 2016 data set was determined to be acceptable for the intended purposes.

Appendix B contains the data validation report and the analytical laboratory data reports for the November 2016 monitoring event.

4.1.3 Spatial Distribution and Temporal Trends

4.1.3.1 Parameter Distribution

As noted in previous site monitoring reports, the influence of past waste disposal activities on groundwater quality at the OVSL is observed in the groundwater VOC detections, general chemistry, inorganics, and field parameter results. The elevated concentrations of parameters adjacent to the landfill are typically characteristic of influence from either landfill leaching, transport from LFG, or increased mobilization of naturally occurring constituents as a result of the landfill's presence.

At the OVSL, several key parameters (arsenic, iron, manganese, and vinyl chloride) are routinely monitored for their spatial distribution each quarter by plotting concentrations on the landfill base map. Spatial distributions for these parameters during the fourth quarter November 2016 monitoring event are presented in Figures 6A through 6D and summarized in the tables below.

Total Arsenic (mg/L) - November 2016 (Figure 6A)				
Concentration	Upgradient	Performance	Compliance	Downgradient
Low	0.000114	0.000081	<0.00004	0.000509
<i>Locations</i>	MW-35	MW-23A	MW-43	MW-33A
High	0.000381	0.00288	0.00542	0.00995
<i>Locations</i>	MW-16	MW-19C	MW-34C	MW-32

Total Iron (mg/L) – November 2016 (Figure 6B)				
Concentration	Upgradient	Performance	Compliance	Downgradient
Low	<0.06	<0.06	<0.06	<0.06
<i>Locations</i>	MW-13B, MW-35	MW-4, MW-24	MW-15R, MW-34A	MW-33C
High	0.12	1.1	27	4.6
<i>Location</i>	MW-16	MW-2B1	MW-42	MW-29A

Total Manganese (mg/L) – November 2016 (Figure 6C)				
Concentration	Upgradient	Performance	Compliance	Downgradient
Low	<0.001	0.065	0.0027	0.0013
<i>Locations</i>	MW-13A, MW-13B, MW-35	MW-23A	MW-34A	MW-36A
High	0.017	2.7	4.4	1.8
<i>Locations</i>	MW-16	MW-2B1	MW-42	MW-32

Vinyl Chloride (µg/L) – November 2016 (Figure 6D)				
Concentration	Upgradient	Performance	Compliance	Downgradient
Low	<0.02	<0.02	<0.02	<0.02
<i>Locations</i>	MW-13B, MW-16, MW-35	MW-20, MW-23A, MW-24	MW-15R, MW-34A, MW-39, MW-43	MW-29A, MW-33A, MW-33C, MW-36A
High	0.008 ^{JB}	0.029 ^B	0.026 ^B	0.46 ^B
<i>Locations</i>	MW-13A	MW-19C	MW-42	MW-32

J B: Qualifiers J (estimated values below reporting limit) and B (compound detected in laboratory blank)

As noted during previous compliance years, groundwater impacts are observed in each category of monitoring wells at the Site. The highest concentrations of arsenic, iron and manganese (0.000381, 0.12 and 0.017 mg/L, respectively) reported in Upgradient (background) monitoring wells during the fourth quarter monitoring event were all detected in MW-16. With the exception of a single, J and B qualified detection (0.008 µg/L at MW-13A in November 2016), vinyl chloride was not reported in any of the Upgradient wells during 2016.

The highest concentrations of these four parameters detected in the Performance monitoring wells occurred at wells MW-19C (0.00288 mg/L arsenic and 0.029 µg/L vinyl chloride) and MW-2B1 (1.1 iron mg/L and 2.7 mg/L manganese). The highest detected concentrations of

these parameters in the Compliance monitoring wells were recorded in wells MW-34C (0.00542 arsenic) and MW-42 (27 mg/L iron, 4.4 mg/L manganese and 0.026 µg/L vinyl chloride). The highest detected concentrations of these parameters in the Downgradient monitoring wells were reported in well MW-32 (0.00995 mg/L arsenic, 1.8 mg/L manganese and 0.46 µg/L vinyl chloride) and MW-29A (4.6 mg/L iron).

4.1.3.2 Temporal Trends

Time series graphs and statistical trend analyses were completed for all Upgradient, Performance, Compliance, and Downgradient monitoring wells using the DUMPStat software package. The statistical data set includes analytical results obtained between 2005 through the present reporting year (2016). This evaluation was conducted for parameters listed in Appendices I and II of WAC 173-351-990 which are organized into two groups: “Trend Test A” and “Trend Test B”. The “Trend Test A” time series includes all organic parameters in Appendices I and II that have been detected above the practical quantification limit (PQL) during at least one sampling event in any of the wells since 2005 (currently 25 VOCs). The “Trend Test B” time series includes Appendix I and II inorganic and groundwater quality parameters (currently 32 parameters). To facilitate review of the statistically significant trends, time series sets were developed to just show those well/parameter combinations exhibiting either increasing or decreasing trends. These time series graphs are presented in Appendix C along with the other statistical evaluation results. A summary of those parameters showing significant increasing or decreasing concentration trends grouped by well type is provided on Table 6A, and a more detailed summary of parameter trends in specific wells can be found in Table 6B.

The dominant data trend seen for the majority of parameters throughout the OVSL remains that of decreasing concentrations. This is predominantly observed in the Performance, Compliance, and Downgradient monitoring wells: however, significant decreases are noted in all well groups for as many as 14 inorganic parameters and two VOCs (Tables 6A/6B). Significant increasing trends are also noted for certain inorganic parameters in all well groups, although the overall number of parameters increasing remains low.

Significant parameters trends calculated for the Compliance monitoring wells are summarized below.

Significant Trends in Compliance Wells (2005 - 2016)			
Increasing		Decreasing	
Parameter	Wells	Parameter	Wells
pH	MW-42, MW-34C	Alkalinity, Total	MW-15R
Potassium, Dissolved	MW-42	Ammonia	MW-43
Temperature	MW-15R, MW-34A, MW-34C	Barium	MW-15R, MW-34A
		Bicarbonate Alkalinity	MW-15R, MW-34A
		Calcium	MW-15R, MW-34A, MW-34C
		Chloride	MW-15R, MW-34A, MW-34C

		Magnesium	MW-15R, MW-34A, MW-34C
		Sodium	MW-15R, MW-34A, MW-34C
		Specific Conductivity	MW-15R, MW-34A, MW-34C
		Sulfate	MW-42
		Total Dissolved Solids	MW-15R, MW-34C
		Vinyl Chloride	MW-34C

4.1.4 Groundwater Geochemistry

The geochemical character of the groundwater, LP-LCD, OBWL-TD and L-INF samples was evaluated by plotting and comparing geochemical parameters using a Piper diagram for the November 2016 analytical results. Water quality samples collected during November 2016 were of similar geochemical water type with clear differences seen between the groundwater and leachate derived samples. As noted for past reporting years, the positions of sampled wells on the diagram indicate that the dominant anion in site groundwater remains bicarbonate, with cations being dominated by calcium and magnesium. The leachate derived samples continue to report significantly higher sodium, calcium and potassium concentrations than groundwater, as well as higher chloride and bicarbonate levels. The Piper diagram for November 2016 can be found in Appendix D. Previous Piper diagrams for the first, second, and third quarters of the current compliance year can be found in their corresponding quarterly monitoring reports.

In addition to the Piper diagram, groundwater cation/anion balance calculations were also used to assess geochemical character. Ideally, after the major anions and cations present in a sample are determined, the sum of the positive cations (in milliequivalents per liter [meq/L]) should approximately equal the sum of the negative anions (Hem 1986). All natural waters should be electroneutral. However, differences can arise between dissolved cations and anions in groundwater as measured by an analytical laboratory due to a number of factors including: presence of colloidal fractions, systematic error in preparation and analysis of samples, malfunction of/poorly calibrated equipment, major species omitted from analysis, the presence of unusually high concentrations of cations/anions, and not all ions present in water are included in the balance calculation. Due to these potential issues, differences in the ion balance can be difficult to assess for imbalances due to groundwater impacts.

The range of the sum of ions and balance of ions observed at the site for the November 2016 monitoring event are summarized in the table below. Positive values indicate that the sum of the cations is greater than the sum of the anions. As stated in WAC 173-351-430-5(a), a relative percent difference (RPD) in the charge-balance (ion balance) of greater than five to ten percent (depending on the concentrations of ions in solution) could potentially indicate impacted groundwater conditions.

Well Group	Upgradient	Performance	Compliance	Downgradient
Sum of Ions (meq/L)	1.16 – 1.91	0.91 – 2.16	0.32 – 4.80	0.86 – 2.53
Balance (%)	-1.9 – 4.5	-3.8 – 25.9	-2.6 – 10.1	-2.1 – 7.6

Ion balances observed at the site during the November 2016 event were generally within or very close to this threshold. Three wells (MW-4, MW-20 and MW-43) reported balances outside this range (25.9, 10.5 and 10.1 percent, respectively). The anomalously large RPD calculated for MW-4 appears to be related to unusually low cation results (primarily calcium and magnesium) reported in the fourth quarter sample, and is suspected to represent a one-time outlier. It's suspected that results outside the (+/-) 5 to 10% ion balance threshold are due to possible errors associated with analytical limitations in these measurements (as previously discussed) or potential low level impacts from human activities at the site.

4.1.5 Statistical Prediction Limit Evaluation

Statistical prediction limits using data from the upgradient monitoring wells are calculated at the end of each monitoring year to provide updated background concentrations for all Appendix I and II inorganic detection monitoring and groundwater quality parameters (a total of 32 parameters). These updated background prediction limit concentrations are used for comparison purposes for compliance and downgradient monitoring wells.

During the fourth quarter of 2016, prediction limits for inorganic parameters were exceeded at least once in ten of the Compliance and Downgradient groundwater monitoring wells (MW-15R, MW-29A, MW-32, MW-33A, MW-33C, MW-34A, MW-34C, MW-36A, MW-39 and MW-42). Compliance wells MW-34C and MW-42 reported the largest number of prediction limit exceedances (11 and 15 exceedances, respectively). A summary of the latest prediction limit exceedances for the November 2016 Compliance and Downgradient well results are presented on Table 7. Prediction limit calculations for 2016 are presented in Appendix C.

As summarized on Tables 6A and 6B, the following Upgradient monitoring wells exhibited statistically significant increasing or decreasing trends over the period for which background prediction limits are calculated: MW-13A (sulfate, temperature), MW-13B (bicarbonate/total alkalinity, chloride and sulfate), MW-16 (chloride) and MW-35 (arsenic, bicarbonate/total alkalinity, chloride, nitrate and temperature). Parameter trends in Upgradient monitoring wells are noted because they can impart a bias on the calculated prediction limit for the affected monitoring parameters which, in turn, can affect the number of exceedances identified for those monitoring parameters in Compliance and Downgradient wells.

For bicarbonate/total alkalinity, nitrate and temperature, their apparent increasing trends in the above-mentioned upgradient wells could impart a positive bias on the calculated prediction limits for these parameters. However, a visual examination of the time series graphs presented in Appendix C indicates that the noted increasing trends for these parameters remains relatively slight. Therefore, any bias to the prediction limit would be expected to be nominal and not significantly change the number of exceedances within this parameter subset.

4.1.6 Point of Compliance and Cleanup Level Exceedances

4.1.6.1 Point of Compliance (POC)

The solid waste regulations (WAC 173-351-300[6]), specify that groundwater quality compliance must be established at a POC located on the landfill property no more than one hundred fifty meters (four hundred ninety two feet) from the waste management unit boundary. At the OVSL, the POC is established as a line of wells located within 150 meters of the landfill waste management unit boundary. As illustrated on Figure 2, the Compliance monitoring wells are colored red and lie west/northwest of the downslope boundary of the landfill.

4.1.6.2 Cleanup Level Exceedances

Site-Specific MTCA Cleanup Levels

Ten organic and inorganic parameters are regulated under the OVSL Cleanup Action Plan (CAP, Ecology 2010) and have site-specific MTCA cleanup levels. Analytical results are used to calculate an upper confidence limit (95% UCL) of the mean concentration for each parameter for each well for Compliance and Downgradient monitoring wells to assess compliance with their respective cleanup level.

The UCLs are calculated using a three-year moving data window (per MTCASat guidance) for the ten site-specific chemicals of concern (COC). The UCLs are calculated using MTCASat; calculation details are presented in Appendix C. The following in-text table and Table 8 summarize the COCs and their 2016 exceedances in the Compliance and Downgradient monitoring wells.

Chemicals of Concern	Units	Site-specific MTCA Cleanup Level	Exceedances in 2016 (95% UCL)
1,1-Dichloroethane	µg/L	50	No
1,4-Dichlorobenzene	µg/L	2	No
Ammonia	mg/L	0.19	Yes
Arsenic	mg/L	0.000462	Yes
Cis-1,2-Dichloroethene	µg/L	35	No
Ethyl ether	µg/L	50	No
Iron	mg/L	0.3	Yes
Manganese	mg/L	0.05	Yes
Trichloroethene	µg/L	1	No
Vinyl Chloride	µg/L	0.2	Yes

Blue indicates this COC reported a 95% UCL exceedance of its site-specific MTCA Cleanup Levels during 2016.

Evidence of stable to improving groundwater quality at the OVSL continued to be noted over 2016 compliance period. Similar to previous reporting periods, the 95% UCL for vinyl chloride remained below the cleanup level in all Compliance wells and all Downgradient wells except MW-32. It should also be noted that minor variations in parameter concentrations observed from year to year can cause exceedances to arise or vanish between reporting periods. This is largely a result of the UCLs hovering very near their site cleanup levels and not an indication of meaningful changes to overall groundwater conditions.

Statistically significant trends are also noted on Table 8 in order to provide additional information regarding the status of the UCL relative to the cleanup standard. Trend information may be particularly useful if the calculated UCL value is very close to the cleanup standard (e.g., within 10%). In such cases, trend information may be useful in predicting a change in status of the UCL versus the cleanup level in the relative near term.

Exceedances of the site-specific MTCA cleanup levels were reported in four of the six Compliance well locations (refer to Table 8): MW-34C (arsenic, iron, manganese); MW-39 (ammonia, arsenic, iron, and manganese); MW-42 (ammonia, arsenic, iron, manganese); and MW-43 (iron and manganese). A significant decreasing trend was reported in 2016 for vinyl chloride in MW-34C and ammonia in MW-43. The 95% UCLs for select VOCs were below the site-specific MTCA cleanup levels in all of the Compliance monitoring wells.

As noted over the past several years, exceedances of the site-specific MTCA cleanup levels continue to be reported in all five Downgradient well locations (refer to Table 8): MW-29A (arsenic, iron, and manganese); MW-32 (arsenic, iron, manganese, and vinyl chloride); MW-33A (ammonia, iron, and manganese); MW-33C (arsenic and manganese); and MW-36A (arsenic). A significant decreasing trend was reported at MW-29A (for ammonia). With the sole exception of vinyl chloride in MW-32, all of the 95% UCLs for the select VOCs remained below the site-specific MTCA cleanup levels in all of the Downgradient monitoring wells.

Other Criteria Comparison (Federal MCLs, WAC 173-200, and MTCA)

In addition to the site-specific MTCA cleanup levels, groundwater at the OVSL is also compared to WAC 173-200 Groundwater Quality Protection Standards and State/Federal Primary and Secondary Maximum Contaminant Levels (MCLs). For comparison purposes, site-specific MTCA cleanup levels are also included.

The WAC 173-200 and MCL exceedances for the 2016 reporting period by parameter and well are summarized on Table 9. Criteria for the following seven analytes were exceeded:

- pH
- ammonia
- arsenic
- iron, total
- manganese
- trichloroethene
- vinyl chloride

These same parameters were noted to have exceeded their respective regulatory standards during the previous two (2014 and 2015) compliance years.

4.2 LEACHATE MONITORING RESULTS

4.2.1 Leachate Quality

The results of the fourth quarter 2016 leachate influent (L-INF) and Old Barney White Landfill Toe Drain (OBWL-TD) sample analyses are presented on Table 4E. Samples were also obtained from the LP-LCD monitoring station and submitted for selected Appendix II parameter and total metals analysis during all four quarters of 2016 (refer to Table 4E).

Similar to previously monitoring years, the 2016 L-INF sample reported relatively elevated concentrations of the typical leachate parameters, including total/bicarbonate alkalinity, ammonia, calcium, chloride, magnesium, sulfate, sodium, COD, TDS and TOC. In addition, low levels of three VOCs, tert-butyl alcohol, tetrahydrofuran and vinyl chloride, were detected in the November 2016 sample. It should be noted that the vinyl chloride detection (0.046 µg/L) was B and J-qualified, and that this parameter had not been reported in the OVSL leachate since 2011. In contrast, the 2016 OBWL-TD sample reported generally lower inorganic results than the leachate influent. No VOCs were detected in the OBWL-TD sample.

Compared to the L-INF sample, the 2016 quarterly LP-LCD samples generally reported lower alkalinity, ammonia, COD and TOC concentrations.

4.2.2 Leachate Generation Rates

Leachate volumes generated at the OVSL have been recorded on a weekly basis by SCS Engineers Field Services since 2008. During the course of the 2016 reporting period, approximately 681,901 gallons of leachate were reported to have been pumped into the leachate collection pond. A total of 88.0 inches of rainfall was recorded at the nearby Bremerton National Airport weather station during 2016.

Leachate production continues to decline at the OVSL, from over 2 million gallons annually prior to 2013, to 1,106,803 gallons in 2014, and 801,614 gallons in 2015. These data continue to suggest that ongoing improvements to site maintenance and existing infrastructure have significantly reduced leachate generation rates (per inch of precipitation) at the OVSL. Annualized rainfall totals at the OVSL and the volumes of leachate produced on a quarterly and annual basis over the last ten years are presented on Figure 7.

In addition, the liner leak collection/detection system is checked regularly for the presence of any accumulated liquids beneath the OVSL leachate pond. If liquids are present, they are pumped out of the collection system, pass through the LP-LCD monitoring station, and are returned to the leachate pond. The volumes of liquid pumped out of the liner leakage collection system during 2016 are presented on Table 10. Approximately 1,687 gallons of liquid were removed from the collection system during 2016, which is a significantly lower LP-LCD volume than was pumped during the two previous reporting years (2,230 and 2,975 gallons in 2014 and 2015, respectively).

4.3 LANDFILL GAS MONITORING RESULTS

The presence of LFG at the OVSL is discussed in terms of detected methane and/or carbon dioxide (at concentrations of both gases at levels greater than 0.3 percent by volume) and depressed oxygen (less than 20.3 percent by volume). The detection of these gases, as well as, elevated gas pressures within the perimeter probes, are indicative of the potential presence of LFG. The reported values represent measurements under stabilized conditions (after purging at least one probe volume from each sampling zone). Also, the monitoring results are discussed in terms of probe locations, not sampling zones (by depth). For example, if methane is detected in the shallow or deep monitoring zone (or both) of one gas probe, the reference is to the location. The screened interval in Middle- and Deep-monitoring zones is sometimes submerged by the shallow groundwater table. When this occurs, gas results are not representative of the screened interval, and therefore not reported.

Perimeter LFG probes and surface structure locations were monitored for the presence of landfill gases. The November 2016 results are summarized in Table 11. LFG probe results for the 2016 compliance period are also summarized on Table 12.

4.3.1 Perimeter Gas Probe

During the November 2016 monitoring, methane was not detected above the regulatory standard in any of the LFG monitoring probes. The regulatory standard for methane in perimeter probes is the lower explosive limit (LEL) which is equal to 5% methane by volume. Carbon dioxide was measured in all the LFG probes ranging from 0.7 (GP-10D) to 8.2 percent by volume (GP-7). Depressed oxygen levels (less than 20.3 percent by volume) were reported at the majority of LFG probes, ranging from 4.0 (GP-8) to 19.7 percent by volume (GP-10S). One LFG probe (GP-13D) reported oxygen levels that were not depressed (20.7 percent by volume). Representative relative (static) pressure readings in the perimeter gas probes ranged from -0.07 (GP-13M/D) to 2.24 (GP-15) inches of water column.

As noted in previous monitoring years, the observed declines in methane and carbon dioxide levels in the subsurface probes (as well as the increases in oxygen levels) likely reflect changes in the LFG extraction system components (e.g., replacement of gas flares and blower station and the installation of six new LFG wells during October 2011 in the Barney White area) and more recent changes to LFG extraction system operations implemented by Waste Management. Appendix E includes tables and time-series plots of the historical concentrations of methane, carbon dioxide, and oxygen in the currently monitored gas probes, from March 2007 through the end of the 2016 monitoring year.

Groundwater seepage during the rainy season can submerge the perforated portion of the LFG probe casing and inhibit collection of soil gas in the vadose zone. To determine whether the perforated portion of the gas probes were blocked by water, water level measurements are taken at each LFG probe location. The percentage of exposed perforated casing for each LFG probe is shown on Table 11.

4.3.2 Structure Monitoring

The fourth quarter 2016 monitoring results did not detect methane in either the south slope well house or the scale house. The regulatory standard for methane in structure on or near the landfill is 25% of the LEL. Carbon dioxide was measured at levels between 0.4 and 2.1 percent by volume in the onsite structures. Slightly depressed oxygen concentrations were recorded at two scale house monitoring locations (18.8 and 20.2 percent by volume at SH-SS and SH-NS, respectively). Depressed oxygen was not observed in the south slope well house.

4.3.3 Barometric Pressure Conditions

Gas concentrations and pressures are influenced by fluctuating barometric pressure. Relative to time, the highest LFG concentrations and depressed oxygen concentrations tend to occur shortly after a significantly falling barometric trend. This is due to the effects of the landfill pressures trying to stabilize with the fluctuation in atmospheric (barometric) pressure and the associated lag time for stabilization.

To assist in interpreting data, barometric conditions were recorded prior to and during LFG monitoring. The trends for November 2016 are presented on Figure 8. On November 15, LFG monitoring was conducted during a period of slightly rising barometric pressure conditions.

5.0 SUMMARY AND CONCLUSIONS

The 2016 groundwater quality results, LFG generation rates and leachate production levels at the OVSL facility continue to indicate an overall improvement of environmental site conditions and the on-going stabilization of the closed landfill. Groundwater quality data collected over the past decade indicate that historically detected contaminants in groundwater are declining, with fewer exceedances of site-specific MTCA cleanup levels reported at POC monitoring wells and downgradient of the site. Despite greater than average precipitation, leachate production during 2016 continued to decline, which remains consistent with recent trends and the past implementation of improved site engineering controls. The facility will continue to explore opportunities to minimize any remaining above ground contribution to leachate volumes to ensure that the trend of diminishing leachate generation is maintained.

Overall LFG production at the facility continues to decline, with flow rates decreasing rapidly to several orders of magnitude below their modeled production high as the natural depletion of methane and other landfill gases continues at the site. It is anticipated that on-going operations and maintenance (O&M) efforts in 2017 will continue to show improving environmental conditions and increased landfill stability.

It should also be noted that during the latter part of 2016, Ecology completed a periodic (5-year) review of the MTCA remedy being implemented at the OVSL. The agency's review reported that the remedial actions (landfill engineering controls combined with monitored natural attenuation) completed at the site remain protective of human health and the environment. In addition, Ecology approved the optimization of the existing post-closure, groundwater monitoring program beginning with the 2017 compliance year. No modifications to the LFG or leachate monitoring schedule are anticipated at this time. The current (2013) site-specific Sampling and Analysis Plan (SAP) will be updated to reflect these changes during the Spring of 2017.

5.1 GROUNDWATER

5.1.1 Groundwater Quality

Elevated concentrations of certain VOCs, general chemistry parameters, inorganic analytes, and field parameters continued to be reported in the monitoring wells adjacent to the OVSL. Over the 2016 monitoring year, site specific MTCA cleanup levels, groundwater protection standards and/or federal MCLs were exceeded for seven analytes: pH, total arsenic, total iron, total manganese, ammonia, trichloroethene, and vinyl chloride. These results remain generally consistent with those reported for previous years, although overall trends show that the majority of analyte concentrations are decreasing.

The only primary MCL exceedances at the OVSL for the 2016 reporting period were for arsenic in wells MW-32 (0.0107 mg/L in May) and MW-34C (0.0156 mg/L, 0.0254 mg/L and 0.0699 mg/L in February, May and August, respectively). These were all total arsenic results obtained from unfiltered groundwater samples. The primary MCL for vinyl chloride was not exceeded during the current reporting period and has not been exceeded since 2006.

MTCA corrective action monitoring during 2016 reported 95% UCL groundwater cleanup goal exceedances at nine of eleven compliance and downgradient wells at the OVSL. Compliance wells MW-15R and MW-34A did not report any exceedances. With the exception of vinyl chloride in MW-32, the only parameters that exceeded the site specific MTCA cleanup levels were ammonia, arsenic, iron, and manganese.

Most parameter exceedances continued to be reported in Compliance wells MW-39 and MW-42 and Downgradient well MW-32. However, an analysis of the 95% UCL for the ten site COCs relative to their respective cleanup levels continues to suggest ongoing improvement in overall groundwater quality through 2016. In addition, Downgradient and Compliance wells exhibited only decreasing significant trends in site-specific COCs in 2016.

Prediction limits for inorganic parameters were exceeded in ten groundwater monitoring wells over the reporting period. Significantly increasing concentrations trends (using Sen's Non-Parametric Test for Trend) were reported for at least one inorganic parameter at eight well locations, while significantly decreasing trends also occurred at nineteen well locations. Significantly decreasing concentration trends were reported for trichloroethene (MW-19C) and vinyl chloride in Performance wells MW-19C and MW-34C.

Collectively, groundwater analytical data, statistical and graphical analyses, and comparison to water quality standards through 2016 continue to indicate similar, but improving conditions to those previously documented from 2005 through 2015, with on-going evidence that natural attenuation continues to be affecting the groundwater quality at the site.

5.1.2 Evidence for Natural Attenuation

Natural attention includes a variety of physical, chemical and biological processes that act without human intervention to reduce mass, toxicity, mobility, volume, or concentration of contaminants. Examples of these processes can include biodegradation, dispersion, dilution, sorption, volatilization, chemical transformation, and contaminant destruction. At solid waste landfills, natural attenuation processes are largely controlled by and associated with changes in groundwater chemistry. Typically, for landfills, pathways for aerating subsurface soils and groundwater is impeded, resulting in increasingly anaerobic and reducing conditions (or in the case of unlined landfills, there is potential for highly reduced liquids to enter the groundwater system). These conditions promote microbial communities that can degrade organic compounds resulting in the dechlorination of solvents and their daughter products.

Gradual, yet consistent, improvements to water quality continue to be observed at the OVSL as illustrated by the overall stability and/or decreasing trends observed in the calculated 95% UCLs for site COCs and through their improving comparison with their respective site-specific MTCA cleanup levels. These data support the conclusion that natural attention is occurring as expected at the OVSL

As discussed in past annual reports, it remains important to note that significant areas across and immediately downgradient of the OVSL waste cells exhibit a pronounced anaerobic and/or reducing geochemistry. Similarly, dissolved oxygen (DO) levels are significantly reduced in the groundwater immediately beneath and downgradient of the unlined Barney White waste cell.

These geochemical conditions are prevalent at well locations showing the most elevated contaminant concentrations (e.g., MW-20 and MW-19C with elevated total iron, vinyl chloride and other redox sensitive parameters). The presence of vinyl chloride beneath the west-central portions of the site is consistent with the ongoing reductive dechlorination of parent compounds (PCE, TCE and DCE isomers). However, further downgradient, along the far western margins of the site, groundwater geochemistry becomes increasingly less reductive and more oxidative, which in turn is increasingly supportive of the degradation of vinyl chloride. This was once again demonstrated during 2016 by the absence of VOCs, including vinyl chloride, in downgradient wells MW-29A, MW-33A, MW-33C and MW-36A. These geochemical conditions (high redox/low dissolved oxygen) have been consistently observed at the OVSL during post-closure monitoring.

The growing number of decreasing parameter trends provides additional evidence supporting the ongoing and expected natural attenuation at the OVSL. Given the current data and historical trends, natural attenuation at the OVSL can be anticipated to continue throughout the post-closure period and beyond.

5.2 LEACHATE

Comparisons between the 2016 groundwater and L-INF field and laboratory results continue to indicate that parameters measured and analyzed in the L-INF are elevated relative to groundwater. These parameters include total/bicarbonate alkalinity, ammonia, calcium, chloride, magnesium, sulfate, sodium, COD, TDS and TOC. Low levels of tert-butyl alcohol, tetrahydrofuran and vinyl chloride were also detected in the November 2016 sample. The vinyl chloride detection (0.046 µg/L) was B and J-qualified, and it should be noted that this parameter had not been reported in OVSL leachate since 2011. In contrast, the OBWL-TD sample reported generally lower inorganic results than the leachate influent. No VOCs were detected in the OBWL-TD sample.

The LP-LCD monitoring station was sampled in all four quarters of 2016. These samples continued to report elevated specific conductivity, alkalinity, ammonia, calcium, chloride, iron, manganese, sodium, sulfate, TDS and TOC compared to the groundwater results.

The volume of leachate generated per inch of precipitation (681,901 gallons relative to 88.0 inches of rain) continues to steadily decline. This compares favorably to past annual totals, from over 2 million gallons annually prior to 2013, to 1,106,803 gallons in 2014, and 801,614 gallons in 2015. Liquid volumes recorded at the LP-LCD monitoring station for the leachate pond leakage collection system indicate that approximately 1,687 gallons of liquid were returned to the pond in 2016, which is a significantly lower volume than was reported over two previous years (2,230 and 2,975 gallons in 2014 and 2015, respectively). The relatively low LP-LCD volumes observed during 2016 continue to suggest that leakage through the leachate pond liner system is minimal and well controlled.

5.3 LANDFILL GAS

Methane was not detected above state regulatory standards in any of the LFG monitoring probes or in any of the landfill structures during 2016. Perimeter LFG probe monitoring results continue to demonstrate that the facility is in compliance with respect to subsurface landfill soil gas migration criteria (less than 5% by volume of methane in soil at the property boundary).

During 2016, methane was not detected at any of the structure gas monitoring locations. It should be noted that due to the demolition of on-site buildings during the latter half of 2009, only the South Slope Well House and the Scale House remain present at the OVSL. Going forward, structure LFG monitoring will continue for these two buildings.

LFG extraction rates and major gas component results for the 2016 operational period are summarized on Table E-4 (Appendix E). During 2016, approximately 128 million cubic feet of LFG were collected at the OVSL flare inlet, with an annualized average concentration of 25.02 percent methane (by volume). Improvements (discussed above and in previous reports) to the OVSL LFG extraction system and associated infrastructure, which commenced in 2007, have reduced and or stabilized LFG levels (as measured by methane, carbon dioxide and depressed oxygen levels) at both perimeter soil gas probe and structural monitoring locations. The LFG collection system will continue to be monitored and optimized to enhance its performance.

6.0 REFERENCES

- American Public Health Association (APHA), American Water Works Association, Water Environment Federation, revised 2014. *Standard Methods for the Examination of Water and Wastewater*.
- Engineering Management Support, December 2010, Environmental Monitoring Plan, Olympic View Sanitary Landfill, Port Orchard, WA.
- Gibbons, Robert D., and Discerning Systems, Inc. Copyright 1994-2005. *DUMPStat Version 2.1.8*.
- Parametrix, Inc. 2007 *Draft Final Remedial Investigation Report, Olympic View Sanitary Landfill*.
- SCS Engineers. June 2006. *Report of the 2005 Gas Probe and Groundwater Monitoring Well Installation at the Olympic View Sanitary Landfill*.
- SCS Engineers. April 2009. *Groundwater Monitoring Well Installation Report, Olympic View Sanitary Landfill*.
- SCS Engineers. 2013. *Olympic View Sanitary Landfill, (OVSL) Sampling and Analysis Plan*. April.
- SCS Engineers. March 2016. *2015 Annual Monitoring Report, Olympic View Sanitary Landfill*.
- USEPA 1994. *Method 200.8, Determination of Trace Elements in Waters and Wastes by Inductively Coupled Plasma-Mass Spectrometry*, Revision 5.4 EMMC Version. Environmental Monitoring Systems Laboratory, Office of Research and Development.
- USEPA revised 2007. *Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods*, Third Ed., Environmental Monitoring Systems Laboratory, Office of Research and Development.
- Washington Department of Ecology. October 2010. *Cleanup Action Plan, Olympic View Sanitary Landfill, Kitsap County, Washington*.
- Washington Department of Ecology. January 2017. *Periodic Review, Olympic View Sanitary Facility Site ID# 79649975, 10015 SW Barney White Road, Port Orchard, Washington*.
- Washington, Attorney General. January 31, 2001. *Agreed Order No. DE 00SWFAPNR-1729*.
- Waste Management of Washington (WMW). Modification 8, October 15, 2008. *Storm Water Pollution Prevention Plan*.

TABLES

Table 1. Groundwater Well Construction Details
2016 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington

Well ID	Northing	Easting	Measuring Point Elevation (ft. MSL)	Well Depth (ft. bgs)	Top of Screen Elevation (ft. MSL)	Bottom of Screen Elevation (ft. MSL)	Screen Length (ft.)
Water Quality Monitoring Wells							
MW-2B1	189232.23	1157544.63	172.94	18	163	153	10
MW-4	188298.52	1156887.57	175.78	34	149	139	10
MW-13A	188233.33	1159346.53	288.74	155	141	131	10
MW-13B	188223.33	1159346.53	288.66	260	36	26	10
MW-15R	189905.03	1157711.29	180.66	33	157	147	10
MW-16	190804.53	1159350.37	240.01	70	178	168	10
MW-19C	188520.03	1157025.96	196.96	90	111	106	5
MW-20	188850.01	1157062.68	198.41	49	165	150	15
MW-23A	189485.84	1158085.12	182.28	23	172	157	15
MW-24	189795.14	1158383.22	208.24	42	176	161	15
MW-29A	188570.27	1156121.60	160.21	25	140	135	5
MW-32	188908.88	1156388.52	152.36	21	135	130	5
MW-33A	189304.18	1155636.34	147.68	20	140	125	15
MW-33C	189284.18	1155636.34	147.59	65	89	79	10
MW-34A	189391.16	1156929.63	197.95	48	168	148	20
MW-34C	189391.16	1156943.77	199.89	98	114	99	15
MW-35	188917.42	1159762.03	302.69	149	161	151	10
MW-36A	189754.10	1156935.20	192.68	50	147	142	5
MW-39	190362.60	1158325.32	189.92	25	174	164	10
MW-42	188690.50	1156617.90	187.43	33	159	154	5
MW-43	188407.60	1156636.60	186.42	30	161	156	5
Water Level Measurement Only Wells							
MW-1	188267.80	1158593.35	273.63	180	NA	NA	NA
MW-2A1	189242.23	1157544.63	174.22	38	143	133	10
MW-5	188840.50	1156959.90	164.37	14	159.5	149.5	10
MW-10	188737.81	1156265.18	155.12	17.5	142	137	5
MW-11	188424.54	1156062.42	155.04	22	137	132	5
MW-12	187614.62	1158267.67	233.09	70	183	163	20
MW-13	188243.33	1159346.53	288.94	40	256	246	10
MW-14	190169.37	1159300.21	228.22	80	151	146	5
MW-17	187977.80	1158110.35	208.01	54	163	153	10
MW-18	187322.70	1158398.81	258.34	75	199	184	15
MW-19A	188540.03	1157025.96	195.74	45.5	165	150	15
MW-19B	188530.03	1157025.96	195.82	59.5	146	136	10
MW-19D	188510.03	1157025.96	196.83	143	61	51	10
MW-21	188737.81	1156245.18	156.03	15	150	140	10
MW-23B	189475.84	1158085.12	182.42	60	130	120	10
MW-23C	189465.84	1158085.12	182.41	114	76	66	10
MW-26	191159.90	1158911.65	189.73	25.5	178	163	15
MW-27	190934.05	1158891.56	200.65	32.5	182	167	15
MW-28	191379.07	1158948.49	181.05	15	174.5	164.5	10
MW-29B	188580.27	1156121.60	161.69	65	110	95	15
MW-29C	188479.36	1156072.97	156.92	50	111	106	5
MW-30A	188623.50	1155612.45	166.74	35	136	131	5
MW-30B	188613.50	1155612.45	166.6	86	84	79	5
MW-31	189001.26	1155843.17	148.28	20	136	126	10
MW-33B	189294.18	1155636.34	147.55	40	114	104	10
MW-34B	189308.15	1156936.77	198.93	208	-1	-11	10
MW-36	189751.87	1156955.77	189.39	100	99	89	10
MW-37	189012.89	1155477.10	145.93	9	139	134	5
MW-38	188892.50	1155905.23	149.93	47	110	101	10
MW-40A	187885.89	1156779.45	180.16	24.4	160	155	5
MW-40B	187882.31	1156784.38	180.24	67	118	113	5
MW-40C	187875.42	1156785.79	181.16	103.7	82	77	5
MW-41A	188106.83	1157522.05	199.43	35.7	168	163	5
MW-41B	188104.34	1157530.68	200.64	79	126	121	5
MW-41C	188101.13	1157541.93	199.67	117	87	82	5

Notes:

NA: screened interval information was not available for well MW-1.

**Table 2. Summary of Analytical Parameters
2016 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington**

Well	Volatile Organic Compounds		Geochemical Indicator Parameters**	Leachate Indicator Parameters			Field Parameters	Metals* and Nitrate		Appendix III Parameters ^b
	WAC 173-351 Appendix I	Vinyl Chloride (SIM)	Cl, Fe, Mn, SO ₄ , Ca, Mg, Na, K, Alkalinity	Ammonia	TOC, TDS	BOD***, COD	Dissolved Oxygen, ORP, pH, Specific Conductivity, Temperature, Turbidity	As, Sb, Ba, Be, Cd, Cr, Co, Cu, Pb, Ni, Se, Ag, Tl, V, Zn, NO ₃	TSS	VOCs, SVOCs, PCBs, Pest/Herb, Hg, Sn
Compliance Monitoring Locations										
MW-15R										
MW-34A										
MW-34C	✓	✓	✓	✓	✓		✓	✓	✓	
MW-39										
MW-42										
MW-43										
Performance Monitoring Locations										
MW-2B1										
MW-4										
MW-19C	✓	✓	✓	✓	✓		✓	✓	✓	
MW-20										
MW-23A										
MW-24										
Downgradient Monitoring Locations										
MW-29A ^a										
MW-32										
MW-33A ^a	✓	✓	✓	✓	✓		✓	✓	✓	
MW-33C										
MW-36A										
Upgradient Monitoring Locations										
MW-13A										
MW-13B	✓	✓	✓	✓	✓		✓	✓	✓	
MW-16										
MW-35										
Leachate Monitoring Locations										
L-INF	✓	✓	✓	✓	✓	✓	✓	✓	✓	
LP-LCD			✓	✓	✓	✓	✓	✓		
OBWL-TD	✓	✓	✓	✓	✓	✓	✓	✓	✓	

Notes

✓ Indicates wells were sampled for selected parameters

* The Appendix I metals in the groundwater samples were analyzed for only total metals fractions (commencing 1Q16).

** Only Iron and Manganese were analyzed for both total and dissolved fractions during 2016.

*** BOD only analyzed at LP-LCD

^a Sampled semi-annually in June and December 2016.

^b Groundwater and leachate samples were not analyzed for Appendix III parameters during 2016.

**Table 3. Groundwater Elevations
2016 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington**

Location ID	Measuring Point Elevation (ft. MSL)	Q1 February 2016		Q2 May 2016		Q3 August 2016		Q4 November 2016	
		DTW	WLE	DTW	WLE	DTW	WLE	DTW	WLE
Water Quality Monitoring Wells									
MW-2B1	172.94	5.51	167.43	5.78	167.16	7.27	165.67	6.20	166.74
MW-4	175.78	--	--	13.45	162.33	15.61	160.17	11.79	163.99
MW-13A	288.74	55.02	233.72	54.04	234.70	46.63	242.11	45.76	242.98
MW-13B	288.66	57.71	230.95	57.79	230.87	59.91	228.75	59.30	229.36
MW-15R	180.66	17.67	162.99	18.19	162.47	19.33	161.33	18.30	162.36
MW-16	240.01	53.70	186.31	51.91	188.10	58.07	181.94	59.30	180.71
MW-19C	196.96	31.73	165.23	32.89	164.07	34.46	162.50	32.89	164.07
MW-20	198.41	34.12	164.29	35.62	162.79	36.57	161.84	35.01	163.40
MW-23A	182.28	9.90	172.38	9.85	172.43	12.38	169.90	12.06	170.22
MW-24	208.25	28.53	179.72	28.52	179.73	32.59	175.66	32.20	176.05
MW-29A	160.21	--	--	13.33	146.88	15.00	145.21	14.68	145.53
MW-32	152.36	1.00	151.36	1.32	151.04	2.16	150.20	1.08	151.28
MW-33A	147.68	9.40	138.28	5.61	142.07	6.28	141.40	4.41	143.27
MW-33C	147.59	1.20	146.39	2.42	145.17	3.42	144.17	1.63	145.96
MW-34A	197.95	38.04	159.91	38.97	158.98	40.43	157.52	38.91	159.04
MW-34C	199.89	39.88	160.01	41.30	158.59	42.24	157.65	40.73	159.16
MW-35	302.69	70.14	232.55	71.40	231.29	72.44	230.25	71.17	231.52
MW-36A	193.15	29.64	163.04	31.05	161.63	31.86	160.82	30.43	162.25
MW-39	189.92	16.24	173.68	18.98	170.94	21.84	168.08	17.16	172.76
MW-42	187.76	26.10	161.33	27.21	160.22	28.78	158.65	26.41	161.02
MW-43	186.57	--	--	24.17	162.25	25.93	160.49	25.15	161.27
Water Level Measurement Only Wells									
MW-1	273.63	NM	NM	NM	NM	NM	NM	NM	NM
MW-2A1	174.22	6.55	167.67	6.70	167.52	8.42	165.80	7.48	166.74
MW-5	164.37	1.25	163.12	1.59	162.78	3.24	161.13	1.82	162.55
MW-9	160.34	--	--	2.95	157.39	3.78	156.56	2.22	158.12
MW-10	155.12	2.80	152.32	4.01	151.11	5.32	149.89	NM	NM
MW-11	155.04	NM	NM	NM	NM	NM	NM	NM	NM
MW-12	233.09	41.20	191.89	41.85	191.24	48.03	185.06	47.85	185.24
MW-13	288.94	--	--	28.40	260.54	29.47	259.47	27.81	261.13
MW-14	228.22	NM	NM	NM	NM	NM	NM	NM	NM
MW-17	208.01	45.50	162.51	29.27	178.74	33.57	174.44	33.06	174.95
MW-18	258.34	58.70	199.64	58.81	199.53	63.97	194.37	64.26	194.08
MW-19A	195.74	30.38	165.36	31.96	163.78	33.28	162.46	31.62	164.12
MW-19B	195.82	30.45	165.37	32.00	163.82	33.33	162.49	31.70	164.12
MW-19D	196.83	30.33	166.50	30.77	166.06	33.38	163.45	32.09	164.74
MW-21	156.03	7.34	148.69	5.23	150.80	6.50	149.53	4.09	151.94
MW-23B	182.42	10.13	172.29	10.08	172.34	12.88	169.54	12.39	170.03
MW-23C	182.41	10.10	172.31	9.98	172.43	13.08	169.33	12.66	169.75
MW-26	189.73	8.65	181.08	8.05	181.68	11.60	178.13	11.97	177.76
MW-27	200.65	33.90	166.75	17.82	182.83	22.17	178.48	22.33	178.32
MW-28	181.05	4.75	176.30	4.71	176.34	5.63	175.42	5.51	175.54
MW-29B	161.69	15.40	146.29	16.98	144.71	18.55	143.14	16.23	145.46
MW-29C	156.92	9.00	147.92	11.64	145.28	13.34	143.58	10.68	146.24
MW-30A	166.74	22.12	144.62	23.79	142.95	25.40	141.34	23.12	143.62
MW-30B	166.60	22.03	144.57	23.62	142.98	25.22	141.38	22.97	143.63
MW-31	148.28	1.83	146.45	3.13	145.15	4.59	143.69	1.93	146.35
MW-33B	147.55	1.30	146.25	2.52	145.03	3.50	144.05	1.72	145.83
MW-34B	198.93	37.93	161.00	39.75	159.18	40.11	158.82	38.74	160.19
MW-36	189.39	29.76	159.63	31.14	158.25	31.98	157.41	30.54	158.85
MW-37	145.93	3.50	142.43	4.85	141.08	5.98	139.95	3.30	142.63
MW-38	149.93	3.13	146.80	4.46	145.47	5.90	144.03	3.26	146.67
MW-40A	176.63	--	--	13.53	166.63	16.25	163.91	13.79	166.37
MW-40B	176.72	12.23	168.01	13.66	166.58	16.34	163.90	14.02	166.22
MW-40C	176.78	15.49	165.67	14.12	167.04	16.58	164.58	15.21	165.95
MW-41A	195.91	--	--	21.35	178.08	25.12	174.31	24.11	175.32
MW-41B	196.24	21.24	179.40	21.54	179.10	25.43	175.21	24.68	175.96
MW-41C	196.15	23.10	176.57	23.25	176.42	26.84	172.83	26.17	173.50

Notes:

- DTW = Depth to Water (ft)
- WLE = Water level elevation
- Elevations, ft. MSL
- NM = Not measured due to access issues
- = Well dry during sampling event

**Table 4A. Detections and Field Measurements - Compliance Monitoring Wells
2016 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington**

Parameter	Units	MW-15R 2/24/2016	MW-15R 5/17/2016	MW-15R 8/29/2016	MW-15R 11/15/2016	MW-34A 2/23/2016	MW-34A 5/17/2016	MW-34A 8/31/2015	MW-34A 11/15/2016	MW-34C 2/23/2016	MW-34C 5/17/2016	MW-34C 8/31/2016	MW-34C 11/15/2016	MW-39 2/24/2016	MW-39 5/16/2016	MW-39 8/31/2016	MW-39 11/14/2016	MW-42 2/22/2016	MW-42 5/16/2016	MW-42 8/29/2016	MW-42 11/16/2016	MW-43 2/22/2016	MW-43 5/16/2016	MW-43 8/29/2016	MW-43 11/14/2016	
Field Parameter																										
Dissolved Oxygen	mg/L	1.27	0.28	0.44	0.85	5.57	5.55	3.52	0.51	0.17	0.33	0.38	0.58	1.21	0.25	0.2	1.28	0.15	0.14	0.19	0.3	4.07	0.18	0.51	2.73	
Oxidation Reduction Potential	mV	123.0	146.0	104.0	109.0	162.1	168.0	145.0	119.6	-3.6	-22.0	-31.0	41.6	19.0	-87.0	-137.0	47.0	-96.0	-26.3	-117.0	-53.5	108.0	124.5	84.0	156.8	
pH	pH	6.43	6.32	6.31	7.37	6.47	5.74	5.73	6.79	6.81	6.44	6.41	7.45	5.98	6.02	5.10	5.27	6.38	6.40	6.16	7.49	5.50	6.30	5.13	6.38	
Specific Conductivity	umhos/cm	152	157	157	155	109	116	127	177	262	234	227	231	142	264	263	130	466	539	541	550	40	41	44	34	
Temperature	deg C	10.37	10.5	11.05	10.45	12.20	12.7	12.88	12.47	13.00	13.3	13.61	12.6	10.15	10.3	11.56	12.89	12.52	11.8	13.13	12.57	8.11	8.8	10.88	12.63	
Turbidity	NTU	4.19	1.70	2.80	1.21	1.23	2.90	1.82	1.25	22.00	128.10	372.00	77.9	7.46	2.10	1.51	4.53	11.38	4.70	2.27	3.75	5.27	3.50	4.21	17.19	
General Chemistry																										
Alkalinity, Bicarbonate (As CaCO3)	mg/L	73	74	66	71	46	56	58	80	130	110	100	110	65	90	90	57	190	230	220	220	12	17	17	13	
Alkalinity, Total (As CaCO3)	mg/L	73	74	66	71	46	56	58	80	130	110	100	110	65	90	90	57	190	230	220	220	12	17	17	13	
Ammonia (as N)	mg/L	--	--	--	--	--	--	--	--	--	0.031	--	0.03	0.11	0.44	0.47	--	5.4	5.7	5.8	5.4	--	0.043	--	0.03	
Calcium, Dissolved	mg/L	14	13	14	13	10	10	12	15	25	22	22	24	10	12	12	13	38	38	43	42	3.2	3.0	0.055	3.2	
Chloride	mg/L	2.3	2.7	2.6	2.3	1.8	1.7	2.5	3.2	4.3	4.4	4.7	4.4	2.6	6.2	6.1	--	9.7	17.0	15.0	12.0	--	1.3	1.8	--	
Iron, Dissolved	mg/L	--	--	--	--	--	--	--	--	0.21	0.58	0.32	0.62	11	35	34	0.37	22	23	24	27	0.32	0.26	--	--	
Iron, Total	mg/L	--	--	0.11	--	--	--	--	0.06	23	34	96 B	8.4	11	37	33 B	0.8	22	24	24	27	0.56	0.86	1.1	0.24	
Magnesium, Dissolved	mg/L	8.4	8.5	9.1	9.4	3.9	4.5	5.1	8.5	11.0	10.0	8.6	11.0	5.1	7.7	6.8	6.1	13	14	15	14	1.3	1.5	0.33	1.4	
Manganese, Dissolved	mg/L	0.0015	0.0024	0.0012	0.0013	--	--	--	0.0017	0.39	0.53	0.48 B	0.54	0.18	0.47	0.44 B	0.02	4.2	4.6	4.5	4.5	0.1	0.087	0.056	0.033	
Manganese, Total	mg/L	0.0024	0.002	0.0084	0.0037	0.0016	--	0.0044	0.0027	2.4	0.9	14	0.6	0.18	0.42	0.41	0.017	4.3	4.5	4.5	4.4	0.11	0.076	0.057	0.036	
Nitrate (As N)	mg/L	0.4	0.17	0.20	0.20	0.36	0.59	0.33	--	--	--	--	--	0.15	--	--	1.6	--	--	--	--	0.44	0.2	0.19	0.52	
Potassium, Dissolved	mg/L	--	--	--	--	--	--	--	--	2.0	--	--	--	--	--	--	--	8.3	8.0	7.7	8.7	--	--	--	--	
Sodium, Dissolved	mg/L	6.6	5.3	5.5	6.3	7.3	7.0	7.7	9.7	13.0	12.0	9.5	12.0	5.8	8.6	8.4	4.8	21.0	21.0	22.0	21.0	2.4	2.2	1.8	2.3	
Sulfate	mg/L	4.0	5.9	5.9	4.8	3.0	3.7	2.7	3.0	4.9	5.5	5.6	4.6	1.1	--	--	1.4	7.5	7.8	9.5	6.3	1.9	1.8	1.7	1.7	
Total Dissolved Solids (TDS)	mg/L	110	98	96	91	96	100	120	120	180	170	170	160	89	120 B	130	76	240	260 B	270	250	24	32 B	27	28	
Total Organic Carbon (TOC)	mg/L	--	--	--	--	--	--	--	--	2.2	1.5	3.7	--	1.2	2.8	2.2	--	6.7	6.7	6.4	7.2	--	1.1	--	1.2	
Total Suspended Solids (TSS)	mg/L	--	--	--	--	--	--	--	--	260	87	430	19	7.6	12	29	--	9.2	14	24	31	--	6.4	--	--	
Metals																										
Antimony, Total	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic, Total	mg/L	0.0002	0.00018	0.000187	0.000238	0.0004	0.00039	0.000474	0.000453	0.0156	0.0254	0.0699	0.00542	0.0006	0.00213	0.00171	0.000181	0.0014	0.0017	0.00193	0.00186	--	--	--	--	
Barium, Total	mg/L	0.0048	0.0046	0.0044	0.0044	0.0035	0.0026	0.0036	0.0045	0.085	0.14	0.59	0.037	0.0100	0.014	0.014	0.0086	0.110	0.110	0.110	0.110	0.0032	0.0031	0.0039	0.0034	
Cadmium, Total	mg/L	--	--	--	--	--	--	--	--	--	--	0.00073	--	--	--	--	--	--	--	--	--	0.00022	--	--	--	
Chromium, Total	mg/L	--	--	--	--	0.0061	0.0061	0.0058	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Cobalt, Total	mg/L	--	--	--	--	--	--	--	--	--	--	0.03	--	--	0.0072	0.0065	--	--	--	--	--	--	--	--	--	
Copper, Total	mg/L	--	--	--	--	--	--	--	--	0.0021	0.0027	0.013	--	--	--	--	--	--	--	--	--	--	--	--	--	
Lead, Total	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Nickel, Total	mg/L	--	--	--	--	0.0054	--	--	--	--	--	0.0047	--	--	--	--	--	--	--	--	--	--	--	--	--	
Vanadium, Total	mg/L	0.0044	0.0034	0.0029	0.0037	0.0045	0.0041	0.0044	0.0039	0.0027	0.0032	0.014	--	--	--	--	--	--	--	--	--	--	--	--	--	
Zinc, Total	mg/L	--	--	--	--	--	--	--	--	--	--	0.0093	--	--	--	--	--	--	--	--	--	--	--	--	--	
Volatile Organic Compounds																										
Acetone	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.3 J	--	--	--	--	--	--	--	
Methylcyclohexane	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Trichloroethene	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Vinyl chloride	ug/L	--	--	--	--	--	--	--	--	0.072	0.081	0.069 B	0.078 B	--	--	--	--	0.018 J	0.031	0.082 B	0.026 B	--	--	--	--	

Notes:
 CaCO₃ = Calcium carbonate
 deg-C = Degrees Celcius
 J = Concentration is estimated
 umhos/cm = Microhms per centimeter
 ug/L = Micrograms per liter
 mg/L = Milligrams per liter
 mV = Millivolts
 N = Nitrogen
 NTU = Nephelometric turbidity units
 SU = Standard units
 -- = Parameter not detected above the project-specific reporting limit
 NM = Not Measured, see field notes
 B = Analyte detected in sample blank
 Bold = Analyte exceeds a water quality standard.
 Parameters not listed above were not detected at any of the above listed sample locations during the reporting year

**Table 4B. Detections and Field Measurements - Performance Monitoring Wells
2016 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington**

Parameter	Units	MW-2B1 2/23/2016	MW-2B1 5/17/2016	MW-2B1 8/30/2016	MW-2B1 11/15/2016	MW-4 2/22/2016	MW-4 5/16/2016	MW-4 9/1/2016	MW-4 11/14/2016	MW-19C 2/22/2016	MW-19C 5/17/2016	MW-19C 8/29/2016	MW-19C 11/14/2016	MW-20 2/23/2016	MW-20 5/17/2016	MW-20 8/29/2016	MW-20 11/14/2016	MW-23A 2/23/2016	MW-23A 5/17/2016	MW-23A 8/30/2016	MW-23A 11/16/2016	MW-24 2/24/2016	MW-24 5/17/2016	MW-24 8/30/2016	MW-24 11/14/2016	
Field Parameter																										
Dissolved Oxygen	mg/L	0.1	0.14	0.28	0.17	0.97	0.14	0.16	4.07	0.25	0.27	0.26	0.33	5.41	2.21	0.80	6.39	0.24	0.11	0.18	4.02	0.19	0.50	1.66	0.24	
Oxidation Reduction Potential	mV	158.1	1.0	-29.0	80.2	173.0	124.4	111.0	142.0	22.0	-1.0	-29.0	63.1	171.0	130.0	73.0	121.8	155.0	7.2	43.0	145.0	125.9	83.0	110.0	107.9	
pH	pH	6.70	6.11	6.06	7.29	5.73	6.65	6.11	5.06	6.69	6.66	6.46	7.41	6.02	6.28	6.24	6.94	6.15	6.54	5.82	6.11	6.63	6.63	5.88	6.63	
Specific Conductivity	umhos/cm	177	232	233	241	71	135	137	50	134	134	168	154	230	376	337	200	175	142	153	88	147	119	115	127	
Temperature	deg C	13.55	14.0	15.20	13.35	9.29	9.7	9.94	11.49	10.31	10.9	11.81	10.56	14.46	15.0	15.65	14.37	12.75	13.2	13.24	12.49	11.95	13.4	12.68	11.66	
Turbidity	NTU	2.14	25.70	19.50	7.21	7.32	1.70	0.56	1.06	4.46	4.00	1.90	5.85	3.17	4.3	0.93	12.91	7.86	4.9	2.29	1.64	2.85	2.8	3.58	2.12	
General Chemistry																										
Alkalinity, Bicarbonate (As CaCO3)	mg/L	73	80	85	82	29	66	65	42	60	63	80	74	63	130	130	75	86	64	72	40	64	51	51	57	
Alkalinity, Total (As CaCO3)	mg/L	73	80	85	82	29	66	65	42	60	63	80	74	63	130	130	75	86	64	72	40	64	51	51	57	
Ammonia (as N)	mg/L	2	1.8	2.2	2.1	--	--	--	--	0.52	0.4	0.49	0.67	--	--	--	--	--	0.034	--	--	--	--	--	--	
Calcium, Dissolved	mg/L	17	17	19 B	18	6.2	11	13	4.3	12	11	15	16	20	33	30	19	19	13	16 B	7.8	12	9	10 B	11	
Chloride	mg/L	4.8	17.0	13.0	14.0	1.9	2.1	2.0	1.4	2.0	2.4	4.7	5.7	9.9	11.0	11.0	8.3	3.0	2.7	2.3	--	2.6	3.2	2.6	2.5	
Iron, Dissolved	mg/L	--	1.9	2.3	0.31	--	--	--	--	--	0.098	0.15	0.064	--	--	--	--	--	--	0.1	--	--	--	--	--	
Iron, Total	mg/L	0.21	3.6	4.1	1.1	0.13	--	--	--	0.14	0.24	0.18	0.12	--	--	--	0.18	1.3	0.50	0.31	0.098	0.14	0.10	0.19	--	
Magnesium, Dissolved	mg/L	5.2	5.1	5.3	5.6	2.9	6.2	5.7	2.0	6.0	5.9	7.8	8.8	10.0	18.0	17.0	11.0	9.2	6.1	7.2	3.4	7.3	5.4	5.7	6.5	
Manganese, Dissolved	mg/L	1.8	2.5	2.4	2.5	0.022	0.44	0.87	0.021	0.97	0.87	1.1	1.2	--	--	0.066	--	0.51	1.0	1.5	0.035	1.2	0.68	0.45	0.7	
Manganese, Total	mg/L	2.1	2.5	2.5	2.7	1.7	0.57	0.87	0.21	0.94	0.89	1.1	1.2	0.0074	0.016	0.29	0.45	1.0	1.3	1.7	0.065	1.4	0.86	1.6	1.7	
Nitrate (As N)	mg/L	--	--	--	1.8	--	--	--	0.33	--	--	--	--	7.8	9.1	3.5	6.0	--	0.22	--	0.24	--	0.18	0.36	0.16 H	
Potassium, Dissolved	mg/L	3.4	3.0	2.9	2.8	--	--	--	--	1.3	1.2	1.4	1.5	3.3	3.4	3.2	3.1	1.5	--	--	--	1.3	--	--	--	
Sodium, Dissolved	mg/L	5.2	13.0	13.0	11.0	4.8	6.7	6.8	3.0	6.0	5.4	6.4	6.1	8.3	11.0	9.2	9.3	5.6	5.0	5.7	3.5	4.9	4.6	4.3	5.0	
Sulfate	mg/L	3.6	7.4	5.8	6.0	3.2	4.8	3.6	2.0	4.0	4.1	4.4	3.7	6.7	9.8	9.1	4.2	3.4	3.8	3.5	2.3 B	5.0	3.7	3.1	3.5	
Total Dissolved Solids (TDS)	mg/L	110	160	140	140	53	90 B	130	36	94	91	110	110	160	230	200	160	130	100	93	87	100	83	77	86 H	
Total Organic Carbon (TOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Total Suspended Solids (TSS)	mg/L	--	6.4	6.4	--	--	--	--	--	--	--	--	--	--	--	--	4.0	--	--	--	26.0	--	--	5.6	--	
Metals																										
Antimony, Total	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic, Total	mg/L	0.0009	0.00321	0.0037	0.00133	0.0005	0.00062	0.00068	0.000292	0.0026	0.00232	0.00292	0.00288	0.0001	0.00014	0.000189	0.000182	0.0009	0.00024	0.000176	0.000081	0.0004	0.00027	0.000364	0.000271	
Barium, Total	mg/L	0.0094	0.013	0.015	0.013	0.0057	0.0028	0.0023	0.0019	0.0036	0.0029	0.0035	0.0035	0.0110	0.0140	0.0120	0.016	0.0110	0.0048	0.0055	0.0078	0.0043	0.0028	0.005	0.0057	
Cadmium, Total	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium, Total	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt, Total	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper, Total	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead, Total	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel, Total	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0043	0.0048	--	--	--	--	--	--	--	--	--
Vanadium, Total	mg/L	--	--	--	--	0.0029	--	--	--	--	--	--	--	--	--	--	--	0.0038	0.0026	--	--	--	--	0.0024	0.0022	
Zinc, Total	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																										
Acetone	ug/L	--	--	3.7 J	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylcyclohexane	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.18 J	--	--	--	--	--	--
Trichloroethene	ug/L	--	--	--	--	--	--	--	--	1.1	1.2	1.2	0.99 J	--	--	0.65 J	--	--	--	--	--	--	--	--	--	--
Vinyl chloride	ug/L	--	0.011 J	0.013 J B	0.0087 J B	0.0097 J	0.031	0.061 B	0.0095 J B	0.01 J	--	0.025 B	0.029 B	--	--	0.061 B	--	--	--	--	--	--	--	--	--	

Notes:
CaCO₃ = Calcium carbonate
deg-C = Degrees Celcius
J = Concentration is estimated
umhos/cm = Microhms per centimeter
ug/L = Micrograms per liter
mg/L = Milligrams per liter
Parameters not listed above were not detected at any of the above listed sample locations during the reporting year

mV = Millivolts
N = Nitrogen
NTU = Nephelometric turbidity units
SU = Standard units
-- = Parameter not detected above the project-specific reporting limit
NM = Not Measured, see field notes

B = Analyte detected in sample blank
H = Analyzed beyond hold time
Bold = Analyte exceeds a water quality standard.

**Table 4C. Detections and Field Measurements - Downgradient Monitoring Wells
2016 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington**

Parameter	Units	MW-29A 5/16/2016	MW-29A 11/14/2016	MW-32 2/24/2016	MW-32 5/16/2016	MW-32 9/1/2016	MW-32 11/16/2016	MW-33A 5/18/2016	MW-33A 11/17/2016	MW-33C 2/24/2016	MW-33C 5/18/2016	MW-33C 9/1/2016	MW-33C 11/17/2016	MW-36A 2/24/2016	MW-36A 5/17/2016	MW-36A 8/29/2016	MW-36A 11/15/2016
Field Parameter																	
Dissolved Oxygen	mg/L	0.15	0.23	0.40	0.15	0.36	1.18	0.57	0.43	0.12	0.25	0.3	0.26	2.16	1.58	1.23	2.9
Oxidation Reduction Potential	mV	65.4	45.6	-47.0	37.5	-61.0	-2.3	1.0	39.2	90.2	-157.0	-122.0	-61.14	161.0	177.0	123.0	133.3
pH	pH	6.49	6.96	6.64	6.96	6.46	7.6	6.66	6.67	7.17	7.59	7.33	8.31	6.11	5.88	5.90	6.81
Specific Conductivity	umhos/cm	84	87	242	235	250	251	138	8.4	160	158	160	159	137	146	126	128
Temperature	deg C	8.80	11.34	12.00	12.10	12.49	12.13	9.40	9.99	8.88	9.70	11.07	9.24	9.58	9.70	10.73	9.71
Turbidity	NTU	2.40	8.87	3.81	2.90	0.90	1.50	12.00	8.61	4.75	1.60	2.49	1.12	5.31	1.60	1.34	1.75
General Chemistry																	
Alkalinity, Bicarbonate (As CaCO3)	mg/L	40	47	110	130	110	110	67	39	82	73	79	68	61	61	57	60
Alkalinity, Total (As CaCO3)	mg/L	40	47	110	130	110	110	67	39	82	73	79	68	61	61	57	60
Ammonia (as N)	mg/L	0.062	0.075	--	--	--	--	--	0.3	--	--	--	--	--	0.03	--	--
Calcium, Dissolved	mg/L	6	7.4	23	20	23	20	14	8.6	17	17	18	17	11	10	9.9	10
Chloride	mg/L	1.3	1.7	7.3	6.5	6.4	7.0	2.9	2.2	2.9	3.0	3.0	2.8	1.7	1.5	1.5	1.7
Iron, Dissolved	mg/L	3.4	4.1	0.55	0.50	0.52	0.50	--	2.5	--	0.068	--	0.081	--	--	0.084	--
Iron, Total	mg/L	3.9	4.6	0.55	0.76	0.55	0.61	1.5	2.5	0.28	0.14	0.2	--	0.07	--	--	0.078
Magnesium, Dissolved	mg/L	3.4	4.5	12.0	11.0	10.0	10.0	6.3	4.1	7.0	7.0	6.5	7.4	7.0	7.0	6.8	8.0
Manganese, Dissolved	mg/L	1.2	1.4	2.0	1.7	1.9	1.7	0.0052	0.089	0.15	0.15	0.15	0.15	0.0011	--	--	--
Manganese, Total	mg/L	1.2	1.4	2.0	1.8	1.8	1.8	0.0098	0.083	0.22	0.15	0.29	0.15	0.0034	0.0011	0.0011	0.0013
Nitrate (As N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	2.2	2.6	0.78	0.49
Potassium, Dissolved	mg/L	--	--	1.4	--	--	1.0	--	--	1.3	1.3	1.1	1.3	1.1	--	--	--
Sodium, Dissolved	mg/L	2.9	3.6	13.0	11.0	11.0	12.0	4.0	3.0	4.7	4.5	4.3	4.2	8.4	7.0	6.1	7.3
Sulfate	mg/L	--	--	8.8	8.7	8.0	8.3	4.1	1.8	7.4	8.0	7.4	7.4	2.3	3.8	2.3	2.5
Total Dissolved Solids (TDS)	mg/L	76 B	58	180	160 B	170	150	86	62	110	100	100	95	120	110	99	96
Total Organic Carbon (TOC)	mg/L	1.6	1.7	--	--	--	--	--	2.5	--	--	--	--	--	--	--	--
Total Suspended Solids (TSS)	mg/L	--	4.0	--	--	--	9.6	5.6	8.4	--	--	--	4.0	--	--	--	--
Metals																	
Antimony, Total	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic, Total	mg/L	0.00163	0.00199	0.009	0.0107	0.00918	0.00995	0.00028	0.000509	0.0024	0.00229	0.00259	0.00253	0.0006	0.00048	0.00051	0.000566
Barium, Total	mg/L	0.0059	0.0100	0.0046	0.0050	0.0041	0.0032	0.0021	0.0024	0.0051	0.0040	0.0043	0.0048	0.0032	0.0025	0.0024	0.0025
Cadmium, Total	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium, Total	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	0.0160	0.011	0.0086	0.0085
Cobalt, Total	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper, Total	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead, Total	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel, Total	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium, Total	mg/L	--	--	--	--	--	--	0.0026	0.0032	--	--	--	--	0.0038	0.0022	0.0029	0.0031
Zinc, Total	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																	
Acetone	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylcyclohexane	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trichloroethene	ug/L	--	--	--	0.5 J	0.47 J	--	--	--	--	--	--	--	--	--	--	--
Vinyl chloride	ug/L	--	--	0.31	0.28	0.35 B	0.46 B	--	--	--	--	--	--	--	--	--	--

Notes:
 CaCO₃ = Calcium carbonate
 deg-C = Degrees Celcius
 J = Concentration is estimated
 umhos/cm = Microhms per centimeter
 ug/L = Micrograms per liter
 mg/L = Miligrams per liter
 mV = Milivolts
 N = Nitrogen
 NTU = Nephelometric turbidity units
 SU = Standard units
 -- = Parameter not detected above the project-specific reporting limit
 NM = Not Measured, see field notes
 B = Anylyte detected in sample blank
Bold = Anylyte exceeds a water quality standard.
 Parameters not listed above were not detected at any of the above listed sample locations during the reporting year

**Table 4D. Detections and Field Measurements - Upgradient Monitoring Wells
2016 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington**

Parameter	Units	MW-13A 2/22/2016	MW-13A 5/16/2016	MW-13A 8/31/2016	MW-13A 11/14/2016	MW-13B 2/22/2016	MW-13B 5/16/2016	MW-13B 8/31/2016	MW-13B 11/14/2016	MW-16 2/24/2016	MW-16 5/16/2016	MW-16 8/31/2016	MW-16 11/14/2016	MW-35 2/22/2016	MW-35 5/16/2016	MW-35 8/31/2016	MW-35 11/15/2016
Field Parameter																	
Dissolved Oxygen	mg/L	5.58	5.92	6.87	6.54	6.04	6.28	7.26	6.94	6.89	6.32	6.07	6.91	5.73	6.05	6.88	6.61
Oxidation Reduction Potential	mV	164.8	164.0	154.0	113	162.8	144.0	108	84	216.1	187.0	163	135	170.8	175.0	121	95
pH	pH	6.69	6.87	6.65	6.50	7.01	7.31	7.23	7.17	6.49	6.11	5.93	5.89	6.58	6.95	7.09	6.61
Specific Conductivity	umhos/cm	177	169	171	169	176	168	171	171	91	102	123	110	164	156	159	158
Temperature	deg C	9.59	9.8	9.98	9.57	9.30	9.9	10.43	10.41	9.02	9.4	9.66	9.81	10.31	10.1	10.78	10.41
Turbidity	NTU	1.03	1.5	0.86	0.84	1.17	4.3	0.65	0.89	0.95	4.2	0.57	2.51	0.99	4.7	0.67	0.78
General Chemistry																	
Alkalinity, Bicarbonate (As CaCO3)	mg/L	80	90	84	92	77	87	82	80	40	50	60	56	72	82	77	91
Alkalinity, Total (As CaCO3)	mg/L	80	90	84	92	77	87	82	80	40	50	60	56	72	82	77	91
Ammonia (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Calcium, Dissolved	mg/L	16.0	15.0	17.0	16.0	18.0	16.0	18.0	17.0	7.7	8.0	12.0	9.6	15.0	14.0	15.0	14.0
Chloride	mg/L	1.9	1.9	1.9	1.8	2.0	2.0	2.0	1.9	1.2	1.2	1.1	1.0	2.1	1.9	1.9	1.8
Iron, Dissolved	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron, Total	mg/L	--	--	--	0.073	--	--	--	--	--	--	--	0.12	--	--	--	--
Magnesium, Dissolved	mg/L	9.7	9.5	8.6	10.0	9.1	8.6	8.1	9.3	4.5	5.0	5.4	5.9	9.3	9.0	8.1	10.0
Manganese, Dissolved	mg/L	--	--	--	--	--	--	--	0.0012	--	--	--	0.0027	--	--	--	--
Manganese, Total	mg/L	--	--	--	--	--	--	--	--	0.0019	--	0.0024	0.017	--	--	--	--
Nitrate (As N)	mg/L	0.42	0.45	0.45	0.48	0.43	0.46	0.45	0.64	0.50	0.69	0.27	0.24	0.41	0.44	0.43	0.47
Potassium, Dissolved	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium, Dissolved	mg/L	5.9	5.5	5.4	5.4	5.8	5.2	5.8	5.1	4.4	4.8	5.4	5.0	5.6	5.2	5.1	6.3
Sulfate	mg/L	2.1	2.2	2.3	2.0	3.4	3.5	3.7	3	2.9	2.6	1.7	1.6	2.6	2.5	2.8	2.2
Total Dissolved Solids (TDS)	mg/L	100	99 B	130	110	100	99 B	120	100	79	83 B	93	86	93	100 B	95	120
Total Organic Carbon (TOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Suspended Solids (TSS)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals																	
Antimony, Total	mg/L	--	--	0.001	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic, Total	mg/L	0.0002	0.00016	0.000177	0.00017	0.0003	0.00029	0.000311	0.000314	0.0003	0.0003	0.000311	0.000381	0.0001	0.0001	0.000109	0.000114
Barium, Total	mg/L	0.0023	0.003	0.0029	0.0028	0.0036	0.0034	0.0041	0.0029	0.0027	0.0031	0.0042	0.0045	0.0031	0.0033	0.0029	0.0027
Cadmium, Total	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium, Total	mg/L	--	--	--	--	0.0033	0.0032	0.0031	0.0036	0.0077	0.0066	0.0092	0.0085	--	--	--	--
Cobalt, Total	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper, Total	mg/L	--	--	--	0.0021	--	--	--	--	--	--	--	--	--	--	--	--
Lead, Total	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel, Total	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium, Total	mg/L	0.0040	0.0039	0.0041	0.0039	0.0058	0.0056	0.0054	0.0061	0.0043	0.0034	0.0042	0.0049	0.0045	0.0046	0.0046	0.0043
Zinc, Total	mg/L	--	--	--	--	--	--	--	--	--	--	--	0.0056	--	--	--	--
Volatile Organic Compounds																	
Acetone	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylcyclohexane	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trichloroethene	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl chloride	ug/L	--	--	--	0.008 J B	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

CaCO₃ = Calcium carbonate
deg-C = Degrees Celcius
J = Concentration is estimated
µmhos/cm = Microhms per centimeter
µg/L = Micrograms per liter
mg/L = Miligrams per liter
Parameters not listed above were not detected at any of the above listed sample locations during the reporting year

mV = Millivolts
N = Nitrogen
NTU = Nephelometric turbidity units
SU = Standard units
-- = Parameter not detected above the project-specific reporting limit
NM = Not Measured, see field notes

B = Analyte detected in sample blank
Bold = Analyte exceeds a water quality standard.

**Table 4E. Detections and Field Measurements - Leachate and Leak Detection Locations
2016 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington**

Parameter	Units	L-INF* 11/14/2016	OBWL-TD 11/14/16	LP-LCD 3/8/2016	LP-LCD 6/20/2016	LP-LCD 9/19/2016	LP-LCD 11/22/2016
Field Parameter							
Dissolved Oxygen	mg/L	6.16	8.53	8.91	4.70	6.10	3.10
Oxidation Reduction Potential	mV	104.0	129.3	53.2	48.0	133.2	-2.0
pH	pH	7.83	6.98	7.25	7.23	7.38	7.12
Specific Conductivity	umhos/cm	43.83	145	3875	3818	3345	3094
Temperature	deg C	18.24	13.29	9.41	19.10	21.70	11.40
Turbidity	NTU	31.38	25.77	4.35	24.1	4.3	119.0
General Chemistry							
Alkalinity, Bicarbonate (As CaCO3)	mg/L	1600	57	790	800	800	790
Alkalinity, Total (As CaCO3)	mg/L	1600	57	790	800	800	790
Ammonia (as N)	mg/L	150.0	--	5.2	4.7	11.0	4.7
Biochemical Oxygen Demand	mg/L	NA	NA	--	2.5	10.0	14 H
Calcium, Dissolved	mg/L	150	24	NA	NA	NA	NA
Calcium, Total	mg/L	NA	NA	66	57	49	58
Chemical Oxygen Demand	mg/L	340	14	170	150	180	190
Chloride	mg/L	680	--	640	600	660	630
Iron, Dissolved	mg/L	0.42	--	NA	NA	NA	NA
Iron, Total	mg/L	NA	NA	0.65	--	0.51	0.54
Magnesium, Dissolved	mg/L	94	2.9	NA	NA	NA	NA
Magnesium, Total	mg/L	NA	NA	37	15	29	34
Manganese, Dissolved	mg/L	2.7	0.008	NA	NA	NA	NA
Manganese, Total	mg/L	NA	NA	0.73	--	0.8	0.73
Nitrate/Nitrite	mg/L	0.36	0.27	NA	NA	NA	NA
Potassium, Dissolved	mg/L	100	2.1	NA	NA	NA	NA
Potassium, Total	mg/L	NA	NA	69	3.1	76	76
Sodium, Dissolved	mg/L	690	5.7	NA	NA	NA	NA
Sodium, Total	mg/L	NA	NA	780	66	700	740
Sulfate	mg/L	280	22	290	310	310	260
Total Dissolved Solids (TDS)	mg/L	2700	140	2,500	2,400	2,200	2,400 H
Total Organic Carbon (TOC)	mg/L	100	1.6	59	53	64	54
Metals							
Antimony, Dissolved	mg/L	--	0.0029	NA	NA	NA	NA
Barium, Dissolved	mg/L	0.19	0.015	NA	NA	NA	NA
Chromium, Dissolved	mg/L	0.0068	--	NA	NA	NA	NA
Cobalt, Dissolved	mg/L	0.0071	--	NA	NA	NA	NA
Nickel, Dissolved	mg/L	0.061	0.0047	NA	NA	NA	NA
Vanadium, Dissolved	mg/L	0.0069	--	NA	NA	NA	NA
Zinc, Dissolved	mg/L	--	0.13	NA	NA	NA	NA
Volatile Organic Compounds							
Butyl alcohol, tert-	ug/L	190	--	NA	NA	NA	NA
Tetrahydrofuran	ug/L	43	--	NA	NA	NA	NA
Vinyl chloride	ug/L	0.046 J B	--	NA	NA	NA	NA
Notes:							
CaCO ₃ = Calcium carbonate		NA = Not Analyed					
deg-C = Degrees Celcius		mV = Milivolts					
J = Concentration is estimated		N = Nitrogen					
umhos/cm = Microhms per centimeter		NTU = Nephelometric turbidity units					
ug/L = Micrograms per liter		SU = Standard units					
mg/L = Miligrams per liter		-- = Parameter not detected above the project-specific reporting limit					
H = Analyzed beyond hold time		NM = Not Measured, see field notes					
Parameters not listed above were not detected at any of the above listed sample locations during the reporting year.		B = Anylyte detected in sample blank					

**Table 5. 2016 Groundwater and Leachate VOC Detections
2016 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington**

Parameter	Units	Event	Well Type	Well	Result
Acetone	ug/L	Q116	Compliance	MW-42	3.3 J
		Q316	Performance	MW-2B1	3.7 J
Butyl alcohol, tert-	ug/L	Q416	System	L-INF	190
Methylcyclohexane	ug/L	Q316	Performance	MW-23A	0.18 J
Tetrahydrofuran	ug/L	Q416	System	L-INF	43
Trichloroethene	ug/L	Q116	Performance	MW-19C	1.1
		Q216	Downgradient	MW-32	0.5 J
		Q216	Performance	MW-19C	1.2
		Q316	Downgradient	MW-32	0.47 J
		Q316	Performance	MW-19C	1.2
		Q316	Performance	MW-20	0.65 J
		Q416	Performance	MW-19C	0.99 J
Vinyl chloride	ug/L	Q116	Compliance	MW-42	0.018 J
		Q116	Compliance	MW-34C	0.072
		Q116	Downgradient	MW-32	0.31
		Q116	Performance	MW-19C	0.01 J
		Q116	Performance	MW-4	0.0097 J
		Q216	Compliance	MW-34C	0.081
		Q216	Compliance	MW-42	0.031
		Q216	Downgradient	MW-32	0.28
		Q216	Performance	MW-2B1	0.011 J
		Q216	Performance	MW-4	0.031
		Q316	Compliance	MW-34C	0.069 B
		Q316	Compliance	MW-42	0.082 B
		Q316	Downgradient	MW-32	0.35 B
		Q316	Performance	MW-20	0.061 B
		Q316	Performance	MW-19C	0.025 B
		Q316	Performance	MW-2B1	0.013 J B
		Q316	Performance	MW-4	0.061 B
		Q416	Compliance	MW-42	0.026 B
		Q416	Compliance	MW-34C	0.078 B
		Q416	Downgradient	MW-32	0.46 B
		Q416	Performance	MW-4	0.0095 J B
		Q416	Performance	MW-19C	0.029 B
		Q416	Performance	MW-2B1	0.0087 J B
		Q416	System	L-INF	0.046 J B
		Q416	Upgradient	MW-13A	0.008 J B

J = Indicates that concentration is estimated due to low concentration in sample

B = Indicates that compound was detected in the method blank for the given parameter

**Table 6A. Summary of Significant Parameter Trends by Well Type
2016 Annual Monitoring Report
Olympic View Sanitary Lanfill, Kitsap County, Washington**

Significant VOC Trends		Significant Inorganic Parameter Trends	
Increasing	Decreasing	Increasing	Decreasing
Upgradient Wells			
None	None	Alkalinity, Bicarbonate Alkalinity, Total Nitrate Temperature	Arsenic, Total Sulfate Chloride
Performance Wells			
None	Trichloroethene Vinyl Chloride	Nitrate Sulfate Temperature	Alkalinity, Bicarbonate Alkalinity, Total Arsenic, Total Calcium, Dissolved Chloride Iron, Total Magnesium, Dissolved Sodium, Dissolved Specific Conductivity Sulfate Temperature
Compliance Wells			
None	Vinyl Chloride	pH Potassium, Dissolved Temperature	Alkalinity, Bicarbonate Alkalinity, Total Ammonia Calcium, Dissolved Chloride Magnesium, Dissolved Sodium, Dissolved Specific Conductivity Sulfate Total Dissolved Solids
Downgradient Wells			
None	None	Nitrate Temperature pH	Alkalinity, Bicarbonate Alkalinity, Total Ammonia Barium, Total Calcium, Dissolved Chloride Magnesium, Dissolved Specific Conductivity Sulfate Total Dissolved Solids

Table 6B. Summary of Trends in Groundwater (2005 - 2016)
2016 Annual Monitoring Report
Olympic View Sanitary Lanfill, Kitsap County, Washington

Results of Sen's Non-Parametric Test for Trend

Trend Test Period: January 2005 through December 2016

Trend Test Wells:

- Compliance Wells: MW-15R, MW-34A, MW-34C, MW-39, MW-42, MW-43
- Performance Wells: MW-2B1, MW-4, MW-19C, MW-20, MW-23A, MW-24
- Downgradient Wells: MW-9*, MW-29A**, MW-32, MW-33A**, MW-33C, MW-36A
- Upgradient Wells MW-13A, MW-13B, MW-16, MW-35,

*no longer routinely sampled; **sampled semi-annually

<i>Trend Test A = all organic parameters listed in Appendix I and Appendix II of WAC 173-351-990 that have been detected at least once in at least one of 22 wells comprising the network of 1) compliance, 2) performance, 3) downgradient, and 4) upgradient site monitoring wells, during the trend test period. This includes the following constituents:</i>		
	<u>Significant Increasing Trends</u>	<u>Significant Decreasing Trends</u>
1,1-Dichloroethane	None	None
1,2-Dichloroethene (total)	None	None
1,2-Dichlorobenzene	None	None
1,4-Dichlorobenzene	None	None
Acetone	None	None
Benzene	None	None
Carbon Disulfide	None	None
Chlorobenzene	None	None
Chlorodifluoromethane	None	None
Chloroethane	None	None
Chloroform	None	None
Chloromethane	None	None
cis-1,2-dichloroethene	None	None
Dichlorodifluoromethane	None	None
Ethyl Ether	None	None
Methylene Chloride	None	None
Naphthalene	None	None
n-Butyl Alcohol	None	None
tert-Butyl Alcohol	None	None
Tetrachloroethene	None	None
Tetrahydrofuran	None	None
Toluene	None	None
trans-1,2-Dichloroethene	None	None
Trichloroethene	None	MW-19C (graph 509)
Vinyl Chloride	None	MW-19C (graph 530) MW-34C (graph 540)

Table 6B. Summary of Trends in Groundwater (2005 - 2016)
2016 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington

<i>Trend Test B = all metals and groundwater quality parameters listed in Appendix I and Appendix II of WAC (173-351-990)</i>		
	<u>Significant Increasing Trends</u>	<u>Significant Decreasing Trends</u>
Antimony, total	None	None
Arsenic, total	None	MW-19C (graph 89) MW-24 (graph 92) MW-35 (graph 100)
Barium, total	None	MW-32 (graph 116)
Beryllium, total	None	None
Cadmium, total	None	None
Chromium, total	None	None
Cobalt, total	None	None
Copper, total	None	None
Lead, total	None	None
Nickel, total	None	None
Selenium, total	None	None
Silver, total	None	None
Thallium, total	None	None
Vanadium, total	None	None
Zinc, total	None	None
Nitrate (as N)	MW-20 (graph 384) MW-35 (graph 394) MW-36A (graph 395)	None
pH	MW-32 (graph 410) MW-34C (graph 414) MW-42 (graph 419)	None
Specific Conductivity	None	MW-15R (graph 507) MW-19C (graph 509) MW-23A (graph 511) MW-24 (graph 512) MW-29A (graph 513) MW-2B1 (graph 514) MW-32 (graph 515) MW-33A (graph 516) MW-34A (graph 518) MW-34C (graph 519) MW-4 (graph 523)

Table 6B. Summary of Trends in Groundwater (2005 - 2016)
2016 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington

<i>Trend Test B = all metals and groundwater quality parameters listed in Appendix I and Appendix II of WAC (173-351-990)</i>		
	<u>Significant Increasing Trends</u>	<u>Significant Decreasing Trends</u>
Temperature	MW-13A (graph 547) MW-15R (graph 549) MW-20 (graph 552) MW-2B1 (graph 556) MW-32 (graph 557) MW-33C (graph 559) MW-34A (graph 560) MW-34C (graph 561) MW-35 (graph 562) MW-4 (graph 565)	MW-24 (graph 554)
Calcium, dissolved	None	MW-15R (graph 171) MW-23A (graph 175) MW-24 (graph 176) MW-29A (graph 177) MW-2B1 (graph 178) MW-32 (graph 179) MW-33A (graph 180) MW-34A (graph 182) MW-34C (graph 183) MW-36A (graph 185)
Bicarbonate Alkalinity as CaCO ₃	MW-13B (graph 2) MW-35 (graph 16)	MW-15R (graph 3) MW-23A (graph 7) MW-24 (graph 8) MW-2B1 (graph 10) MW-34A (graph 14) MW-34C (graph 15) MW-36A (graph 17)
Magnesium, dissolved	None	MW-15R (graph 318) MW-23A (graph 322) MW-24 (graph 323) MW-2B1 (graph 325) MW-33A (graph 327) MW-34A (graph 329) MW-34C (graph 330) MW-42 (graph 335)

Table 6B. Summary of Trends in Groundwater (2005 - 2016)
2016 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington

<i>Trend Test B = all metals and groundwater quality parameters listed in Appendix I and Appendix II of WAC (173-351-990)</i>		
	<u>Significant Increasing Trends</u>	<u>Significant Decreasing Trends</u>
Sulfate	MW-24 (graph 533)	MW-13A (graph 526) MW-13B (graph 527) MW-19C (graph 530) MW-23A (graph 532) MW-36A (graph 542) MW-4 (graph 544) MW-42 (graph 545)
Sodium, dissolved	None	MW-15R (graph 486) MW-19C (graph 488) MW-23A (graph 490) MW-24 (graph 491) MW-2B1 (graph 493) MW-34A (graph 497) MW-34C (graph 498)
Chloride	None	MW-13B (graph 191) MW-15R (graph 192) MW-16 (graph 193) MW-19C (graph 194) MW-23A (graph 196) MW-2B1 (graph 199) MW-33A (graph 201) MW-34A (graph 203) MW-34C (graph 204) MW-35 (graph 205) MW-36A (graph 206) MW-4 (graph 208)
Potassium, dissolved	MW-42 (graph 440)	None
Total Alkalinity as CaCO ₃	MW-13B (graph 23) MW-35 (graph 37)	MW-15R (graph 24) MW-23A (graph 28) MW-24 (graph 29) MW-2B1 (graph 31) MW-34A (graph 35) MW-34C (graph 36) MW-36A (graph 38)

Table 6B. Summary of Trends in Groundwater (2005 - 2016)
2016 Annual Monitoring Report
Olympic View Sanitary Lanfill, Kitsap County, Washington

<i>Trend Test B = all metals and groundwater quality parameters listed in Appendix I and Appendix II of WAC (173-351-990)</i>		
	<u>Significant Increasing Trends</u>	<u>Significant Decreasing Trends</u>
Iron, total	None	MW-24 (graph 281)
Manganese, total	None	None
Ammonia (as N)	None	MW-29A (graph 51) MW-43 (graph 63)
Total Organic Carbon	None	None
Total Dissolved Solids	None	MW-15R (graph 591) MW-23A (graph 595) MW-24 (graph 596) MW-2B1 (graph 598) MW-32 (graph 599) MW-33A (graph 600) MW-34C (graph 603)

**Table 7. Fourth Quarter 2016 Prediction Limit Exceedances
2016 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington**

Well Type	Well Location	Date Sampled	Parameter	Units	Result	Prediction Limit
Compliance	MW-15R	11/15/2016	Sodium, dissolved	mg/L	6.3	6.2
	MW-34A	11/15/2016	Barium, total	mg/L	0.0045	0.0045
			Sodium, dissolved	mg/L	9.7	6.2
	MW-34C	11/15/2016	Alkalinity, bicarbonate (as caco3)	mg/L	110	96
			Alkalinity, total (as caco3)	mg/L	110	96
			Arsenic, total	ug/L	5.42	0.4793
			Barium, total	mg/L	0.037	0.0045
			Calcium, dissolved	mg/L	24	17.1
			Iron, total	mg/L	8.4	0.31
			Magnesium, dissolved	mg/L	11	10.984
			Manganese, total	mg/L	0.6	0.062
			Sodium, dissolved	mg/L	12	6.2
			Specific conductivity	mS/cm	0.231	0.18
			MW-39	11/14/2016	Barium, total	mg/L
	Iron, total	mg/L			0.8	0.31
	pH	pH Units			5.27	5.88 - 8.24
	MW-42	11/16/2016	Alkalinity, bicarbonate (as caco3)	mg/L	220	96
			Alkalinity, total (as caco3)	mg/L	220	96
			Ammonia (as n)	mg/L	5.4	0.3
			Arsenic, total	ug/L	1.86	0.4793
			Barium, total	mg/L	0.11	0.0045
			Calcium, dissolved	mg/L	42	17.1
			Chloride	mg/L	12	4.4
			Iron, total	mg/L	27	0.31
			Magnesium, dissolved	mg/L	14	10.984
			Manganese, total	mg/L	4.4	0.062
			Potassium, dissolved	mg/L	8.7	1.2
			Sodium, dissolved	mg/L	21	6.2
			Specific conductivity	mS/cm	0.55	0.18
Total dissolved solids (tds)			mg/L	250	175	
Total organic carbon (toc)			mg/L	7.2	6	

**Table 7. Fourth Quarter 2016 Prediction Limit Exceedances
2016 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington**

Well Type	Well Location	Date Sampled	Parameter	Units	Result	Prediction Limit
Downgradient	MW-29A	11/14/2016	Arsenic, total	ug/L	1.99	0.4793
			Barium, total	mg/L	0.01	0.0045
			Iron, total	mg/L	4.6	0.31
			Manganese, total	mg/L	1.4	0.062
	MW-32	11/16/2016	Alkalinity, bicarbonate (as caco3)	mg/L	110	96
			Alkalinity, total (as caco3)	mg/L	110	96
			Arsenic, total	ug/L	9.95	0.4793
			Calcium, dissolved	mg/L	20	17.1
			Chloride	mg/L	7	4.4
			Iron, total	mg/L	0.61	0.31
			Manganese, total	mg/L	1.8	0.062
			Sodium, dissolved	mg/L	12	6.2
			Specific conductivity	mS/cm	0.251	0.18
			MW-33A	11/17/2016	Arsenic, total	ug/L
	Iron, total	mg/L			2.5	0.31
	Manganese, total	mg/L			0.083	0.062
	MW-33C	11/17/2016	Arsenic, total	ug/L	2.53	0.4793
			Barium, total	mg/L	0.0048	0.0045
			Manganese, total	mg/L	0.15	0.062
			pH	pH Units	8.31	5.88 - 8.24
Potassium, dissolved			mg/L	1.3	1.2	
MW-36A	11/15/2016	Arsenic, total	ug/L	0.566	0.4793	
		Sodium, dissolved	mg/L	7.3	6.2	

Notes:

Contents prepared by GeoChem Applications

deg C = degrees Celcius

CaCO3 = calcium carbonate

N = nitrogen

µg/L = micrograms per liter

mg/L = milligrams per liter

mS/cm = milliSiemens per centimeter

Table 8. 2016 Annual Groundwater Cleanup Level Statistical Evaluation Summary
2016 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington

Statistical Methodology: calculation of 95% UCL of mean per MTCASat

Data Input (general): 3-year "moving window", updated annually

Data Input (specific): January 1, 2014 through December 31, 2016

Wells Evaluated: (1) Compliance -- MW-15R, MW-34A, MW-34C, MW-39, MW-42, MW-43; (2) Downgradient -- MW-29A, MW-32, MW-33A, MW-33C, MW-36A

Monitoring Well Type	Monitoring Well	Corrective Action Monitoring Parameter	N ^[1]	% Detect	Max ^[2]	95% UCL of Mean ^[3]	Units ^[4]	Note	Groundwater Cleanup Level ^[5]	Units ^[4]	Does 95% UCL Exceed Cleanup Level?	Significant Trend? ^[6]
Compliance	MW-15R	1,1-Dichloroethane	12	0%	0.38 (ND)	0.38	ug/L	B	50	ug/L	No	No
		1,4-Dichlorobenzene	12	0%	0.84 (ND)	0.84	ug/L	B	2.0	ug/L	No	No
		Ammonia as N	12	8.3%	0.036	0.036	mg/L	A	0.19	mg/L	No	No
		Arsenic, total	12	100%	0.238	0.215	ug/L	LN	0.462	ug/L	No	No
		cis-1,2-dichloroethene	12	0%	0.81 (ND)	0.81	ug/L	B	35.0	ug/L	No	No
		Ethyl ether	12	0%	0.72 (ND)	0.72	ug/L	B	50.0	ug/L	No	No
		Iron, total	11[7]	18%	0.11	0.11	mg/L	A	0.3	mg/L	No	No
		Manganese, total	12	100%	0.021	0.01	mg/L	LN	0.05	mg/L	No	No
		Trichloroethene	12	0%	0.46 (ND)	0.46	ug/L	B	1.0	ug/L	No	No
		Vinyl Chloride	12	0%	0.02 (ND)	0.02	ug/L	B	0.2	ug/L	No	No
	MW-34A	1,1-Dichloroethane	12	0%	0.38 (ND)	0.38	ug/L	B	50.0	ug/L	No	No
		1,4-Dichlorobenzene	12	0%	0.84 (ND)	0.84	ug/L	B	2.0	ug/L	No	No
		Ammonia as N	12	0%	0.03 (ND)	0.03	mg/L	B	0.19	mg/L	No	No
		Arsenic, total	12	100%	0.5	0.4493	ug/L	LN	0.462	ug/L	No	No
		cis-1,2-dichloroethene	12	0%	0.81 (ND)	0.81	ug/L	B	35.0	ug/L	No	No
		Ethyl ether	12	0%	0.72 (ND)	0.72	ug/L	B	50.0	ug/L	No	No
		Iron, total	12	8.3%	0.06	0.06	mg/L	A	0.3	mg/L	No	No
		Manganese, total	12	67%	0.0044	0.00251	mg/L	LN	0.05	mg/L	No	No
		Trichloroethene	12	0%	0.46 (ND)	0.46	ug/L	B	1.0	ug/L	No	No
		Vinyl Chloride	12	8.3%	0.03	0.03	ug/L	A	0.2	ug/L	No	No
	MW-34C	1,1-Dichloroethane	12	0%	0.38 (ND)	0.38	ug/L	B	50.0	ug/L	No	No
		1,4-Dichlorobenzene	12	0%	0.84 (ND)	0.84	ug/L	B	2.0	ug/L	No	No
		Ammonia as N	12	25%	0.031	0.031	mg/L	A	0.19	mg/L	No	No
		Arsenic, total	12	100%	84.6	84.6	ug/L	A**	0.462	ug/L	Yes	No
		cis-1,2-dichloroethene	12	0%	0.81 (ND)	0.81	ug/L	B	35.0	ug/L	No	No
		Ethyl ether	12	0%	0.72 (ND)	0.72	ug/L	B	50.0	ug/L	No	No
		Iron, total	12	100%	100	148	mg/L	LN	0.3	mg/L	Yes	No
Manganese, total		12	100%	14	5.915	mg/L	Z	0.05	mg/L	Yes	No	
Trichloroethene		12	0%	0.46 (ND)	0.46	ug/L	B	1.0	ug/L	No	No	
Vinyl Chloride		12	100%	0.16	0.11868	ug/L	LN	0.2	ug/L	No	Yes ↓	

Table 8. 2016 Annual Groundwater Cleanup Level Statistical Evaluation Summary
2016 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington

Monitoring Well Type	Monitoring Well	Corrective Action Monitoring Parameter	N ^[1]	% Detect	Max ^[2]	95% UCL of Mean ^[3]	Units ^[4]	Note	Groundwater Cleanup Level ^[5]	Units ^[4]	Does 95% UCL Exceed Cleanup Level?	Significant Trend? ^[6]
Compliance	MW-39	1,1-Dichloroethane	12	0%	0.38 (ND)	0.38	ug/L	B	50.0	ug/L	No	No
		1,4-Dichlorobenzene	12	0%	0.84 (ND)	0.84	ug/L	B	2.0	ug/L	No	No
		Ammonia as N	12	92%	0.48	0.39	mg/L	Z	0.19	mg/L	Yes	No
		Arsenic, total	12	100%	2.16	1.70338	ug/L	N	0.462	ug/L	Yes	No
		cis-1,2-dichloroethene	12	0%	0.81 (ND)	0.81	ug/L	B	35.0	ug/L	No	No
		Ethyl ether	12	0%	0.72 (ND)	0.72	ug/L	B	50.0	ug/L	No	No
		Iron, total	12	100%	40	33.555	mg/L	Z	0.3	mg/L	Yes	No
		Manganese, total	12	100%	0.49	0.427	mg/L	Z	0.05	mg/L	Yes	No
		Trichloroethene	12	0%	0.46 (ND)	0.46	ug/L	B	1.0	ug/L	No	No
		Vinyl Chloride	12	0%	0.02 (ND)	0.02	ug/L	B	0.2	ug/L	No	No
	MW-42	1,1-Dichloroethane	12	0%	0.38 (ND)	0.38	ug/L	B	50.0	ug/L	No	No
		1,4-Dichlorobenzene	12	0%	0.84 (ND)	0.84	ug/L	B	2.0	ug/L	No	No
		Ammonia as N	12	100%	6.7	6.216	mg/L	LN	0.19	mg/L	Yes	No
		Arsenic, total	12	100%	1.93	1.726	ug/L	LN	0.462	ug/L	Yes	No
		cis-1,2-dichloroethene	12	0%	0.81 (ND)	0.81	ug/L	B	35.0	ug/L	No	No
		Ethyl ether	12	0%	0.72 (ND)	0.72	ug/L	B	50.0	ug/L	No	No
		Iron, total	12	100%	32	26.76	mg/L	LN	0.3	mg/L	Yes	No
		Manganese, total	12	100%	5.3	4.8	mg/L	LN	0.1	mg/L	Yes	No
		Trichloroethene	12	0%	0.46 (ND)	0.46	ug/L	B	1.0	ug/L	No	No
		Vinyl Chloride	12	92%	0.16	0.1295	ug/L	LN	0.2	ug/L	No	No
	MW-43	1,1-Dichloroethane	12	0%	0.38 (ND)	0.38	ug/L	B	50.0	ug/L	No	No
		1,4-Dichlorobenzene	12	0%	0.84 (ND)	0.84	ug/L	B	2.0	ug/L	No	No
		Ammonia as N	12	58%	0.12	0.081	mg/L	LN	0.19	mg/L	No	Yes (↓)
		Arsenic, total	12	17%	0.05	0.05	ug/L	A	0.462	ug/L	No	No
		cis-1,2-dichloroethene	12	0%	0.81 (ND)	0.81	ug/L	B	35.0	ug/L	No	No
		Ethyl ether	12	0%	0.72 (ND)	0.72	ug/L	B	50.0	ug/L	No	No
		Iron, total	11[8]	100%	1.7	1.2266	mg/L	LN	0.3	mg/L	Yes	No
Manganese, total		12	100%	0.26	0.34247	mg/L	LN	0.05	mg/L	Yes	No	
Trichloroethene		12	0%	0.46 (ND)	0.46	ug/L	B	1.0	ug/L	No	No	
Vinyl Chloride	12	0%	0.02 (ND)	0.02	ug/L	B	0.2	ug/L	No	No		

Table 8. 2016 Annual Groundwater Cleanup Level Statistical Evaluation Summary
2016 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington

Monitoring Well Type	Monitoring Well	Corrective Action Monitoring Parameter	N ^[1]	% Detect	Max ^[2]	95% UCL of Mean ^[3]	Units ^[4]	Note	Groundwater Cleanup Level ^[5]	Units ^[4]	Does 95% UCL Exceed Cleanup Level?	Significant Trend? ^[6]
Downgradient	MW-29A	1,1-Dichloroethane	6	0%	0.38 (ND)	0.38	ug/L	B	50.0	ug/L	No	No
		1,4-Dichlorobenzene	6	0%	0.84 (ND)	0.84	ug/L	B	2.0	ug/L	No	No
		Ammonia as N	6	100%	0.095	0.0906	mg/L	LN	0.19	mg/L	No	Yes (↓)
		Arsenic, total	6	100%	1.99	1.936	ug/L	LN	0.462	ug/L	Yes	No
		cis-1,2-dichloroethene	6	0%	0.81 (ND)	0.81	ug/L	B	35.0	ug/L	No	No
		Ethyl ether	6	0%	0.72 (ND)	0.72	ug/L	B	50.0	ug/L	No	No
		Iron, total	6	100%	4.7	4.627	mg/L	LN	0.3	mg/L	Yes	No
		Manganese, total	6	100%	1.4	1.388	mg/L	Z	0.05	mg/L	Yes	No
		Trichloroethene	6	0%	0.46 (ND)	0.46	ug/L	B	1.0	ug/L	No	No
		Vinyl Chloride	6	0%	0.02 (ND)	0.02	ug/L	B	0.2	ug/L	No	No
	MW-32	1,1-Dichloroethane	12	0%	0.38 (ND)	0.38	ug/L	B	50.0	ug/L	No	No
		1,4-Dichlorobenzene	12	0%	0.84 (ND)	0.84	ug/L	B	2.0	ug/L	No	No
		Ammonia as N	11	18%	0.039	0.039	mg/L	A	0.19	mg/L	No	No
		Arsenic, total	12	100%	26.6	13.827	ug/L	Z	0.462	ug/L	Yes	No
		cis-1,2-dichloroethene	12	8.3%	0.81 (ND)	0.81	ug/L	A*	35.0	ug/L	No	No
		Ethyl ether	11	0%	0.72 (ND)	0.72	ug/L	B	50.0	ug/L	No	No
		Iron, total	12	100%	6.3	2.025	mg/L	Z	0.3	mg/L	Yes	No
		Manganese, total	12	100%	4.1	2.839568	mg/L	LN	0.05	mg/L	Yes	No
		Trichloroethene	12	67%	0.5	0.5	ug/L	A***	1.0	ug/L	No	No
		Vinyl Chloride	12	100%	0.54	0.4274	ug/L	LN	0.2	ug/L	Yes	No
	MW-33A	1,1-Dichloroethane	6	0%	0.38 (ND)	0.38	ug/L	B	50.0	ug/L	No	No
		1,4-Dichlorobenzene	6	0%	0.84 (ND)	0.84	ug/L	B	2.0	ug/L	No	No
		Ammonia as N	6	67%	0.3	0.3	mg/L	A	0.19	mg/L	Yes	No
		Arsenic, total	6	100%	0.509	0.4684	ug/L	LN	0.462	ug/L	Yes	No
		cis-1,2-dichloroethene	6	0%	0.81 (ND)	0.81	ug/L	B	35.0	ug/L	No	No
		Ethyl ether	6	0%	0.72 (ND)	0.72	ug/L	B	50.0	ug/L	No	No
		Iron, total	6	100%	5	5	mg/L	A**	0.3	mg/L	Yes	No
Manganese, total		6	100%	0.1	0.082	mg/L	Z	0.05	mg/L	Yes	No	
Trichloroethene		6	0%	0.46 (ND)	0.46	ug/L	B	1.0	ug/L	No	No	
Vinyl Chloride		6	0%	0.02 (ND)	0.02	ug/L	B	0.2	ug/L	No	No	

Table 8. 2016 Annual Groundwater Cleanup Level Statistical Evaluation Summary
2016 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington

Monitoring Well Type	Monitoring Well	Corrective Action Monitoring Parameter	N ^[1]	% Detect	Max ^[2]	95% UCL of Mean ^[3]	Units ^[4]	Note	Groundwater Cleanup Level ^[5]	Units ^[4]	Does 95% UCL Exceed Cleanup Level?	Significant Trend? ^[6]
Downgradient	MW-33C	1,1-Dichloroethane	12	0%	0.38 (ND)	0.38	ug/L	B	50.0	ug/L	No	No
		1,4-Dichlorobenzene	12	0%	0.84 (ND)	0.84	ug/L	B	2.0	ug/L	No	No
		Ammonia as N	12	0%	0.03 (ND)	0.03	mg/L	B	0.19	mg/L	No	No
		Arsenic, total	12	100%	2.67	2.552	ug/L	LN	0.462	ug/L	Yes	No
		cis-1,2-dichloroethene	12	0%	0.81 (ND)	0.81	ug/L	B	35.0	ug/L	No	No
		Ethyl ether	12	0%	0.72 (ND)	0.72	ug/L	B	50.0	ug/L	No	No
		Iron, total	12	83%	0.38	0.2962	mg/L	LN	0.3	mg/L	No	No
		Manganese, total	12	100%	0.29	0.2209	mg/L	LN	0.05	mg/L	Yes	No
		Trichloroethene	12	0%	0.46 (ND)	0.46	ug/L	B	1.0	ug/L	No	No
		Vinyl Chloride	12	0%	0.02 (ND)	0.02	ug/L	B	0.2	ug/L	No	No
	MW-36A	1,1-Dichloroethane	12	0%	0.38 (ND)	0.38	ug/L	B	50.0	ug/L	No	No
		1,4-Dichlorobenzene	12	0%	0.84 (ND)	0.84	ug/L	B	2.0	ug/L	No	No
		Ammonia as N	12	8.3%	0.03	0.03	mg/L	A	0.19	mg/L	No	No
		Arsenic, total	12	100%	0.68	0.5859	ug/L	LN	0.462	ug/L	Yes	No
		cis-1,2-dichloroethene	12	0%	0.81 (ND)	0.81	ug/L	B	35.0	ug/L	No	No
		Ethyl ether	12	0%	0.72 (ND)	0.72	ug/L	B	50.0	ug/L	No	No
		Iron, total	12	50%	0.18	0.1333	mg/L	LN	0.3	mg/L	No	No
		Manganese, total	12	83%	0.0068	0.006	mg/L	LN	0.05	mg/L	No	No
		Trichloroethene	12	0%	0.46 (ND)	0.46	ug/L	B	1.0	ug/L	No	No
Vinyl Chloride	12	0%	0.02 (ND)	0.02	ug/L	B	0.2	ug/L	No	No		

NOTES:

^[1] N = number of data points used for UCL calculation of the mean; only SIM results used for Vinyl Chloride (e.g., duplicate results with higher RLs by non-SIM were omitted).

^[2] MAX = maximum detected result in the data set; if no detected results, then = maximum reporting limit for non-detect results (indicated with ND).

^[3] A 3-year moving data set is used for calculation of the UCL.

^[4] ug/L - micrograms per liter; mg/L = milligrams per liter.

^[5] Groundwater Cleanup Levels are listed on Table 3 of the October 2010 Draft Cleanup Action Plan.

^[6] Trend analysis results are based on data for the period January 2005 through December 2016; arrows indicated increasing (▲) or decreasing (▼) trends.

^[7] For MW-15R, outlier of 0.41 mg/L from 2-24-15 sampling event was removed prior to UCL calculation

^[8] For MW-43, outlier of 24 mg/L from 6-2-14 sampling event was removed prior to UCL calculation

A = Detection frequency of data set too low and/or N too few to calculate 95% UCL of mean; therefore, the highest detected result in the data set used to represent 95% UCL of mean.

A* = Same as note "A" except that the highest value in the data set is below the reporting limit of one or more non-detected results; therefore, the highest reporting limit is used to represent the 95% UCL of the mean.

A** = MTCASat suggests use of lognormal formula but calculation of 95% UCL of mean by Land's formula provides unrealistic result; therefore, the highest detected result is used to represent the 95% UCL of the mean.

A*** = MTCASat suggests use of the Z-score method but then cites inability to calculate due to presence of censored values; therefore, the highest detected result is used to represent the 95% UCL of the mean.

B = Detection frequency = 0; therefore, the highest reporting limit in the data set is used to represent the 95% UCL of mean.

LN = The 95% UCL of the mean is calculated using Land's formula since lognormal distribution is indicated.

N = The 95% UCL of the mean is calculated using a normal-based t-statistic since a normal distribution is indicated.

Z = the 95% UCL of the mean is calculated using the Z-score method in MTCASat since neither normal nor lognormal distribution can be determined.

**Table 9. Groundwater Quality Criteria and Site-Specific Cleanup Level Exceedances
2016 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington**

Comparison Criteria	Field Parameters	General Chemistry						VOCs		
	pH (SU)	Ammonia (mg N/L)	Arsenic, Total (mg/L)	Iron, Dissolved (mg/L)	Iron, Total (mg/L)	Manganese, Dissolved (mg/L)	Manganese, Total (mg/L)	TCE (µg/L)	Vinyl Chloride (µg/L)	
WAC 173-200	6.5 < > 8.5	--	0.00005	0.3	0.3	0.05	0.05	3	0.02	
Primary Federal MCL	--	--	0.01	--	--	--	--	5	2	
Secondary Federal MCL	6.5 < > 8.5	--	--	0.3	0.3	0.05	0.05	--	--	
Site-specific MTCA Cleanup Levels	--	0.19	0.00046	--	--	--	--	1	0.2	
Well, Location, and Sample Event										
Upgradient Monitoring Locations	MW-13A	Q1 2016	--	--	0.0002	--	--	--	--	--
		Q2 2016	--	--	0.00016	--	--	--	--	--
		Q3 2016	--	--	0.000177	--	--	--	--	--
		Q4 2016	--	--	0.00017	--	--	--	--	--
	MW-13B	Q1 2016	--	--	0.0003	--	--	--	--	--
		Q2 2016	--	--	0.00029	--	--	--	--	--
		Q3 2016	--	--	0.000311	--	--	--	--	--
		Q4 2016	--	--	0.000314	--	--	--	--	--
	MW-16	Q1 2016	6.49	--	0.0003	--	--	--	--	--
		Q2 2016	6.11	--	0.0003	--	--	--	--	--
		Q3 2016	5.93	--	0.000311	--	--	--	--	--
		Q4 2016	5.89	--	0.000381	--	--	--	--	--
	MW-35	Q1 2016	--	--	0.0001	--	--	--	--	--
		Q2 2016	--	--	0.0001	--	--	--	--	--
		Q3 2016	--	--	0.000109	--	--	--	--	--
		Q4 2016	--	--	0.000114	--	--	--	--	--
Performance Monitoring Locations	MW-2B1	Q1 2016	--	2.00	0.0009	--	--	1.8	2.1	--
		Q2 2016	6.11	1.80	0.00321	1.9	3.6	2.5	2.5	--
		Q3 2016	6.06	2.20	0.0037	2.3	4.1	2.4	2.5	--
		Q4 2016	--	2.10	0.00133	0.31	1.1	2.5	2.7	--
	MW-4	Q1 2016	5.73	--	0.0005	--	--	--	1.7	--
		Q2 2016	--	--	0.00062	--	--	0.44	0.57	0.031
		Q3 2016	6.11	--	0.00068	--	--	0.87	0.87	0.061
		Q4 2016	5.06	--	0.000292	--	--	--	0.21	--
	MW-19C	Q1 2016	--	0.52	0.0026	--	--	0.97	0.94	1.1
		Q2 2016	--	0.40	0.00232	--	--	0.87	0.89	1.2
		Q3 2016	6.46	0.49	0.00292	--	--	1.1	1.1	1.2
		Q4 2016	--	0.67	0.00288	--	--	1.2	1.2	0.029
	MW-20	Q1 2016	6.02	--	0.0001	--	--	--	--	--
		Q2 2016	6.28	--	0.00014	--	--	--	--	--
		Q3 2016	6.24	--	0.000189	--	--	0.066	0.29	0.061
		Q4 2016	--	--	0.000182	--	--	--	0.45	--
MW-23A	Q1 2016	6.15	--	0.0009	--	1.3	0.51	1.0	--	
	Q2 2016	--	--	0.00024	--	0.5	1.0	1.3	--	
	Q3 2016	5.82	--	0.000176	--	0.31	1.5	1.7	--	
	Q4 2016	6.11	--	0.000081	--	--	--	0.065	--	
MW-24	Q1 2016	--	--	0.0004	--	--	1.2	1.4	--	
	Q2 2016	--	--	0.00027	--	--	0.68	0.86	--	
	Q3 2016	5.88	--	0.000364	--	--	0.45	1.6	--	
	Q4 2016	--	--	0.000271	--	--	0.7	1.7	--	
Compliance Monitoring Locations	MW-15R	Q1 2016	6.43	--	0.0002	--	--	--	--	
		Q2 2016	6.32	--	0.00018	--	--	--	--	
		Q3 2016	6.31	--	0.000187	--	--	--	--	
		Q4 2016	--	--	0.000238	--	--	--	--	
	MW-34A	Q1 2016	6.47	--	0.0004	--	--	--	--	
		Q2 2016	5.74	--	0.00039	--	--	--	--	
		Q3 2016	5.73	--	0.000474	--	--	--	--	
		Q4 2016	--	--	0.000453	--	--	--	--	
	MW-34C	Q1 2016	--	--	0.0156	--	23	0.39	2.4	0.072
		Q2 2016	6.44	--	0.0254	0.58	34	0.53	0.9	0.081
		Q3 2016	6.41	--	0.0699	0.32	96	0.48	14	0.069
		Q4 2016	--	--	0.00542	0.62	8.4	0.54	0.6	0.078
	MW-39	Q1 2016	5.98	--	0.0006	11	11	0.18	0.18	--
		Q2 2016	6.02	0.44	0.00213	35	37	0.47	0.42	--
		Q3 2016	5.10	0.47	0.00171	34	33	0.44	0.41	--
		Q4 2016	5.27	--	0.000181	0.37	0.8	--	--	--
MW-42	Q1 2016	6.38	5.40	0.0014	22	22	4.2	4.3	--	
	Q2 2016	6.40	5.70	0.0017	23	24	4.6	4.5	0.031	
	Q3 2016	6.16	5.80	0.00193	24	24	4.5	4.5	0.082	
	Q4 2016	--	5.40	0.00186	27	27	4.5	4.4	0.026	
MW-43	Q1 2016	5.50	--	--	0.32	0.56	0.1	0.11	--	
	Q2 2016	6.30	--	--	--	0.86	0.087	0.076	--	
	Q3 2016	5.13	--	--	--	1.1	0.056	0.057	--	
	Q4 2016	6.38	--	--	--	--	--	--	--	
Down Gradient Monitoring Locations	MW-32	Q1 2016	--	--	0.0090	0.55	0.55	2.0	2.0	0.31
		Q2 2016	--	--	0.0107	0.5	0.76	1.7	1.8	0.28
		Q3 2016	6.46	--	0.00918	0.52	0.55	1.9	1.8	0.35
		Q4 2016	--	--	0.00995	0.5	0.61	1.7	1.8	0.46
	MW-33C	Q1 2016	--	--	0.0024	--	--	0.15	0.22	--
		Q2 2016	--	--	0.00229	--	--	0.15	0.15	--
		Q3 2016	--	--	0.00259	--	--	0.15	0.29	--
		Q4 2016	--	--	0.00253	--	--	0.15	0.15	--
	MW-36A	Q1 2016	6.11	--	0.0006	--	--	--	--	--
		Q2 2016	5.88	--	0.00048	--	--	--	--	--
		Q3 2016	5.90	--	0.00051	--	--	--	--	--
		Q4 2016	--	--	0.000566	--	--	--	--	--
	MW-29A	Q2 2016	6.49	--	0.00163	3.4	3.9	1.2	1.2	--
		Q4 2016	--	--	0.00199	4.1	4.6	1.4	1.4	--
	MW-33A	Q2 2016	--	--	0.00028	--	1.5	--	--	--
		Q4 2016	--	0.30	0.000509	2.5	2.5	0.089	0.083	--

Notes:
 SU = standard units
 mg N/L = milligrams of Nitrogen per liter
 mg/L = milligrams per liter
 µg/L = micrograms per liter
 0.00141 = exceeds Site-specific MTCA Cleanup Levels
 0.035 = exceeds WAC 173-200 Groundwater Quality Criteria
 6.44 = exceeds Federal MCL and WAC 173-200 Groundwater Quality Criteria
 0.0014 = exceeds Federal MCLs, Site-specific MTCA Cleanup Levels, and WAC 173-200 Criteria
 TCE = Trichloroethene

**Table 10. Cumulative 2016 Leak Detection System Volumes
2016 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington**

Date	Total Volume (Gals)	Comments
3/14/2016	490	Pumped dry, sample collected 3/8/2016
6/20/2016	265	Pumped dry, sample collected 6/20/2016
9/19/2016	640	Pumped dry, sample collected 9/19/2016
10/10/2016	152	Pumped dry
11/21/2016	140	Pumped dry, sample collected 11/22/2016
TOTAL	1,687	Volume for period between 1/1/2016 through 12/31/2016.

"No measurement until sample" indicates that volume present was not pumped so adequate volume would be available for sampling.

**Table 11. Fourth Quarter 2016 Landfill Gas Measurement Results
2016 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County Washington**

Waste Management Incorporated												
Instrument Readings							Comments					
Location Reference Designation	Date	Time	Pressure (in H ₂ O)	CH ₄ (% vol.)	CO ₂ (% vol.)	O ₂ (% vol.)	CH ₄ Spike Note 1 (% vol.)	CO ₂ Spike Note 1 (% vol.)	Depth to Water TOP (ft)	Exposed Portion of Perforations Notes 2 & 3 (ft) (%)		Other
Subsurface Landfill Gas Detection Wells (Gas Probes):												
GP-7	11/15/16	11:48	0.40	0.10	8.20	4.70			11.0	0.4	7%	
GP-8	11/15/16	11:42	0.02	0.10	3.60	4.00			16.2	3.4	67%	
GP-9S	11/15/16	12:00	0.01	0.00	2.10	17.50			0.0	0.0		Note 4
GP-9D	11/15/16	11:58	0.01	0.00	1.40	18.90			30.3	4.0	81%	
GP-10S	11/15/16	12:07	0.02	0.00	0.90	19.70			0.0	0.0		Note 4
GP-10D	11/15/16	12:10	0.04	0.00	0.70	19.40			28.7	4.6	92%	
GP-11S	11/15/16	12:21	0.00	0.00	2.20	18.30			0.0	0.0		Note 4
GP-11D	11/15/16	12:19	0.00	0.00	0.00	0.00			22.2	0.0	0%	Note 3
GP-12S	11/15/16	12:28	-0.03	0.00	1.20	18.30			0.0	0.0		Note 4
GP-12M	11/15/16	12:30	0.00	0.00	1.30	18.10			0.0	0.0		Note 4
GP-12D	11/15/16	12:34	0.00	0.00	0.00	0.00			39.4	0.0	0%	Note 3
GP-13S	11/15/16	12:39	-0.02	0.00	3.00	16.60			0.0	0.0		Note 4
GP-13M	11/15/16	12:42	-0.07	0.00	2.60	17.80			0.0	0.0		Note 4
GP-13D	11/15/16	12:45	-0.07	0.00	0.20	20.70			49.3	4.1	41%	
GP-14	11/15/16	12:50	0.04	0.00	5.60	8.20			15.4	5.0	99%	
GP-15	11/15/16	12:58	2.24	1.30	6.60	0.00			14.6	4.2	84%	
GP-16	11/15/16	13:13	-0.01	0.00	1.50	17.30			12.8	2.6	52%	
Onsite Building Interiors:												
SH-SS	11/15/16	13:04	-0.02	0.00	2.10	18.80						
SH-NS	11/15/16	13:06	0.00	0.00	0.80	20.20						
SH-IN	11/15/16	13:07	0.00	0.00	0.40	20.30						
SS-WH	11/15/16	13:18	0.00	0.00	0.80	20.10						
<p align="center">Weather Conditions</p> <p>Monitoring Date: 11/15/16 Sky Cover: Cloudy</p> <p>Monitored By: Steve Harquail Wind/Rain/Snow: None</p> <p>Instrument: GEM 2NAV Temperature (°F): 52</p> <p>Calibration Date: 11/15/16 Preceding 24-hr Barometric Trend: Rising</p>												
<p>Notes:</p> <p>1. Measurement for spike concentrations of CH₄ and CO₂ are recorded if observed during sampling.</p> <p>2. Exposed perforations = perforated pipe section not submerged by water.</p> <p>3. Readings not reported: Screened interval completely submerged.</p> <p>4. Depth to water measurement not taken this quarter.</p>												
<p>CH₄ = Methane SH-SS = Scale House - South Side Exterior</p> <p>CO₂ = Carbon Dioxide SH-NS = Scale House - North Side Exterior</p> <p>O₂ = Oxygen SH-Of = Scale House - Office Interior</p> <p>GP = Gas Probe SS-WH = South Slope Well House</p> <p>S = Shallow Monitoring Zone</p> <p>M = Middle Monitoring Zone Depressed O₂ < 20.3% vol.</p> <p>D = Deep Monitoring Zone Detected CO₂ > 0.3 % vol.</p> <p>TOP = From Top of Pipe Detected CH₄ > 0.3 % vol.</p>												

Table 12. Landfill Gas Monitoring Results - 2016
2016 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington

Location	Date	Pressure (in. H ₂ O)	CH ₄ (% vol.)	CO ₂ (% vol.)	O ₂ (% vol.)
GP-7	3/24/2016	0.00	0.0	3.1	9.7
	6/27/2016	13.77	0.0	7.3	6.8
	9/20/2016	0.08	0.0	11.2	7.7
	11/15/2016	0.40	0.1	8.2	4.7
GP-8	3/24/2016	0.00	0.0	1.4	6.7
	6/27/2016	13.79	0.0	2.8	11.3
	9/20/2016	0.10	0.0	5.0	11.9
	11/15/2016	0.02	0.1	3.6	4.0
GP-9S	3/24/2016	0.00	0.0	1.8	18.4
	6/27/2016	0.00	0.0	1.9	19.3
	9/20/2016	0.06	0.0	2.2	19.7
	11/15/2016	0.01	0.0	2.1	17.5
GP-9D	3/24/2016	0.07	0.0	1.3	18.8
	6/27/2016	0.00	0.0	1.0	18.6
	9/20/2016	0.07	0.0	1.4	19.6
	11/15/2016	0.01	0.0	1.4	18.9
GP-10S	3/24/2016	-0.02	0.0	0.7	20.1
	6/27/2016	-0.33	0.0	0.7	20.2
	9/20/2016	0.05	0.0	0.5	20.5
	11/15/2016	0.02	0.0	0.9	19.7
GP-10D	3/24/2016	-0.08	0.0	0.7	18.2
	6/27/2016	0.00	0.0	0.5	19.3
	9/20/2016	0.06	0.0	0.3	20.7
	11/15/2016	0.04	0.0	0.7	19.4
GP-11S	3/24/2016	-0.17	0.0	2.1	17.5
	6/27/2016	0.00	0.0	1.0	18.7
	9/20/2016	0.03	0.0	1.9	19.2
	11/15/2016	0.00	0.0	2.2	18.3
GP-11D	3/24/2016	-0.46	0.0	2.1	15.6
	6/27/2016	0.00	0.0	2.9	18.2
	9/20/2016	-0.05	0.0	0.6	19.9
	11/15/2016	0.00	0.0	0.0	0.0
GP-12S	3/24/2016	-0.16	0.0	1.7	18.7
	6/27/2016	0.01	0.0	1.0	19.7
	9/20/2016	0.03	0.0	0.9	19.5
	11/15/2016	-0.03	0.0	1.2	18.3
GP-12M	3/24/2016	-0.21	0.0	1.6	18.8
	6/27/2016	0.00	0.0	1.1	19.9
	9/20/2016	0.02	0.0	0.9	20.0
	11/15/2016	0.00	0.0	1.3	18.1
GP-12D	3/24/2016	-0.68	0.0	1.1	17.7
	6/27/2016	-32.86	0.0	0.5	19.4
	9/20/2016	0.02	0.0	0.7	17.8
	11/15/2016	0.00	0.0	0.0	0.0

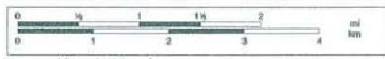
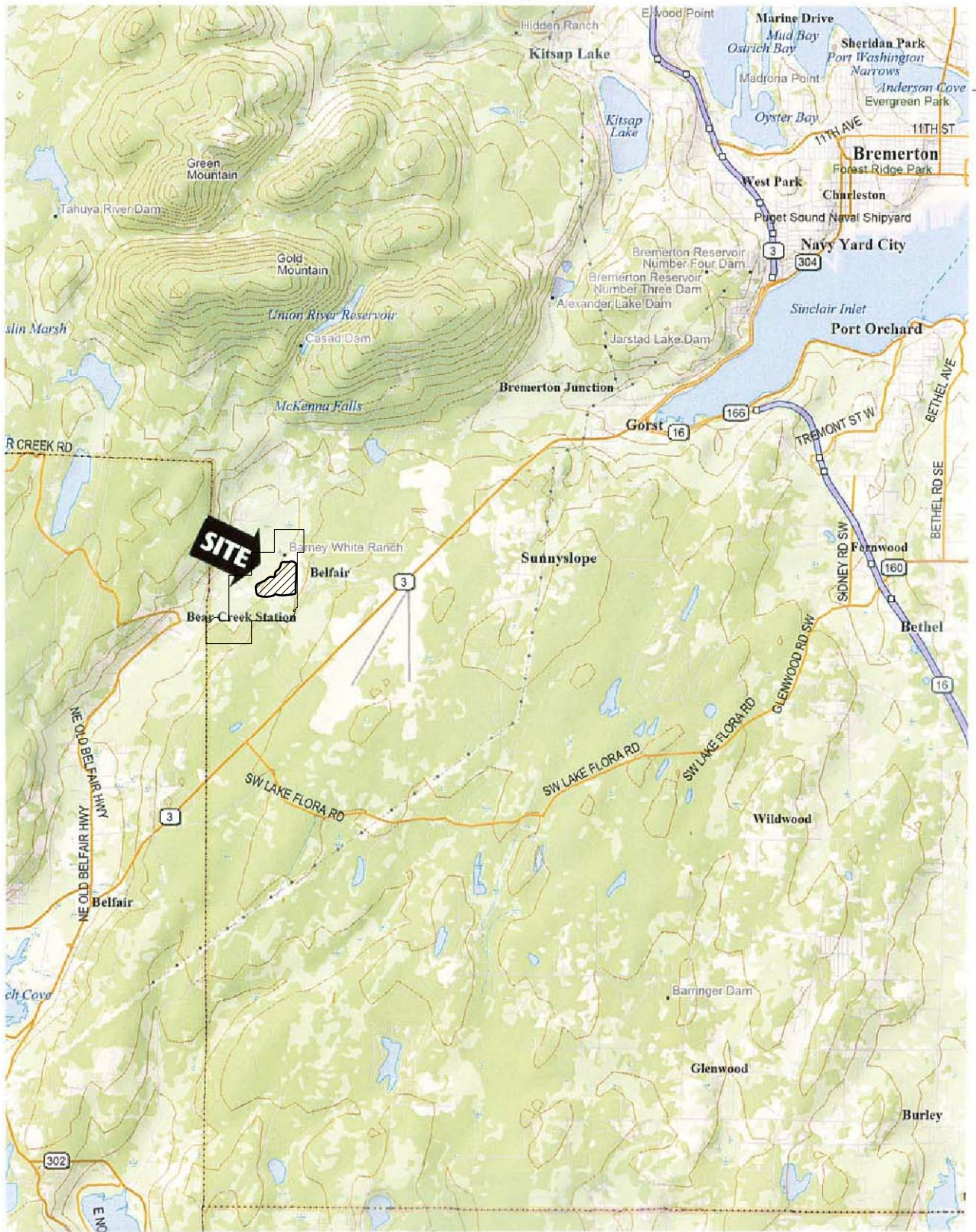
Table 12. Landfill Gas Monitoring Results - 2016
2016 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington

Location	Date	Pressure (in. H ₂ O)	CH ₄ (% vol.)	CO ₂ (% vol.)	O ₂ (% vol.)
GP-13S	3/24/2016	-0.05	0.0	3.3	16.7
	6/27/2016	0.00	0.0	2.8	18.5
	9/20/2016	0.01	0.0	1.8	18.5
	11/15/2016	-0.02	0.0	3.0	16.6
GP-13M	3/24/2016	-0.21	0.0	3.3	15.9
	6/27/2016	0.05	0.0	2.4	17.5
	9/20/2016	0.00	0.0	2.5	17.9
	11/15/2016	-0.07	0.0	2.6	17.8
GP-13D	3/24/2016	-0.03	0.0	2.1	18.5
	6/27/2016	0.05	0.0	0.3	20.6
	9/20/2016	0.00	0.0	0.1	21.1
	11/15/2016	-0.07	0.0	0.2	20.7
GP-14	3/24/2016	0.01	0.0	4.8	4.9
	6/27/2016	-0.01	0.0	5.8	8.0
	9/20/2016	-0.01	0.0	2.0	15.8
	11/15/2016	0.04	0.0	5.6	8.2
GP-15	3/24/2016	0.38	0.1	4.3	0.0
	6/27/2016	-11.39	0.0	3.3	7.0
	9/20/2016	0.00	0.0	3.0	16.8
	11/15/2016	2.24	1.3	6.6	0.0
GP-16	3/24/2016	-0.03	0.0	2.4	17.6
	6/27/2016	-0.01	0.0	2.5	18.5
	9/20/2016	0.00	0.0	2.0	18.8
	11/15/2016	-0.01	0.0	1.5	17.3

Notes:

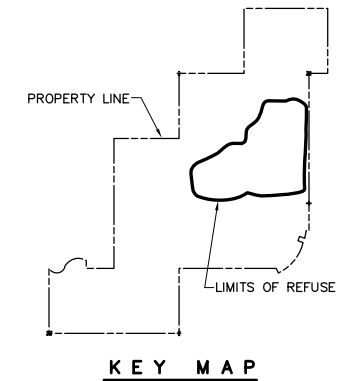
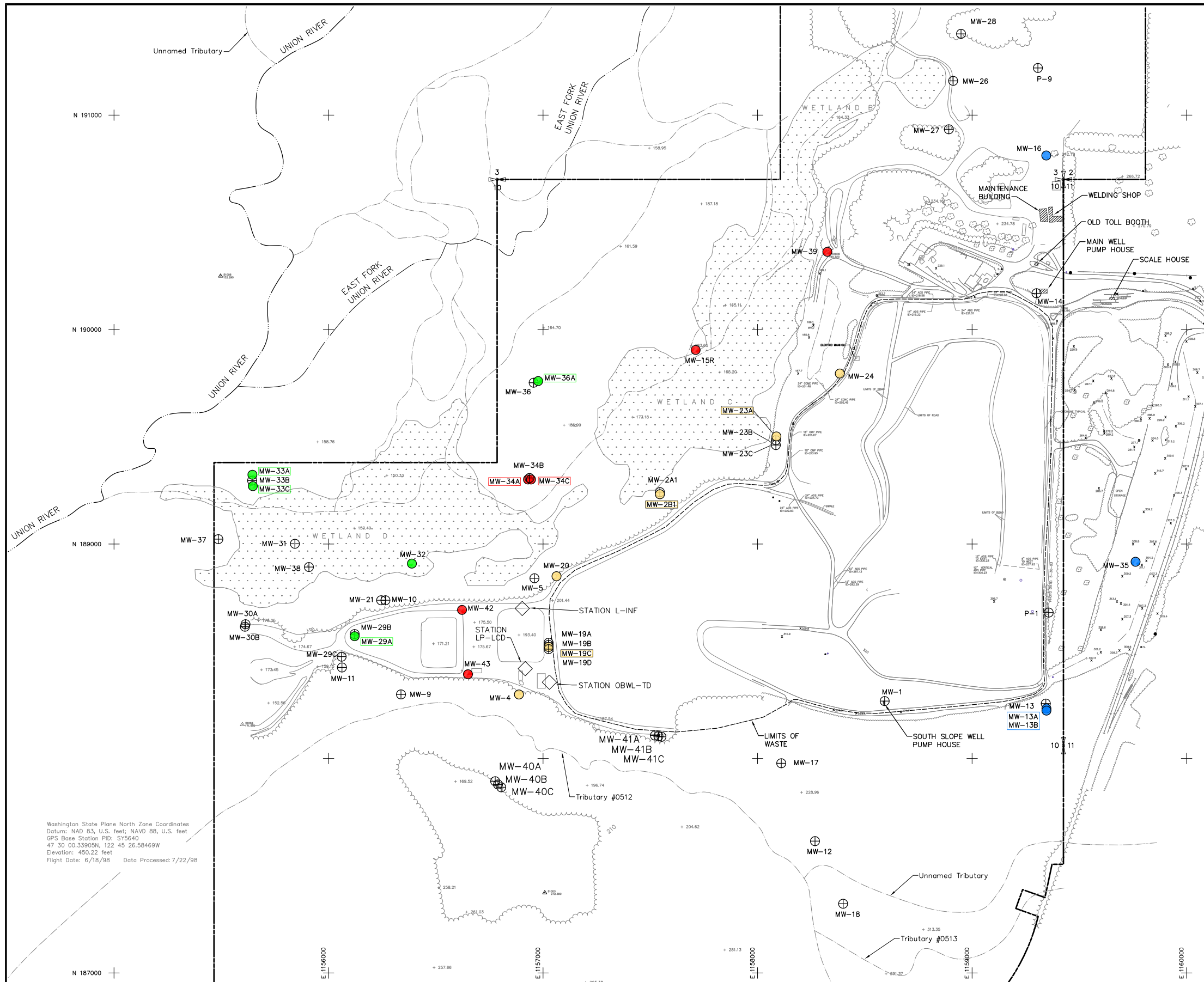
— Readings not reported: screened interval submerged

FIGURES



© 2004 DeLorme. Topo USA® 5.0.

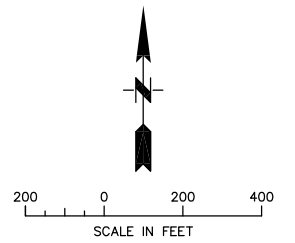
SCS ENGINEERS Environmental Consultants and Contractors 2405 140th Avenue NE, Suite 107 Bellevue, Washington 98005 (425) 746-4600 FAX: (425) 746-6747	PROJECT NO. 04204027.20	DES BY L.L.	SITE LOCATION MAP OLYMPIC VIEW SANITARY LANDFILL KITSAP COUNTY, WASHINGTON	DATE FEBRUARY 2017
	SCALE 1:100,000	CHK BY D.V.		FIGURE
	CAD FILE FIGURE 1	APP BY G.H.		1



LEGEND

	MW-35	UPGRADIENT (BACKGROUND) GROUNDWATER MONITORING WELL
	MW-32	DOWNGRADIENT GROUNDWATER MONITORING WELL
	MW-20	PERFORMANCE GROUNDWATER MONITORING WELL
	MW-43	COMPLIANCE GROUNDWATER MONITORING WELL
	MW-36	GROUNDWATER MONITORING WELL (WATER LEVEL ONLY)
	L-INF	LEACHATE INFLUENT MONITORING STATION
		PROPERTY LINE (ASSUMED)

Washington State Plane North Zone Coordinates
 Datum: NAD 83, U.S. feet; NAVD 88, U.S. feet
 GPS Base Station PID: S79640
 47 30 00.33905N, 122 45 26.58469W
 Elevation: 450.22 feet
 Flight Date: 6/18/98 Data Processed: 7/22/98

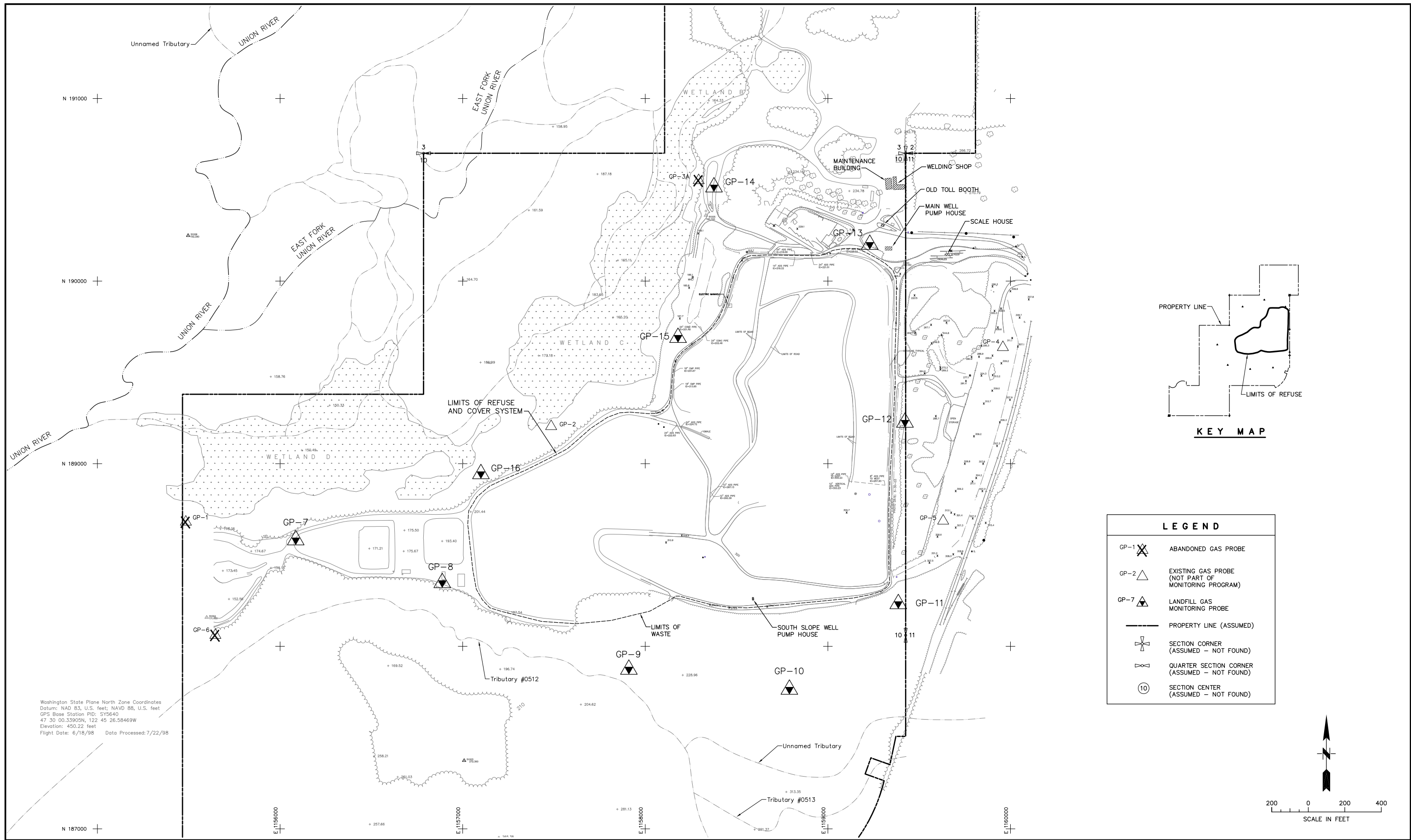


SCS ENGINEERS
 Environmental Consultants and Contractors
 2405 140th Avenue NE, Suite 107
 Bellevue, Washington 98005
 (425) 746-4600 FAX: (425) 746-6747

PROJECT NO.	04204027.20	DES BY	S.G.
SCALE	AS SHOWN	CHK BY	D.V.
CAD FILE	FIGURE 2	APP BY	G.H.

**GROUNDWATER MONITORING WELL NETWORK
 AND LEACHATE MONITORING LOCATIONS**
 OLYMPIC VIEW SANITARY LANDFILL
 KITSAP COUNTY, WASHINGTON

DATE	FEBRUARY 2017
FIGURE	2



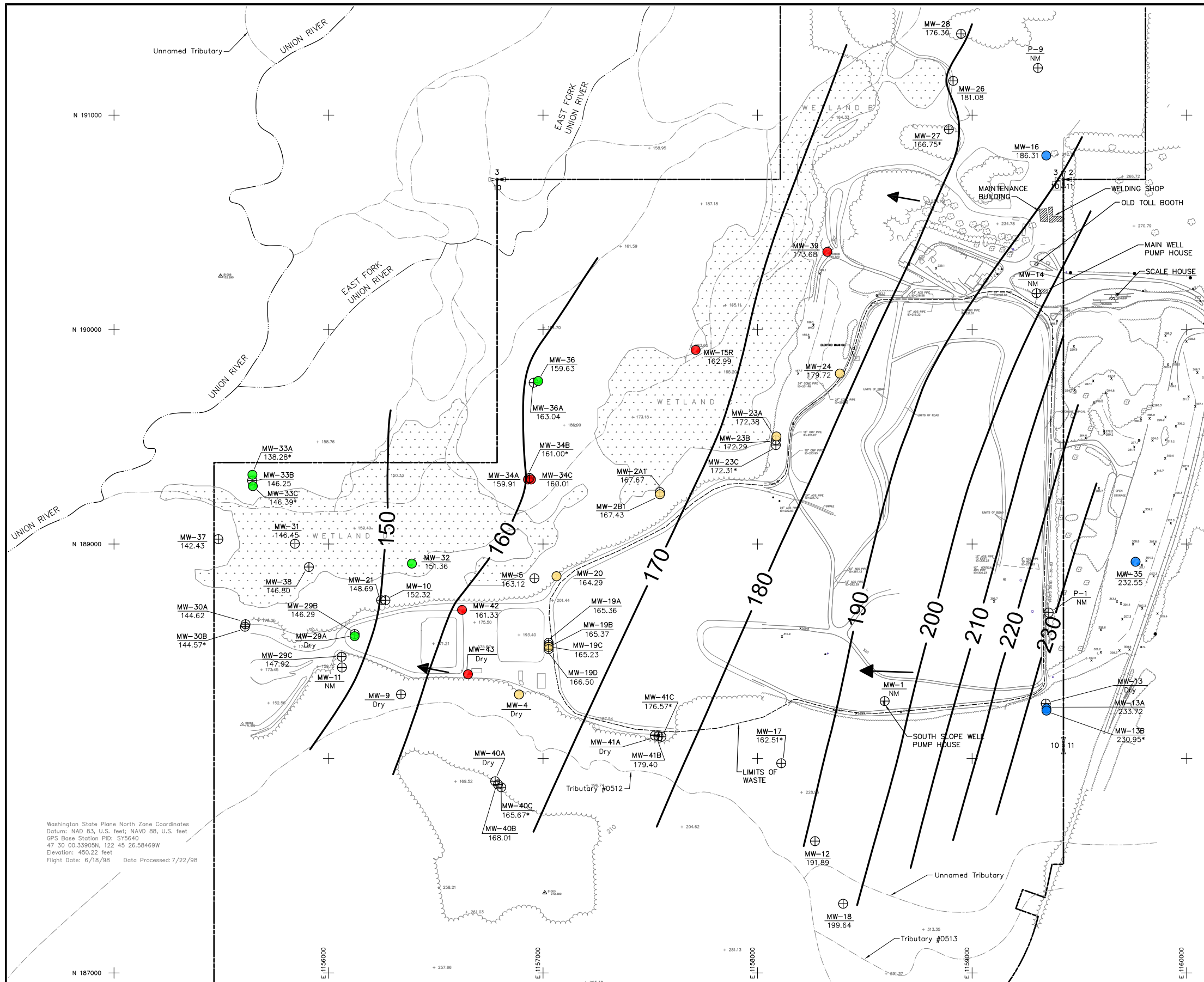
Washington State Plane North Zone Coordinates
 Datum: NAD 83, U.S. feet; NAVD 88, U.S. feet
 GPS Base Station PID: SY5640
 47 30 00.33905N, 122 45 26.58469W
 Elevation: 450.22 feet
 Flight Date: 6/18/98 Data Processed: 7/22/98

SCS ENGINEERS
 Environmental Consultants and Contractors
 2405 140th Avenue NE, Suite 107
 Bellevue, Washington 98005
 (425) 746-4600 FAX: (425) 746-6747

PROJECT NO.	04204027.20	DES BY	T.M.
SCALE	AS SHOWN	CHK BY	D.V.
CAD FILE	FIGURE 3	APP BY	G.H.

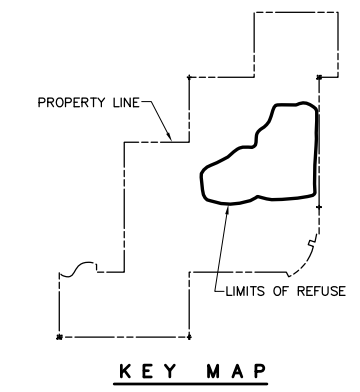
SUBSURFACE LANDFILL GAS MONITORING PROBES
 AND BUILDING MONITORING LOCATIONS
 OLYMPIC VIEW SANITARY LANDFILL
 KITSAP COUNTY, WASHINGTON

DATE
 FEBRUARY 2017
 FIGURE
3



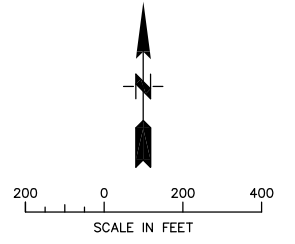
Note:
 Water level contours were generated using depth to water and reference elevation data from wells screened between 89 and 200 ft-msl. The water level elevations for the following locations have not been used for contouring.

- Wells MW-13, MW-13B, MW-19D, MW-23C, MW-30B, MW-33C, MW-34B, MW-40C, and MW-41C have screen elevations outside the 89 to 200 ft-msl range.



LEGEND	
	UPGRADIENT (BACKGROUND) GROUNDWATER MONITORING WELL
	DOWNGRADIENT GROUNDWATER MONITORING WELL
	PERFORMANCE GROUNDWATER MONITORING WELL
	COMPLIANCE GROUNDWATER MONITORING WELL
	GROUNDWATER MONITORING WELL (WATER LEVEL ONLY)
	MONITORING WELL WATER LEVEL ELEVATION, FT-MSL
	ESTIMATED GROUNDWATER ELEVATION CONTOUR IN FEET-MSL CONTOUR INTERVAL = 5 FT
	GROUNDWATER FLOW DIRECTION
	WATER LEVEL ELEVATION NOT NOT USED IN CONTOURING
	PROPERTY LINE (ASSUMED)

Washington State Plane North Zone Coordinates
 Datum: NAD 83, U.S. feet; NAVD 88, U.S. feet
 GPS Base Station PID: SY9640
 47 30 00.33905N, 122 45 26.58469W
 Elevation: 450.22 feet
 Flight Date: 6/18/98 Data Processed: 7/22/98

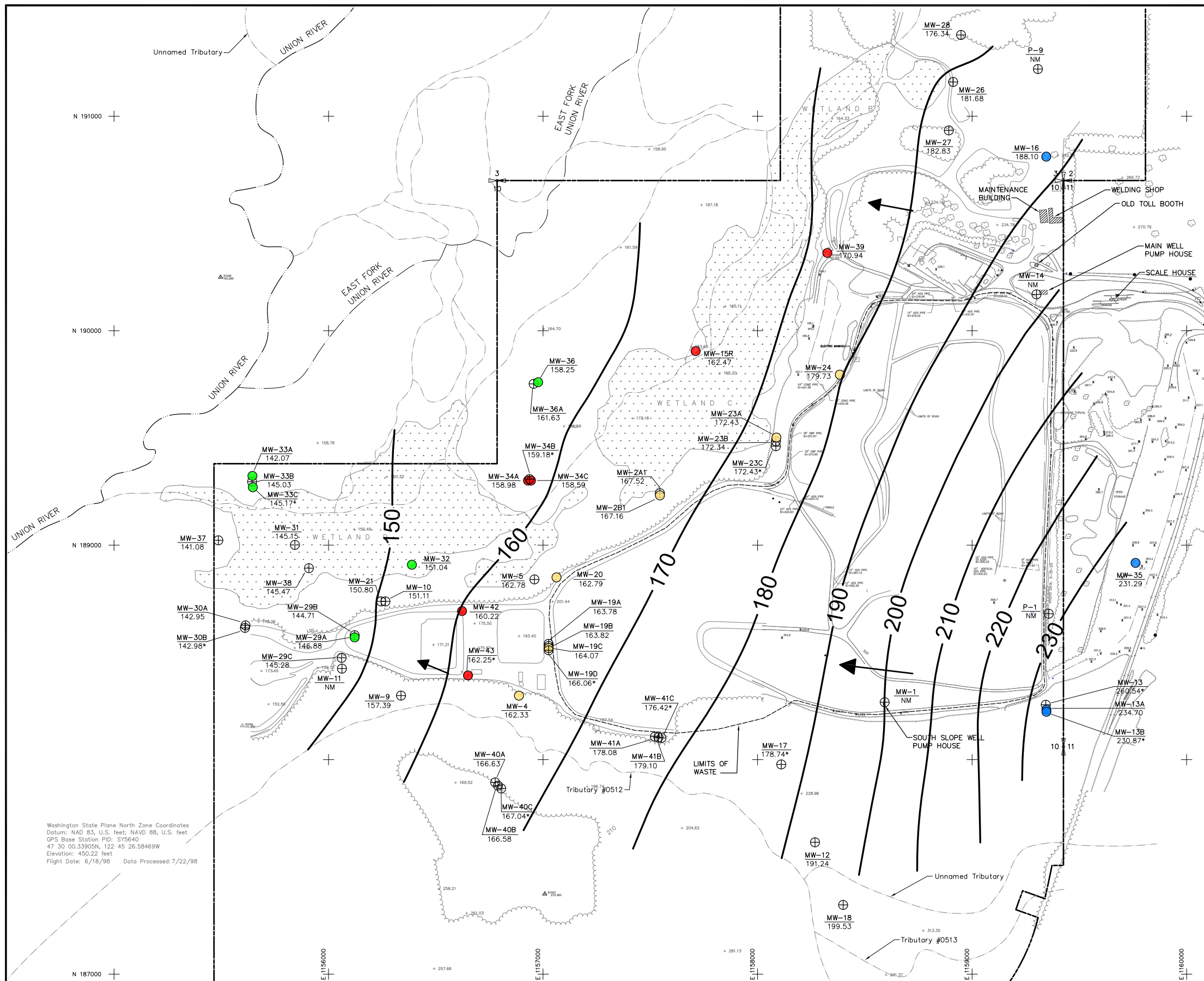


SCS ENGINEERS
 Environmental Consultants and Contractors
 2405 140th Avenue NE, Suite 107
 Bellevue, Washington 98005
 (425) 746-4600 FAX: (425) 746-6747

PROJECT NO.	04204027.20	DES BY	S.G.
SCALE	AS SHOWN	CHK BY	D.V.
CAD FILE	FIGURE 4A	APP BY	D.V.

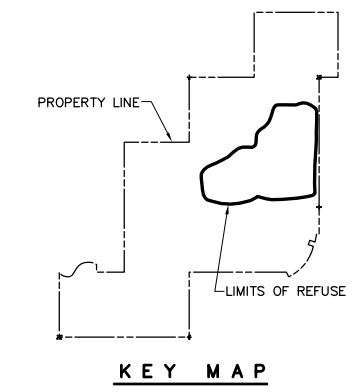
WATER LEVEL CONTOUR MAP
 FEBRUARY 2016
 OLYMPIC VIEW SANITARY LANDFILL
 KITSAP COUNTY, WASHINGTON

DATE
 FEBRUARY 2017
 FIGURE
4A



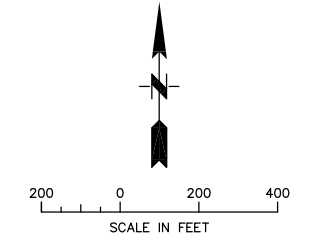
Note:
 Water level contours were generated using depth to water and reference elevation data from wells screened between 89 and 200 ft-msl. The water level elevations for the following locations have not been used for contouring.

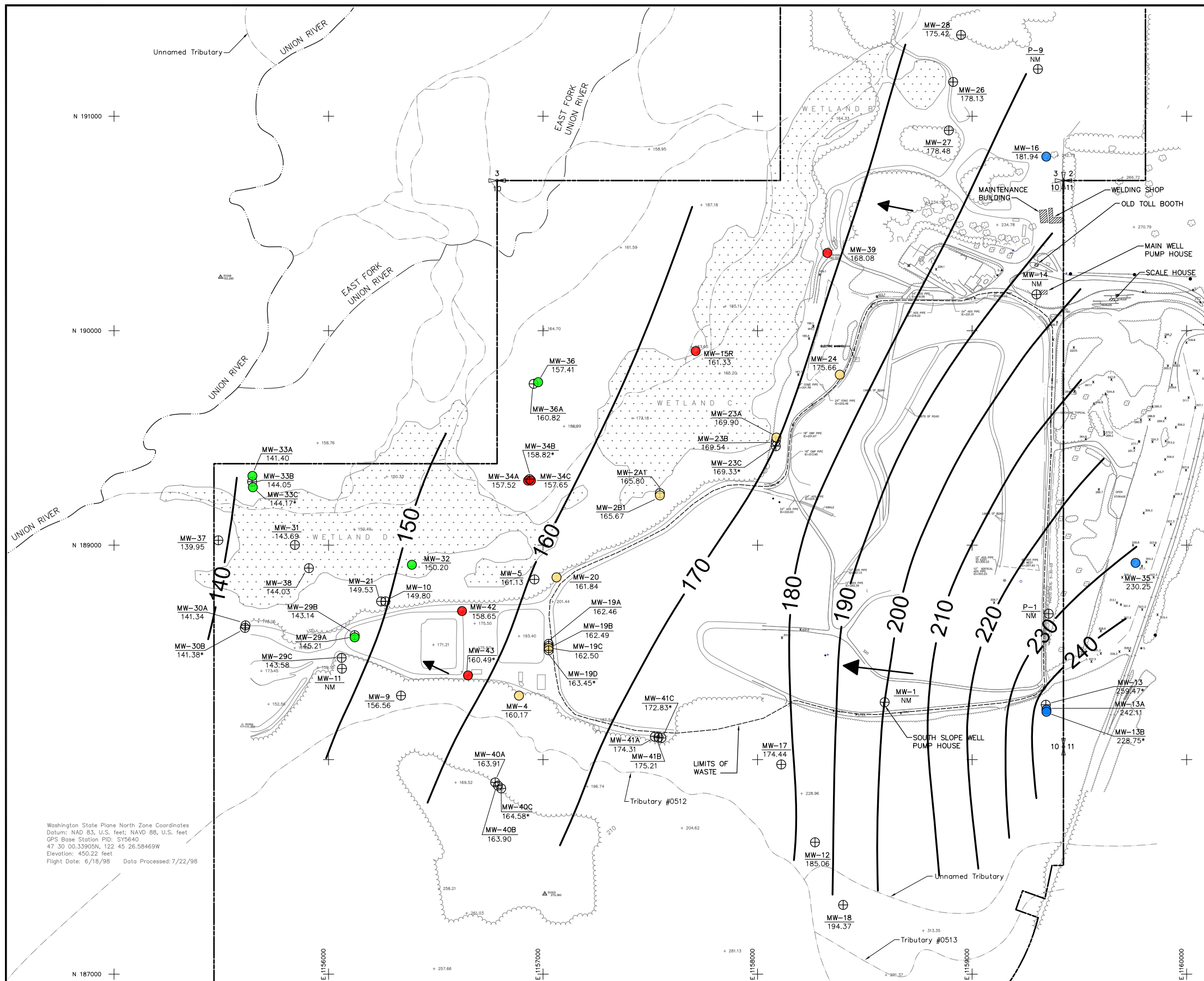
- Wells MW-13, MW-13B, MW-19D, MW-23C, MW-30B, MW-33C, MW-34B, MW-40C, and MW-41C have screen elevations outside the 89 to 200 ft-msl range.



LEGEND	
	UPGRADIENT (BACKGROUND) GROUNDWATER MONITORING WELL
	DOWNGRADIENT GROUNDWATER MONITORING WELL
	PERFORMANCE GROUNDWATER MONITORING WELL
	COMPLIANCE GROUNDWATER MONITORING WELL
	GROUNDWATER MONITORING WELL (WATER LEVEL ONLY)
	MONITORING WELL WATER LEVEL ELEVATION, FT-MSL
	ESTIMATED GROUNDWATER ELEVATION CONTOUR IN FEET-MSL CONTOUR INTERVAL = 10 FT
	GROUNDWATER FLOW DIRECTION
	WATER LEVEL ELEVATION NOT NOT USED IN CONTOURING
	PROPERTY LINE (ASSUMED)

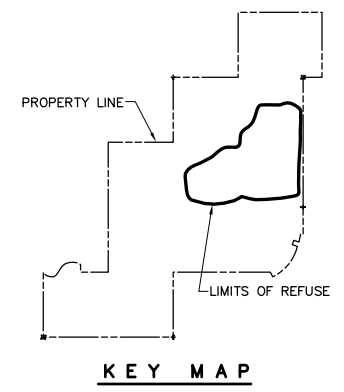
Washington State Plane North Zone Coordinates
 Datum: NAD 83, U.S. feet; NAVD 88, U.S. feet
 GPS Base Station PID: S19640
 47 30 00.33905N, 122 45 26.58469W
 Elevation: 450.22 feet
 Flight Date: 6/18/98 Data Processed: 7/22/98





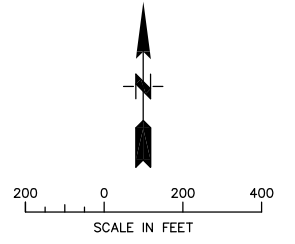
Note:
 Water level contours were generated using depth to water and reference elevation data from wells screened between 89 and 200 ft-msl. The water level elevations for the following locations have not been used for contouring.

- Wells MW-13, MW-13B, MW-19D, MW-23C, MW-30B, MW-33C, MW-34B, MW-40C, and MW-41C have screen elevations outside the 89 to 200 ft-msl range.



LEGEND	
	UPGRADIENT (BACKGROUND) GROUNDWATER MONITORING WELL
	DOWNGRADIENT GROUNDWATER MONITORING WELL
	PERFORMANCE GROUNDWATER MONITORING WELL
	COMPLIANCE GROUNDWATER MONITORING WELL
	GROUNDWATER MONITORING WELL (WATER LEVEL ONLY)
	MONITORING WELL WATER LEVEL ELEVATION, FT-MSL
	ESTIMATED GROUNDWATER ELEVATION CONTOUR IN FEET-MSL CONTOUR INTERVAL = 10 FT
	GROUNDWATER FLOW DIRECTION
	WATER LEVEL ELEVATION NOT NOT USED IN CONTOURING
	PROPERTY LINE (ASSUMED)

Washington State Plane North Zone Coordinates
 Datum: NAD 83, U.S. feet; NAVD 88, U.S. feet
 GPS Base Station PID: SY9640
 47 30 00.33905N, 122 45 26.58469W
 Elevation: 450.22 feet
 Flight Date: 6/18/98 Data Processed: 7/22/98

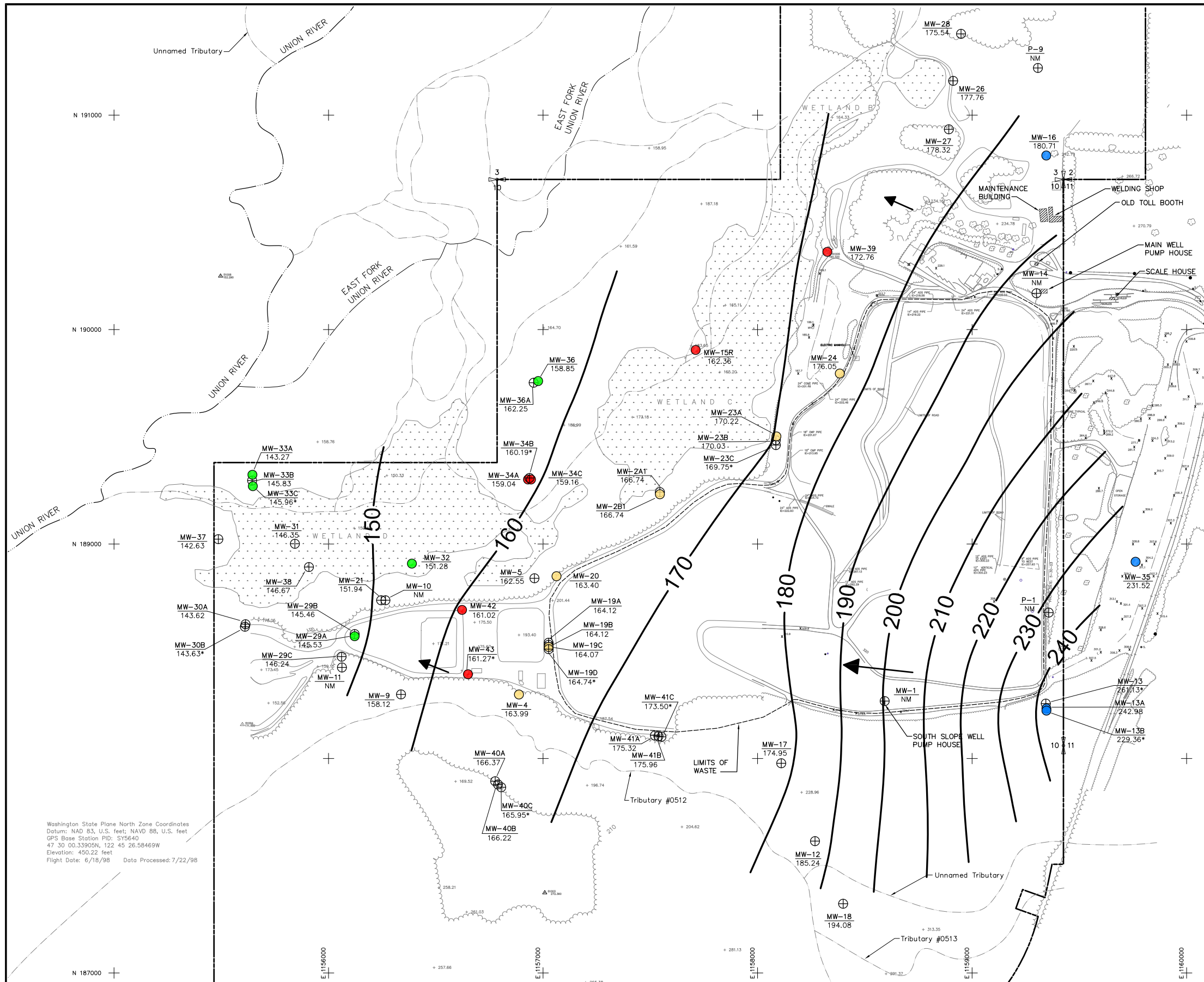


SCS ENGINEERS
 Environmental Consultants and Contractors
 2405 140th Avenue NE, Suite 107
 Bellevue, Washington 98005
 (425) 746-4600 FAX: (425) 746-6747

PROJECT NO.	04204027.20	DES BY	S.G.
SCALE	AS SHOWN	CHK BY	D.V.
CAD FILE	FIGURE 4C	APP BY	D.V.

WATER LEVEL CONTOUR MAP
 AUGUST 2016
 OLYMPIC VIEW SANITARY LANDFILL
 KITSAP COUNTY, WASHINGTON

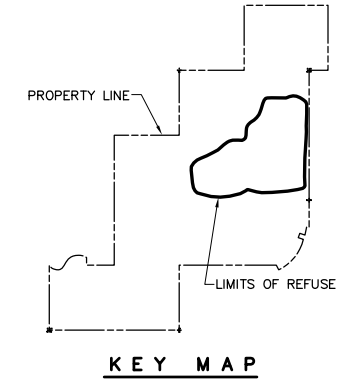
DATE	FEBRUARY 2017
FIGURE	4C



Note:

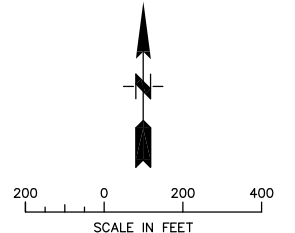
Water level contours were generated using depth to water and reference elevation data from wells screened between 89 and 200 ft-msl. The water level elevations for the following locations have not been used for contouring.

- Wells MW-13, MW-13B, MW-19D, MW-23C, MW-30B, MW-33C, MW-34B, MW-40C, and MW-41C have screen elevations outside the 89 to 200 ft-msl range.



LEGEND	
	UPGRADIENT (BACKGROUND) GROUNDWATER MONITORING WELL
	DOWNGRADIENT GROUNDWATER MONITORING WELL
	PERFORMANCE GROUNDWATER MONITORING WELL
	COMPLIANCE GROUNDWATER MONITORING WELL
	GROUNDWATER MONITORING WELL (WATER LEVEL ONLY)
	MONITORING WELL
	WATER LEVEL ELEVATION, FT-MSL
	ESTIMATED GROUNDWATER ELEVATION CONTOUR IN FEET-MSL CONTOUR INTERVAL = 10 FT
	GROUNDWATER FLOW DIRECTION
	WATER LEVEL ELEVATION NOT NOT USED IN CONTOURING
	PROPERTY LINE (ASSUMED)

Washington State Plane North Zone Coordinates
 Datum: NAD 83, U.S. feet; NAVD 88, U.S. feet
 GPS Base Station PID: SY9640
 47 30 00.33905N, 122 45 26.58469W
 Elevation: 450.22 feet
 Flight Date: 6/18/98 Data Processed: 7/22/98



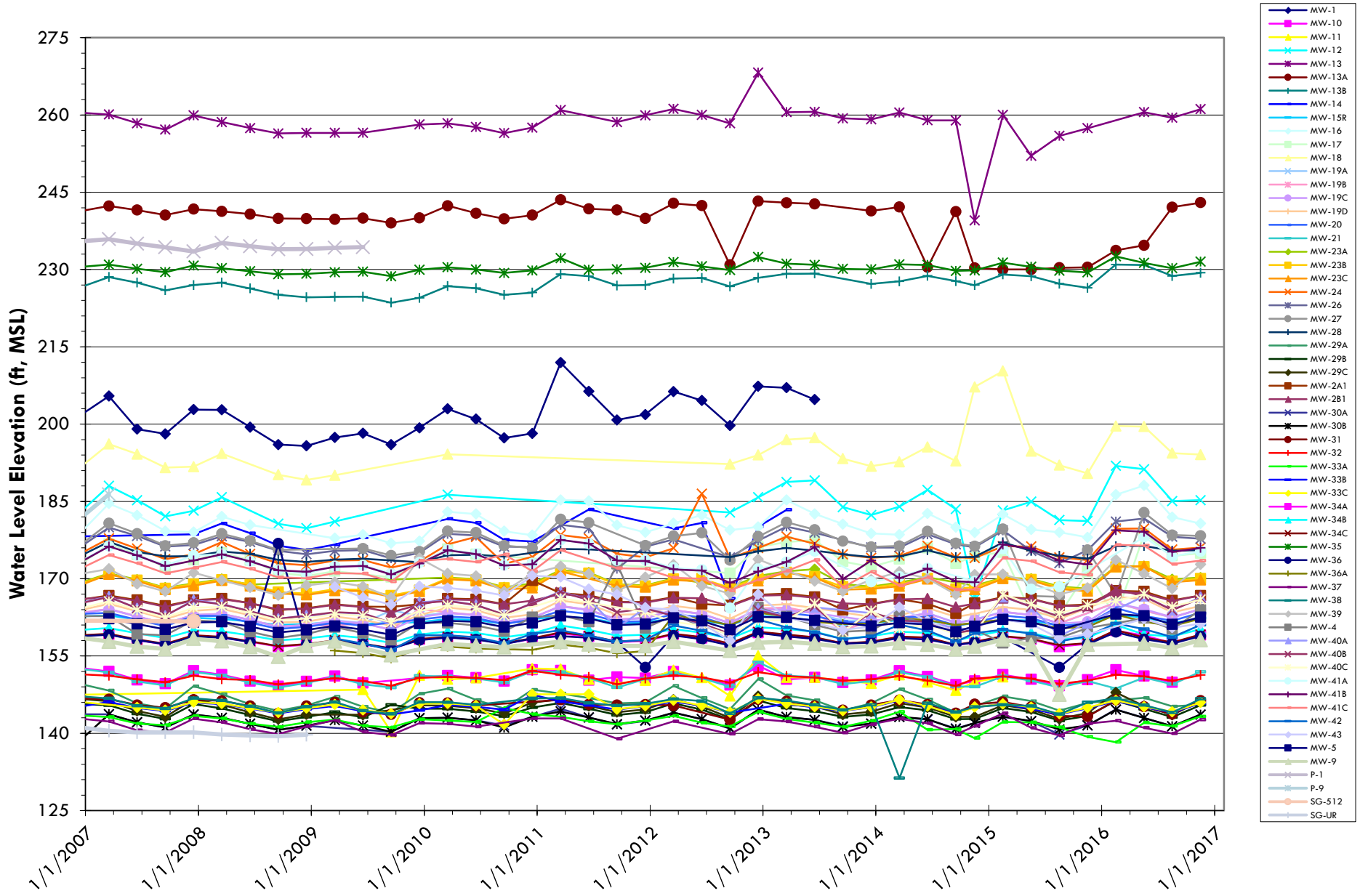
SCS ENGINEERS
 Environmental Consultants and Contractors
 2405 140th Avenue NE, Suite 107
 Bellevue, Washington 98005
 (425) 746-4600 FAX: (425) 746-6747

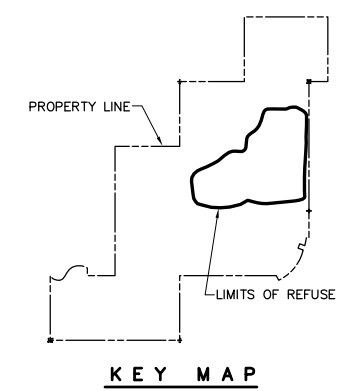
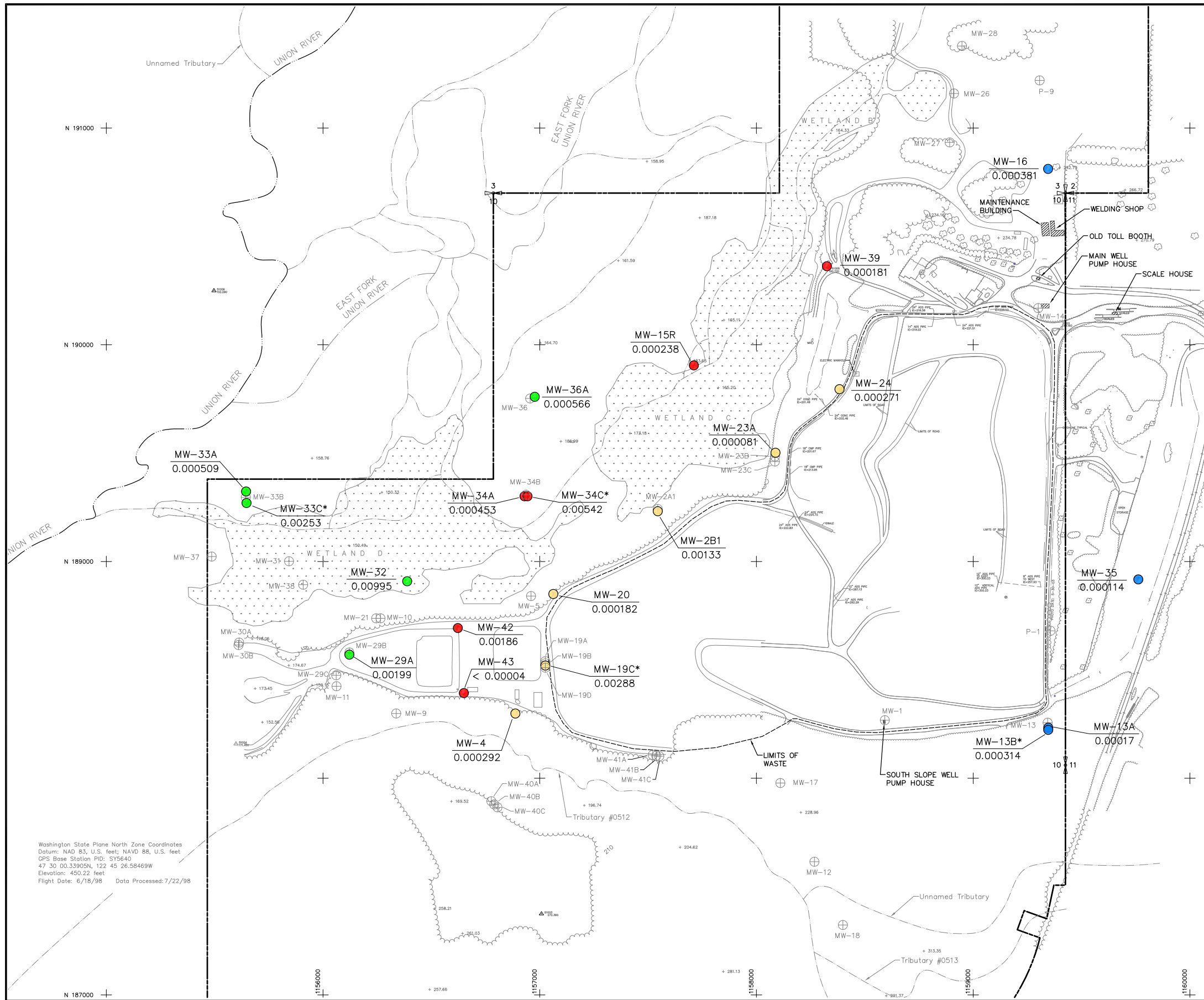
PROJECT NO.	04204027.20	DES BY	S.G.
SCALE	AS SHOWN	CHK BY	D.V.
CAD FILE	FIGURE 4D	APP BY	D.V.

WATER LEVEL CONTOUR MAP NOVEMBER 2016	
OLYMPIC VIEW SANITARY LANDFILL KITSAP COUNTY, WASHINGTON	

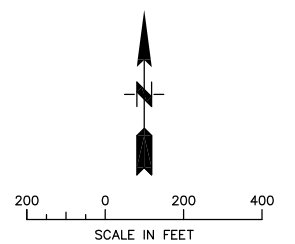
DATE	FEBRUARY 2017
FIGURE	4D

Figure 5. Historical Groundwater Elevations
2016 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington





LEGEND	
	UPGRADIENT (BACKGROUND) GROUNDWATER MONITORING WELL MW-35
	DOWNGRADIENT GROUNDWATER MONITORING WELL MW-32
	PERFORMANCE GROUNDWATER MONITORING WELL MW-20
	COMPLIANCE GROUNDWATER MONITORING WELL MW-43
	GROUNDWATER MONITORING WELL (WATER LEVEL ONLY) MW-36
	SHALLOW MONITORING WELL ARSENIC, TOTAL (mg/L) MW-32 0.00995
	DEEP MONITORING WELL *
	PROPERTY LINE (ASSUMED)



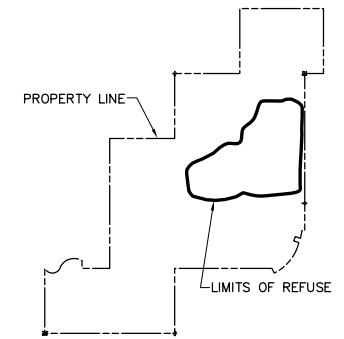
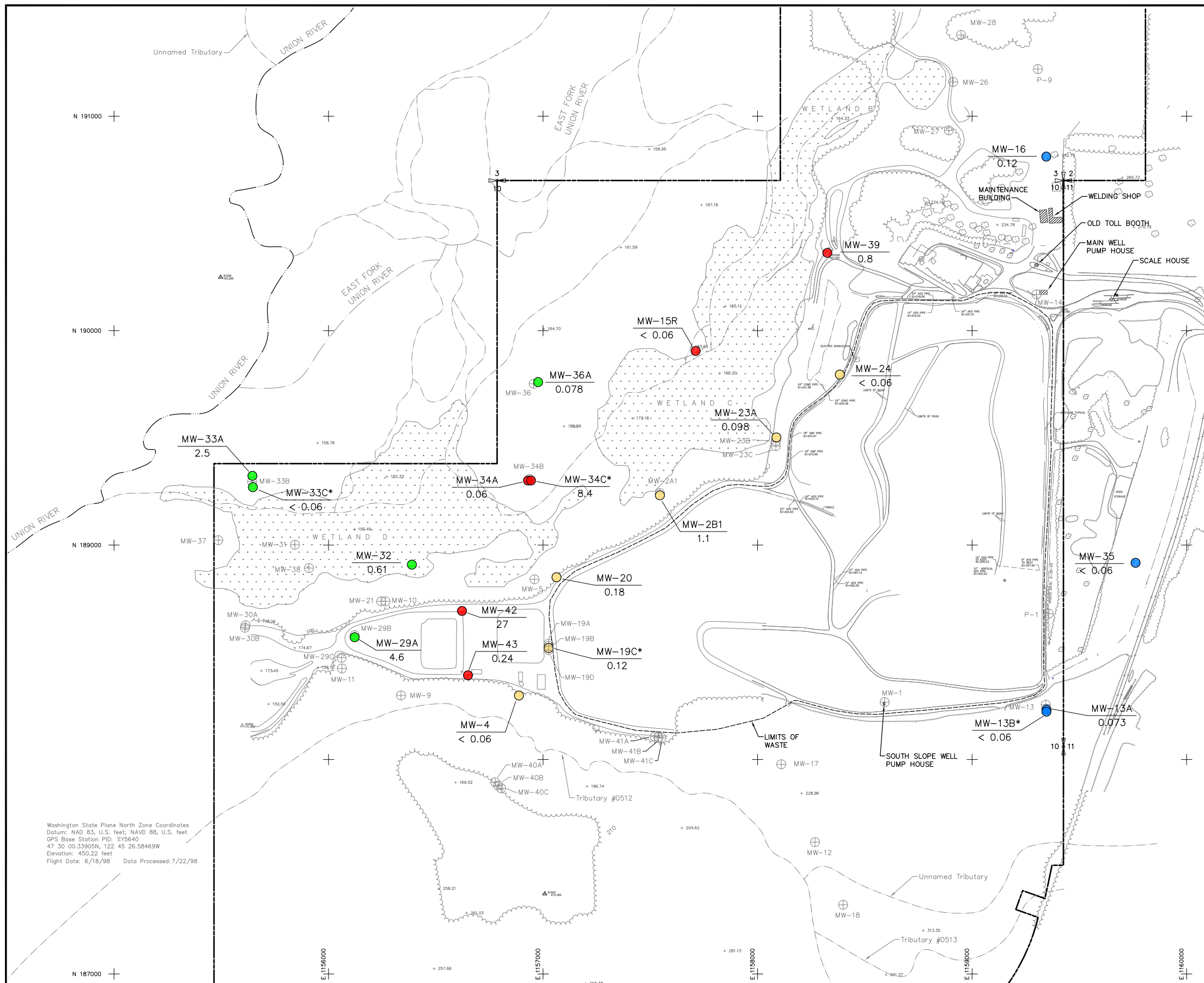
Washington State Plane North Zone Coordinates
 Datum: NAD 83, U.S. feet; NAVD 88, U.S. feet
 GPS Base Station PID: SY5640
 47° 30' 00.339059N, 122° 45' 26.58469W
 Elevation: 450.22 feet
 Flight Date: 6/18/98 Data Processed: 7/22/98

SCS ENGINEERS
 Environmental Consultants and Contractors
 2405 140th Avenue NE, Suite 107
 Bellevue, Washington 98005
 (425) 746-4600 FAX: (425) 746-6747

PROJECT NO.	04204027.20	DES BY	S.G.
SCALE	AS SHOWN	CHK BY	D.V.
CAD FILE	FIGURE 6A	APP BY	G.H.

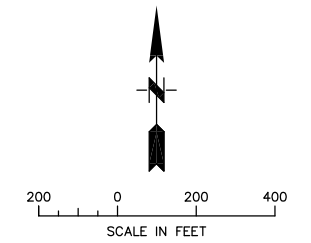
TOTAL ARSENIC CONCENTRATION MAP
 NOVEMBER 2016
 OLYMPIC VIEW SANITARY LANDFILL
 KITSAP COUNTY, WASHINGTON

DATE	FEBRUARY 2017
FIGURE	6A



KEY MAP

LEGEND	
● MW-35	UPGRADIENT (BACKGROUND) GROUNDWATER MONITORING WELL
● MW-32	DOWNGRADIENT GROUNDWATER MONITORING WELL
● MW-20	PERFORMANCE GROUNDWATER MONITORING WELL
● MW-43	COMPLIANCE GROUNDWATER MONITORING WELL
⊕ MW-36	GROUNDWATER MONITORING WELL (WATER LEVEL ONLY)
<u>MW-32</u> 0.61	<u>SHALLOW MONITORING WELL</u> IRON, TOTAL (mg/L)
*	DEEP MONITORING WELL
---	PROPERTY LINE (ASSUMED)



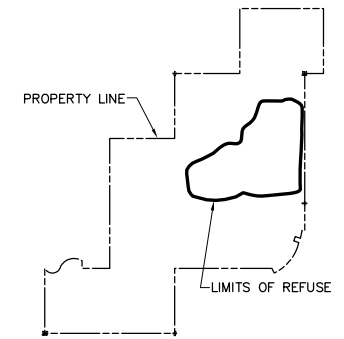
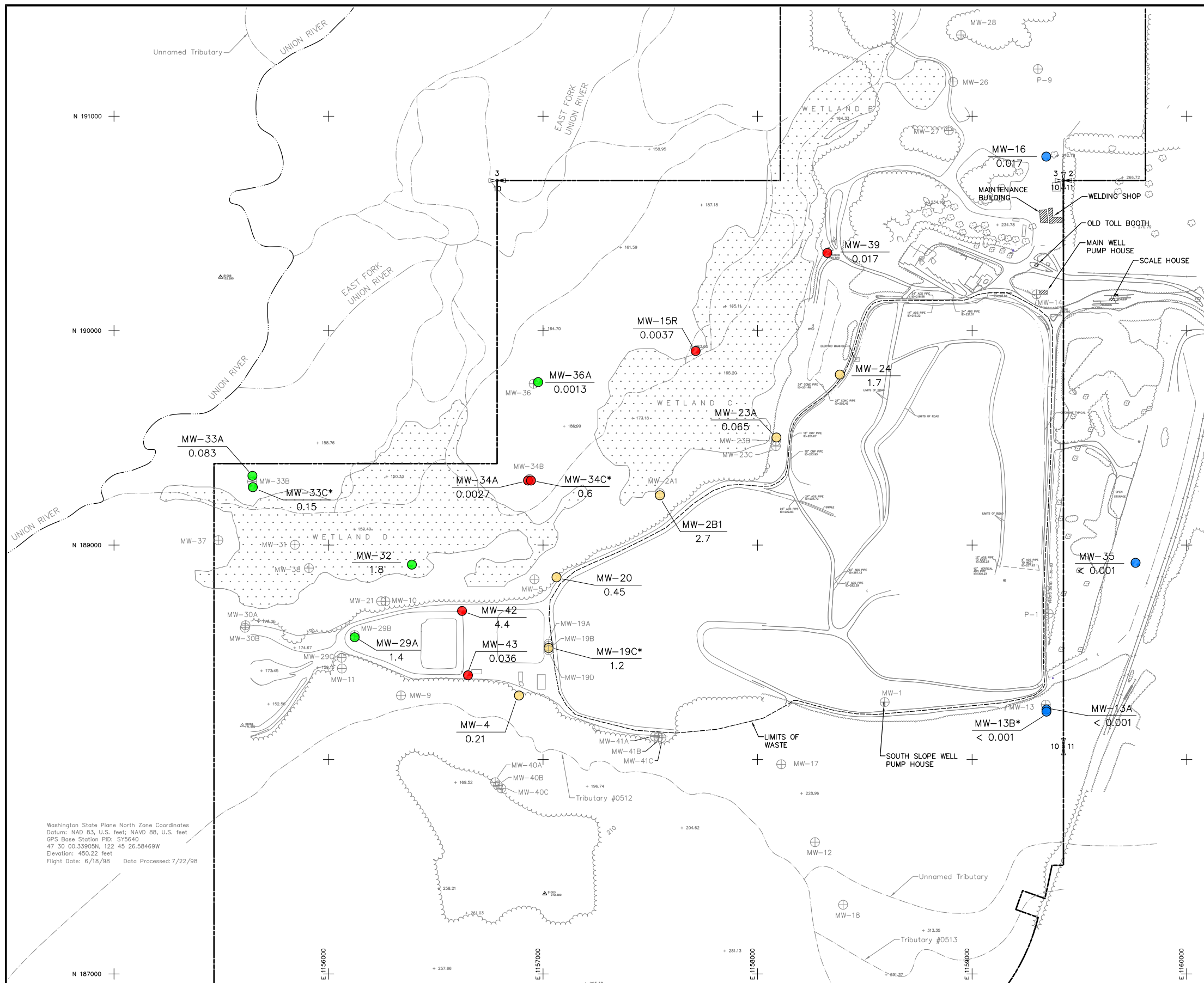
Washington State Plane North Zone Coordinates
 Datum: NAD 83, U.S. feet; NAVD 88, U.S. feet
 GPS Base Station PID: SY9640
 47 30 00.33905N, 122 45 26.58469W
 Elevation: 450.22 feet
 Flight Date: 6/18/98 Data Processed: 7/22/98

SCS ENGINEERS
 Environmental Consultants and Contractors
 2405 140th Avenue NE, Suite 107
 Bellevue, Washington 98005
 (425) 746-4600 FAX: (425) 746-6747

PROJECT NO.	04204027.20	DES BY	S.G.
SCALE	AS SHOWN	CHK BY	D.V.
CAD FILE	FIGURE 6B	APP BY	G.H.

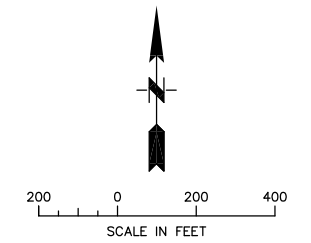
TOTAL IRON CONCENTRATION MAP
 NOVEMBER 2016
 OLYMPIC VIEW SANITARY LANDFILL
 KITSAP COUNTY, WASHINGTON

DATE
 FEBRUARY 2017
 FIGURE
6B



KEY MAP

LEGEND	
● MW-35	UPGRADIENT (BACKGROUND) GROUNDWATER MONITORING WELL
● MW-32	DOWNGRADIENT GROUNDWATER MONITORING WELL
● MW-20	PERFORMANCE GROUNDWATER MONITORING WELL
● MW-43	COMPLIANCE GROUNDWATER MONITORING WELL
⊕ MW-36	GROUNDWATER MONITORING WELL (WATER LEVEL ONLY)
<u>MW-32</u> 1.8	<u>SHALLOW MONITORING WELL</u> MANGANESE, TOTAL (mg/L)
*	DEEP MONITORING WELL
---	PROPERTY LINE (ASSUMED)



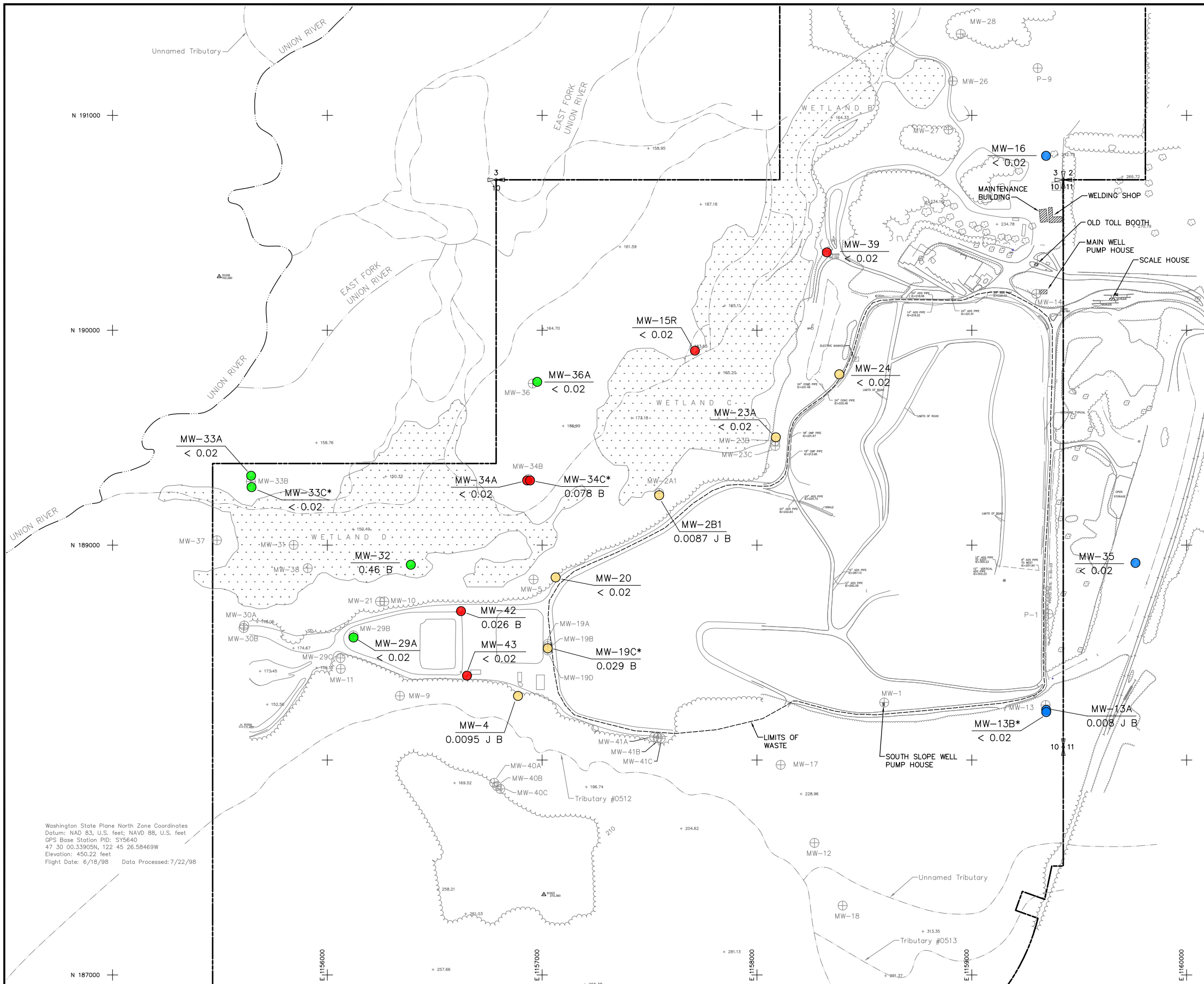
Washington State Plane North Zone Coordinates
 Datum: NAD 83, U.S. feet; NAVD 88, U.S. feet
 GPS Base Station PID: SY9640
 47 30 00.33905N, 122 45 26.58469W
 Elevation: 450.22 feet
 Flight Date: 6/18/98 Data Processed: 7/22/98

SCS ENGINEERS
 Environmental Consultants and Contractors
 2405 140th Avenue NE, Suite 107
 Bellevue, Washington 98005
 (425) 746-4600 FAX: (425) 746-6747

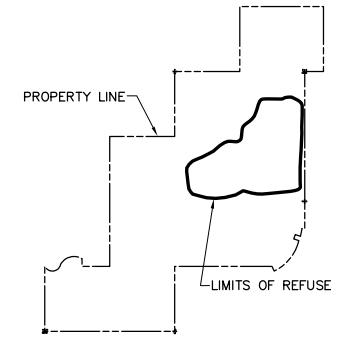
PROJECT NO.	04204027.20	DES BY	S.G.
SCALE	AS SHOWN	CHK BY	D.V.
CAD FILE	FIGURE 6C	APP BY	G.H.

TOTAL MANGANESE CONCENTRATION MAP
 NOVEMBER 2016
 OLYMPIC VIEW SANITARY LANDFILL
 KITSAP COUNTY, WASHINGTON

DATE
 FEBRUARY 2017
 FIGURE
6C

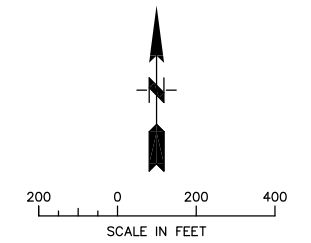


- NOTES:
1. J-flagged values are reported as estimated values below the standard method reporting limit.
 2. B-flagged values are estimated values. Concentrations may have been impacted by blank contributions as identified by the lab.



KEY MAP

LEGEND	
● MW-35	UPGRADIENT (BACKGROUND) GROUNDWATER MONITORING WELL
● MW-32	DOWNGRADIENT GROUNDWATER MONITORING WELL
● MW-20	PERFORMANCE GROUNDWATER MONITORING WELL
● MW-43	COMPLIANCE GROUNDWATER MONITORING WELL
⊕ MW-36	GROUNDWATER MONITORING WELL (WATER LEVEL ONLY)
<u>MW-32</u> 0.46 B	<u>SHALLOW MONITORING WELL</u> VINYL CHLORIDE (ug/L)
*	DEEP MONITORING WELL
---	PROPERTY LINE (ASSUMED)



Washington State Plane North Zone Coordinates
 Datum: NAD 83, U.S. feet; NAVD 88, U.S. feet
 GPS Base Station PID: SY9640
 47 30 00.33905N, 122 45 26.58469W
 Elevation: 450.22 feet
 Flight Date: 6/18/98 Data Processed: 7/22/98

SCS ENGINEERS
 Environmental Consultants and Contractors
 2405 140th Avenue NE, Suite 107
 Bellevue, Washington 98005
 (425) 746-4600 FAX: (425) 746-6747

PROJECT NO.	04204027.20	DES BY	S.G.
SCALE	AS SHOWN	CHK BY	D.V.
CAD FILE	FIGURE 6D	APP BY	G.H.

VINYL CHLORIDE CONCENTRATION MAP	
NOVEMBER 2016	
OLYMPIC VIEW SANITARY LANDFILL	
KITSAP COUNTY, WASHINGTON	

DATE	FEBRUARY 2017
FIGURE	6D

Figure 7. Leachate Generation (2007 - 2016)
2016 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington

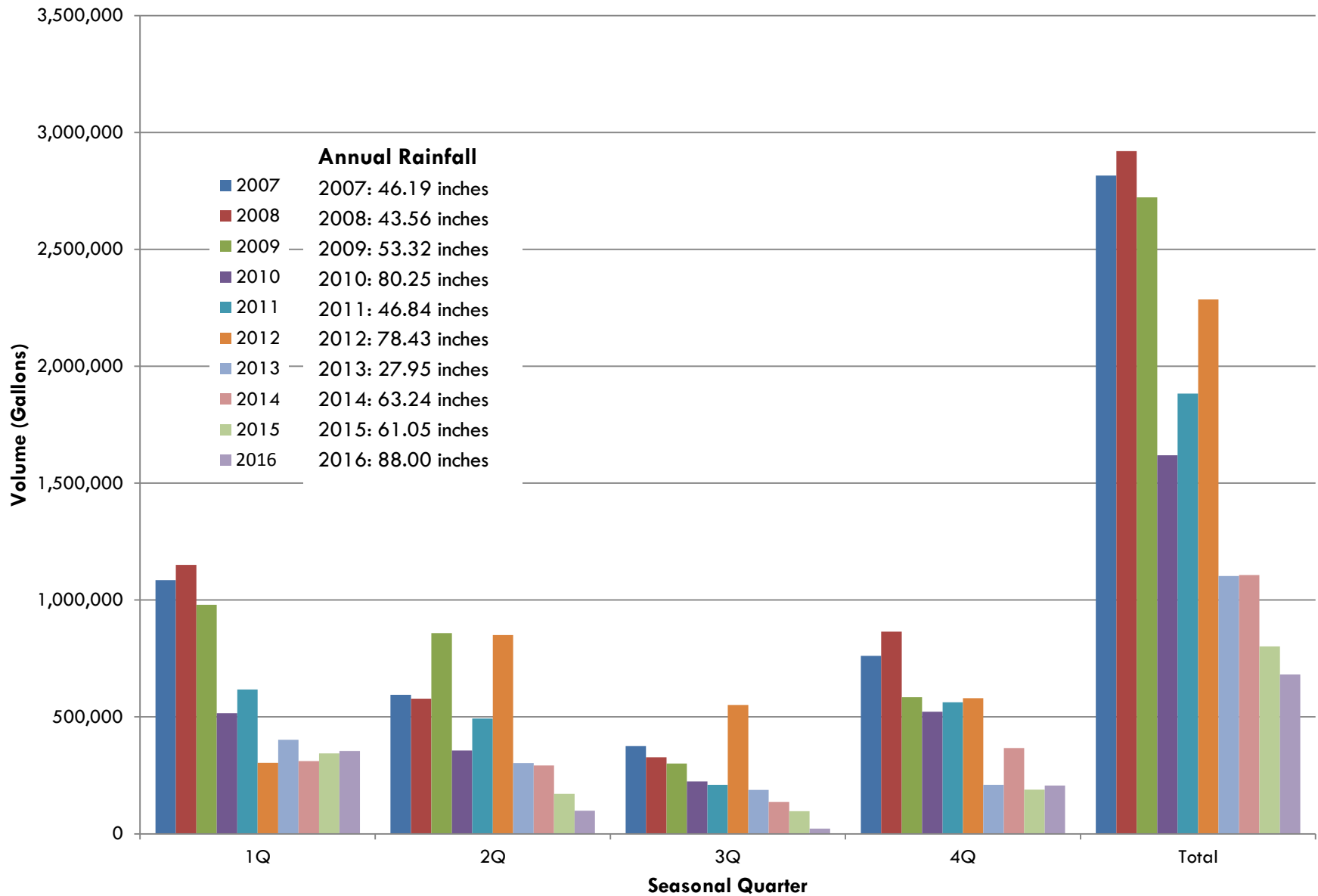
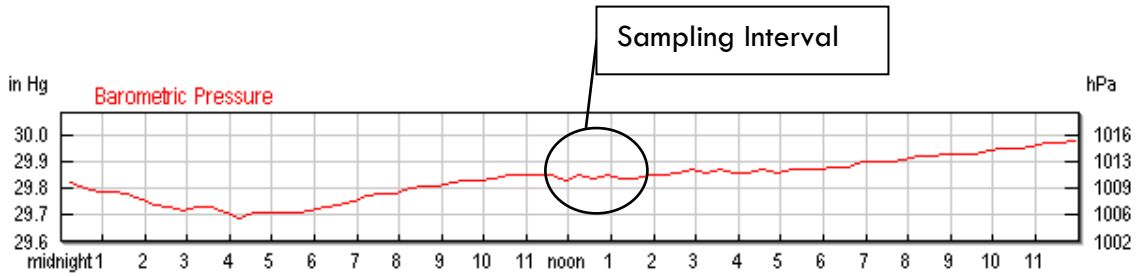


Figure 8. Barometric Pressure during LFG Migration Monitoring – November 2016
2016 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington

Barometric Pressure Trend for November 2016



Barometric Pressure Trend for November 15, 2016



Source: Bremerton National Airport, Station KPWT
Latitude 47.5, Longitude 122.75, Elevation 482 ft-AMSL

Data Sources:

https://www.wunderground.com/history/airport/KPWT/2016/11/13/MonthlyHistory.html?req_city=&req_state=&req_statename=&reqdb.zip=&reqdb.magic=&reqdb.wmo=

APPENDIX A

FOURTH QUARTER 2016
FIELD DOCUMENTATION

(FIELD DOCUMENTATION FROM Q1 THROUGH Q3 ON CD)

SCS ENGINEERS

November 18, 2016
File No. 04204027.19

**Subject: Fourth Quarter 2016 Compliance Monitoring Event
Olympic View Sanitary Landfill, Kitsap County, Washington**

Sampling Event Dates: 11/14/16 through 11/17/16
Personnel: Sam Graber & Sam Adlington

NOTES/SAMPLING DECODING:

- Dedicated pumps were used for purging and sampling all wells.
- Duplicate samples were collected at MW-33C (DUP1) and MW-20 (DUP2).
- Geotech and Solinst water level meters were used to record all water level elevations.
- In addition to the monitoring wells where groundwater was collected for chemical analysis, additional wells were monitored for groundwater level elevations. A summary of measured water levels are included with the field documentation.
- Several well locks noted to need replacement on the site.
- This was the annual event and leachate samples were collected from the Leachate-Influent location as well as the Barney White Toe Drain Location
- The samples were sent to TestAmerica Denver for analysis at the close of each sampling day, except samples for low level arsenic which were held until the end of the sampling event and provided to Analytical Resources, Inc. in Tukwila, Washington.

Sample Date	Location ID	Sample ID	Comments
11/14/2016	MW-13A	1116-01	
11/14/2016	MW-13B	1116-02	
11/14/2016	MW-16	1116-03	
11/14/2016	MW-39	1116-04	
11/14/2016	MW-4	1116-05	
11/14/2016	MW-43	1116-06	
11/14/2016	MW-29A	1116-07	
11/14/2016	MW-20	1116-08	
11/14/2016	MW-20	1116-09	DUP-2
11/14/2016	MW-19C	1116-10	
11/14/2016	OBWL-TD	1116-11	

Sample Date	Location ID	Sample ID	Comments
11/14/2016	L-INF	1116-12	
11/15/2016	MW-35	1116-13	
11/15/2016	MW-34C	1116-14	
11/15/2016	MW-34A	1116-15	
11/15/2016	MW-36A	1116-16	
11/15/2016	MW-15R	1116-17	
11/15/2016	MW-2B1	1116-18	
11/16/2016	MW-23A	1116-19	
11/16/2016	MW-32	1116-20	
11/16/2016	MW-42	1116-21	
11/17/2016	MW-33A	1116-22	
11/17/2016	MW-33C	1116-23	
11/17/2016	MW-33C	1116-24	DUP-1
11/17/2016	MW-24	1116-25	
11/22/2016	LP-LCD	1116-26	

FIELD INFORMATION FORM



Site Name: WJSC
 Site No.:
 Sample Point: MW-13A
 Sample ID:

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO
 PURGE DATE (MM DD YY): 11/14/16
 PURGE TIME (2400 Hr Clock): 10:20
 ELAPSED HRS (hrs:min): 23
 WATER VOL IN CASING (Gallons):
 ACTUAL VOL PURGED (Gallons):
 WELL VOLs PURGED:

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: Y or N
 Purging Device: C A-Submersible Pump D-Bailer
 Sampling Device: C B-Peristaltic Pump E-Piston Pump
 X-Other: C-QED Bladder Pump F-Dipper/Bottle
 Filter Device: Y or N 0.45 μ or μ (circle or fill in)
 Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other:
 Sample Tube Type: D A-Teflon C-PVC X-Other:
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC) (ft/msl) Depth to Water (DTW) (from TOC) 4576 (ft)
 Groundwater Elevation (site datum, from TOC) (ft/msl)
 Total Well Depth (from TOC) (ft) Stick Up (from ground elevation) (ft)
 Casing ID (in) Casing Material
 Note: Total Well Depth, Stick Up, Casing Id. etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit (μL/min)	pH (std)	Conductance (SC/EC) (μmhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
10:23	330	5.72	1173	9.35		6.94	1136.0	
10:28		6.22	1170	9.63		6.72	1122.0	
10:31		6.29	1170	9.61		6.66	1119.0	
10:34		6.34	1170	9.60		6.62	1117.0	
10:37		6.43	1169	9.59		6.59	1115.0	
10:40		6.49	1169	9.57		6.56	1113.0	
10:43	✓	6.50	1169	9.57		6.54	1113.0	4575
					0.84			

Suggested range for 3 consec. readings or note Permit/State requirements:
 pH: +/- 0.2 Conductance: +/- 3% Temp: - Turbidity: - D.O.: +/- 10% eH/ORP: +/- 25 mV DTW: Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA
 SAMPLE DATE (MM DD YY): 11/14/16
 pH (std): 6.50
 CONDUCTANCE (umhos/cm @ 25°C): 1169
 TEMP. (°C): 9.57
 TURBIDITY (ntu): 0.84
 DO (mg/L-ppm): 6.54
 eH/ORP (mV): 1113.0
 Other: 0.84 Units: 1043

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: clear Odor: Color: Other:
 Weather Conditions (required daily, or as conditions change): Direction/Speed: Outlook: Precipitation: Y or N

FIELD COMMENTS
 Specific Comments (including purge/well volume calculations if required):

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
11/14/16 Sam Grabis [Signature] SCS
 Date Name Signature Company

FIELD INFORMATION FORM



Site Name: OSL
 Site No.: 111416
 Sample Point: MW-13B
 Sample ID

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO

<u>111416</u>	<u>1112</u>	<u>23</u>			
PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs:min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)	WELL VOLS PURGED

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment... Dedicated: Y or N

Filter Device: Y or N 0.45 μ or _____ μ (circle or fill in)

Purging Device: C A-Submersible Pump D-Bailer
 B-Peristaltic Pump E-Piston Pump

Sampling Device: C C-QED Bladder Pump F-Dipper/Bottle

Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other _____

X-Other: _____ Sample Tube Type: D A-Teflon C-PVC X-Other: _____
 B-Stainless Steel D-Polypropylene

WELL DATA

Well Elevation (at TOC): _____ (ft/msl) Depth to Water (DTW) (from TOC): 59.30 (ft) Groundwater Elevation (site datum, from TOC): _____ (ft/msl)

Total Well Depth (from TOC): _____ (ft) Stick Up (from ground elevation): _____ (ft) Casing ID: _____ (in) Casing Material: _____

Note: Total Well Depth, Stick Up, Casing Id. etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit (ml/min)	pH (std)	Conductance (SC/EC) (μmhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
<u>111:15</u>	<u>350</u> 1 st	<u>6.53</u> 1 st	<u>170</u>	<u>10.91</u>		<u>6.11</u>	<u>113.0</u>	
<u>111:20</u>		<u>6.62</u> 2 nd	<u>170</u>	<u>10.65</u>		<u>6.70</u>	<u>100.0</u>	
<u>111:23</u>		<u>6.76</u> 3 rd	<u>170</u>	<u>10.54</u>		<u>6.90</u>	<u>91.0</u>	
<u>111:26</u>		<u>7.02</u> 4 th	<u>170</u>	<u>10.75</u>		<u>6.96</u>	<u>85.0</u>	
<u>111:29</u>		<u>7.08</u>	<u>169</u>	<u>10.31</u>		<u>6.94</u>	<u>86.0</u>	
<u>111:32</u>		<u>7.14</u>	<u>170</u>	<u>10.56</u>		<u>6.95</u>	<u>84.0</u>	<u>59.52</u>
<u>111:35</u>	<u>↓</u>	<u>7.17</u>	<u>171</u>	<u>10.41</u>	<u>0.89</u>	<u>6.94</u>	<u>84.0</u>	
							<u>84.0</u>	

Suggested range for 3 consec. readings or note Permit/State requirements:
 pH: +/- 0.2 Conductance: +/- 3% Temp: - Turbidity: - D.O.: +/- 10% eH/ORP: +/- 25 mV DTW: Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (umhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: <u>time</u> Units
<u>111416</u>	<u>7.17</u>	<u>171</u>	<u>10.41</u>	<u>0.89</u>	<u>6.94</u>	<u>84.0</u>	<u>1135</u>

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: clear Odor: _____ Color: _____ Other: _____

Weather Conditions (required daily, or as conditions change): _____ Direction/Speed: _____ Outlook: _____ Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required): _____

FIELD COMMENTS

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

11/14/16 Sam Gruber _____ SCS

 Date Name Signature Company

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM



Site Name: OUSL

Site No.:

Sample Point: MW-16
Sample ID

This Waste Management Field Information Form is Required
This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID: _____

PURGE INFO

PURGE DATE: 11/14/16 PURGE TIME: 12:25 ELAPSED HRS: 23 WATER VOL IN CASING: _____ ACTUAL VOL PURGED: _____ WELL VOLs PURGED: _____

(MM DD YY) (2400 Hr Clock) (hrs:min) (Gallons) (Gallons)

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment... Dedicated: Y or N

Filter Device: Y or N | 0.45 μ or _____ μ (circle or fill in)

Purging Device: C A-Submersible Pump D-Bailer
B-Peristaltic Pump E-Piston Pump

Sampling Device: C C-QED Bladder Pump F-Dipper/Bottle

Filter Type: A A-In-line Disposable C-Vacuum
B-Pressure X-Other _____

X-Other: _____ Sample Tube Type: D A-Teflon C-PVC X-Other: _____
B-Stainless Steel D-Polypropylene

WELL DATA

Well Elevation (at TOC): _____ (ft/msl) Depth to Water (DTW) (from TOC): 5930 (ft) Groundwater Elevation (site datum, from TOC): _____ (ft/msl)

Total Well Depth (from TOC): _____ (ft) Stick Up (from ground elevation): _____ (ft) Casing ID: _____ (in) Casing Material: _____

Note: Total Well Depth, Stick Up, Casing Id. etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit ml/min	pH (std)	Conductance (SC/EC) (μ mhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
12:28	350	6.89	120	10.52		8.02	1114.0	
12:33		6.15	112	9.72		6.93	1300	
12:36		5.98	110	9.64		7.12	1320	
12:39		5.94	110	9.62		7.12	1330	
12:42		5.91	110	9.62		6.91	1350	
12:45		5.91	110	9.63		7.00	1350	5937
12:48		5.89	110	9.61	251	6.91	1350	

Suggested range for 3 consec. readings or note Permit/State requirements:
 pH: +/- 0.2 Conductance: +/- 3% Temp: - Turbidity: - D.O.: +/- 10% eH/ORP: +/- 25 mV DTW: Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. **If more fields above are needed, use separate sheet or form.**

FIELD DATA

SAMPLE DATE (MM DD YY): 11/14/16 pH (std): 5.89 CONDUCTANCE (μ mhos/cm @ 25°C): 110 TEMP. (°C): 9.81 TURBIDITY (ntu): 251 DO (mg/L-ppm): 6.91 eH/ORP (mV): 1350 Other: fine

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: Clear Odor: - Color: - Other: -

Weather Conditions (required daily, or as conditions change): Direction/Speed: - Outlook: - Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required): _____

FIELD COMMENTS

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

11/14/16 Sam Grater [Signature] SCS

Date Name Signature Company

FIELD INFORMATION FORM



Site Name: JUSC
 Site No.: Sample Point: MW-39
Sample ID

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO
 PURGE DATE: 11/14/16 PURGE TIME: 13:31 ELAPSED HRS: 23
(MM DD YY) (2400 Hr Clock) (hrs:min)
 WATER VOL IN CASING: ACTUAL VOL PURGED: WELL VOLS PURGED:
(Gallons) (Gallons)
 Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: Y or N
 Purging Device: C A-Submersible Pump D-Bailer
 Sampling Device: C B-Peristaltic Pump E-Piston Pump
 X-Other: C-QED Bladder Pump F-Dipper/Bottle
 Filter Device: Y or N 0.45 μ or μ (circle or fill in)
 Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other:
 Sample Tube Type: D A-Teflon C-PVC X-Other:
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC): (ft/msl) Depth to Water (DTW) (from TOC): 1716 (ft)
 Groundwater Elevation (site datum, from TOC): (ft/msl)
 Total Well Depth (from TOC): (ft) Stick Up (from ground elevation): (ft)
 Casing ID: (in) Casing Material:
 Note: Total Well Depth, Stick Up, Casing Id. etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit (ml/min)	pH (std)	Conductance (SC/EC) (μ mhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
13:34	350	5.50	136	27.4		1.80	270	
13:39		5.30	126	27.3		1.51	500	
13:42		5.31	131	27.5		1.49	530	
13:45		5.29	134	27.4		1.42	510	
13:48		5.31	134	27.4		1.40	500	
13:51		5.30	133	27.3		1.34	480	
13:54		5.27	130	27.89	4.53	1.28	470	1847

Suggested range for 3 consec. readings or note Permit/State requirements:
 pH: +/- 0.2 Conductance: +/- 3% Temp: - Turbidity: - D.O.: +/- 10% eH/ORP: +/- 25 mV DTW: Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. **If more fields above are needed, use separate sheet or form.**

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (μ mhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: <u>time</u> Units
11/14/16	5.27	130	27.89	4.53	1.28	470	1354

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: clear Odor: - Color: - Other: -
 Weather Conditions (required daily, or as conditions change): Direction/Speed: - Outlook: - Precipitation: Y or N

FIELD COMMENTS
 Specific Comments (including purge/well volume calculations if required):

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
11/14/16 Sam Grater [Signature] SCS
 Date Name Signature Company

FIELD INFORMATION FORM



Site Name: OVSL

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID: _____

Site No.: _____ Sample Point: MW-43
Sample ID

PURGE INFO

111416	1136				
PURGE DATE <small>(MM DD YY)</small>	PURGE TIME <small>(2400 Hr Clock)</small>	ELAPSED HRS <small>(hrs:min)</small>	WATER VOL IN CASING <small>(Gallons)</small>	ACTUAL VOL PURGED <small>(Gallons)</small>	WELL VOLs PURGED

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment... Dedicated: Y or N

Filter Device: Y or N 0.45 μ or _____ μ (circle or fill in)

Purging Device: C A-Submersible Pump D-Bailer
 B B-Peristaltic Pump E-Piston Pump

Filter Type: A A-In-line Disposable C-Vacuum
 B B-Pressure X-Other _____

Sampling Device: C C-QED Bladder Pump F-Dipper/Bottle

X-Other: _____

Sample Tube Type: D A-Teflon C-PVC X-Other: _____
 B B-Stainless Steel D-Polypropylene

WELL DATA

Well Elevation (at TOC) _____ (ft/msl) Depth to Water (DTW) (from TOC) _____ (ft) Groundwater Elevation (site datum, from TOC) _____ (ft/msl)

Total Well Depth (from TOC) _____ (ft) Stick Up (from ground elevation) _____ (ft) Casing ID _____ (in) Casing Material _____

Note: Total Well Depth, Stick Up, Casing Id. etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (μmhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
11:39	1 st	8.35	42	12.71	>1000	5.32	80.9	—
11:43	2 nd	7.30	37	12.69	62.41	3.32	130.5	—
11:46	3 rd	6.88	35	12.68	18.76	2.92	145.8	—
11:49	4 th	6.66	35	12.66	15.78	2.86	152.6	—
11:52		6.58	34	12.67	15.75	2.78	154.7	—
11:55		6.47	34	12.65	14.04	2.73	156.8	—
11:58		6.38	34	12.63	17.19	2.73	156.8	—
:								
:								
:								

Suggested range for 3 consec. readings or note Permit/State requirements:

pH	Conductance	Temp.	Turbidity	D.O.	eH/ORP	DTW
+/- 0.2	+/- 3%	-	-	+/- 10%	+/- 25 mV	Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (umhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: <u>TIME</u>
111416	6.38	34	12.63	17.19	2.73	156.8	11:58

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: CLEAR Odor: _____ Color: LT. ORANGE Other: _____

Weather Conditions (required daily, or as conditions change): _____ Direction/Speed: _____ Outlook: OVERCAST Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required): _____

FIELD COMMENTS

DTW OBSTRUCTION AT 28.75' FROM TOC

2 x 1000 ml Poly, 3 x 500 ml HNO3 (1 FILTERED), 1 x 500 ml H2SO4 AMBER

6XVOA

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

11/14/16 SAM ADUNGTON [Signature] SCS ENGINEERS

Date Name Signature Company

FIELD INFORMATION FORM



Site Name: OVSL
 Site No.:
 Sample Point: MW-29A
 Sample ID:

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO
 PURGE DATE: 11/14/16 PURGE TIME: 12:26 ELAPSED HRS:
 WATER VOL IN CASING: ACTUAL VOL PURGED: WELL VOLS PURGED:
(MM DD YY) (2400 Hr Clock) (hrs:min) (Gallons) (Gallons) (ft)
 Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: Y or N
 Purging Device: C A-Submersible Pump D-Bailer
 B-Peristaltic Pump E-Piston Pump
 Sampling Device: C C-QED Bladder Pump F-Dipper/Bottle
 X-Other:
 Filter Device: Y or N 0.45 μ or μ (circle or fill in)
 Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other:
 Sample Tube Type: D A-Teflon C-PVC X-Other:
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC): (ft/msl) Depth to Water (DTW) (from TOC): 1468 (ft) Groundwater Elevation (site datum, from TOC): (ft/msl)
 Total Well Depth (from TOC): (ft) Stick Up (from ground elevation): (ft) Casing ID: (in) Casing Material:
 Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (μmhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
12:29	1 st	6.88	83	11.27	4.52	2.36	62.1	
12:32	2 nd	6.79	86	11.27	1.19	0.87	60.7	
12:35	3 rd	6.84	87	11.29	1.087		53.8	
12:38	4 th	6.94	86	11.26	1.100	0.31	48.2	
12:41		6.94	87	11.34	8.84	0.23	47.8	
12:44		6.94	87	11.34	8.87	0.23	45.6	
!								
!								
!								
!								

Suggested range for 3 consec. readings or note Permit/State requirements:
 pH: +/- 0.2 Conductance: +/- 3% Temp: -- Turbidity: -- D.O.: +/- 10% eH/ORP: +/- 25 mV DTW: Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA
 SAMPLE DATE (MM DD YY): 11/14/16 pH (std): 6.96 CONDUCTANCE (umhos/cm @ 25°C): 87 TEMP. (°C): 11.34 TURBIDITY (ntu): 8.87 DO (mg/L-ppm): 0.23 eH/ORP (mV): 45.6 Other: TIME
 Units: 1244
 Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: Odor: Color: Other:
 Weather Conditions (required daily, or as conditions change): Direction/Speed: Outlook: OVERCAST Precipitation: Y or N
 Specific Comments (including purge/well volume calculations if required):

FIELD COMMENTS
WATER LEVEL FLUCTUATING INCONSISTENTLY DURING PURGE.
POTENTIAL ISSUE w/ LOW CONDUCTIVITY & WATER LEVEL METER.
2 x 1000 ml Poly, 3 x 500 ml HNO3 (1 FILTERED), 1 x 500 ml H2SO4 AMBER
6 x VOA

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
11/14/16 SAM ADONIGTON [Signature] SCS ENGINEERS
 Date Name Signature Company

FIELD INFORMATION FORM



Site Name: OVSL
 Site No.: [] [] [] []
 Sample Point: MW-20
 Sample ID

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO
 PURGE DATE: 11/14/16
 PURGE TIME: 13:11
 ELAPSED HRS: [] [] [] [] [] []
 WATER VOL IN CASING: [] [] [] [] [] [] [] [] [] [] (Gallons)
 ACTUAL VOL PURGED: [] [] [] [] [] [] (Gallons)
 WELL VOLs PURGED: [] [] [] [] [] []

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: Y or N
 Purging Device: C
 Sampling Device: C
 X-Other: _____
 Filter Device: Y or N
 Filter Type: A
 Sample Tube Type: D

WELL DATA
 Well Elevation (at TOC): [] [] [] [] [] [] (ft/msl)
 Depth to Water (DTW) (from TOC): 3501 (ft)
 Groundwater Elevation (site datum, from TOC): [] [] [] [] [] [] (ft/msl)
 Total Well Depth (from TOC): [] [] [] [] [] [] (ft)
 Stick Up (from ground elevation): [] [] [] [] [] [] (ft)
 Casing ID: [] [] [] [] [] [] (in)
 Casing Material: [] [] [] [] [] []

Note: Total Well Depth, Stick Up, Casing Id. etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (umhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
<u>13:14</u>	1"	<u>7.10</u>	<u>211</u>	<u>14.36</u>	<u>7.90</u>	<u>6.34</u>	<u>97.3</u>	[] [] [] []
<u>13:17</u>	2"	<u>7.02</u>	<u>209</u>	<u>14.37</u>	<u>3.45</u>	<u>6.21</u>	<u>110.85</u>	<u>3530</u>
<u>13:20</u>	3"	<u>6.98</u>	<u>199</u>	<u>14.37</u>	<u>10.66</u>	<u>6.38</u>	<u>114.9</u>	[] [] [] []
<u>13:23</u>	4"	<u>6.96</u>	<u>197</u>	<u>14.36</u>	<u>4.78</u>	<u>6.38</u>	<u>118.2</u>	<u>3534</u>
<u>13:26</u>		<u>6.96</u>	<u>198</u>	<u>14.36</u>	<u>11.44</u>	<u>6.38</u>	<u>120.1</u>	[] [] [] []
<u>13:29</u>		<u>6.94</u>	<u>200</u>	<u>14.37</u>	<u>12.91</u>	<u>6.39</u>	<u>121.8</u>	<u>3538</u>
[] [] [] []		[] [] []	[] [] []	[] [] []	[] [] []	[] [] []	[] [] []	[] [] [] []
[] [] [] []		[] [] []	[] [] []	[] [] []	[] [] []	[] [] []	[] [] []	[] [] [] []
[] [] [] []		[] [] []	[] [] []	[] [] []	[] [] []	[] [] []	[] [] []	[] [] [] []
[] [] [] []		[] [] []	[] [] []	[] [] []	[] [] []	[] [] []	[] [] []	[] [] [] []

FIELD DATA
 SAMPLE DATE: 11/14/16
 pH (std): 6.94
 CONDUCTANCE (umhos/cm @ 25°C): 200
 TEMP. (°C): 14.37
 TURBIDITY (ntu): 12.91
 DO (mg/L - ppm): 6.39
 eH/ORP (mV): 121.8
 Other: Time
 Units: [] [] [] [] [] [] [] [] [] []

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: _____ Odor: _____ Color: _____ Other: _____
 Weather Conditions (required daily, or as conditions change): _____ Direction/Speed: _____ Outlook: OVERCAST Precipitation: Y or N
 Specific Comments (including purge/well volume calculations if required): _____

FIELD COMMENTS
DUPLICATE VOLUME CONVERTED AS DUP2@ 1339
2x 1000 ml Poly, 3x 500 ml HNO3 (1 FILTERED), 1x 500 ml AMBER, 3x 6x VOA
PER SAMPLE VOLUME

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
 Date: 11/14/16 Name: SAM AD-INGRSON Signature: [Signature] Company: SCS ENGINEERS

FIELD INFORMATION FORM



Site Name: OVSL
 Site No.:
 Sample Point: WW-19C
 Sample ID:

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO
 PURGE DATE: 11/14/16 PURGE TIME: 14:06 ELAPSED HRS:
 WATER VOL IN CASING: ACTUAL VOL PURGED: WELL VOLs PURGED:
(MM DD YY) (2400 Hr Clock) (hrs:min) (Gallons) (Gallons)
 Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: Y or N
 Purging Device: C A-Submersible Pump D-Bailer
 B-Peristaltic Pump E-Piston Pump
 Sampling Device: C C-QED Bladder Pump F-Dipper/Bottle
 X-Other:
 Filter Device: Y or N 0.45 μ or μ (circle or fill in)
 Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other:
 Sample Tube Type: C A-Teflon C-PVC X-Other:
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC): (ft/msl) Depth to Water (DTW) (from TOC): 3296 (ft) Groundwater Elevation (site datum, from TOC): (ft/msl)
 Total Well Depth (from TOC): (ft) Stick Up (from ground elevation): (ft) Casing ID: (in) Casing Material:
 Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)	Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (μmhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L-ppm)	eH/ORP (mV)	DTW (ft)
		<u>14:10</u>	<u>1st</u>	<u>741</u>	<u>141</u>	<u>11.64</u>	<u>1370</u>	<u>604</u>	<u>989</u>
	<u>14:13</u>	<u>2nd</u>	<u>730</u>	<u>149</u>	<u>10.73</u>	<u>1488</u>	<u>231</u>	<u>799</u>	<u>3297</u>
	<u>14:16</u>	<u>3rd</u>	<u>732</u>	<u>152</u>	<u>10.64</u>	<u>876</u>	<u>089</u>	<u>739</u>	
	<u>14:19</u>	<u>4th</u>	<u>734</u>	<u>154</u>	<u>10.65</u>	<u>632</u>	<u>056</u>	<u>706</u>	<u>3297</u>
	<u>14:22</u>		<u>737</u>	<u>154</u>	<u>10.60</u>	<u>420</u>	<u>041</u>	<u>673</u>	
	<u>14:25</u>		<u>739</u>	<u>154</u>	<u>10.62</u>	<u>589</u>	<u>036</u>	<u>651</u>	<u>3297</u>
	<u>14:28</u>		<u>741</u>	<u>154</u>	<u>10.56</u>	<u>585</u>	<u>033</u>	<u>631</u>	
	<u> </u>		<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	<u> </u>		<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	<u> </u>		<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>

Suggested range for 3 consec. readings or note Permit/State requirements:
 pH: +/- 0.2 Conductance: +/- 3% Temp: - Turbidity: - D.O.: +/- 10% eH/ORP: +/- 25 mV DTW: Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA
 SAMPLE DATE (MM DD YY): 11/14/16 pH (std): 741 CONDUCTANCE (umhos/cm @ 25°C): 154 TEMP. (°C): 10.56 TURBIDITY (ntu): 585 DO (mg/L-ppm): 033 eH/ORP (mV): 631 Other: TIME
 Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: Odor: Color: Other:
 Weather Conditions (required daily, or as conditions change): Direction/Speed: Outlook: OVERCAST Precipitation: Y or N

FIELD COMMENTS
 Specific Comments (including purge/well volume calculations if required):
2 x 1000ml Poly, 3 x 500ml HNO3 Poly (1 FILTERED), 1 x 500ml AMBER
6x VOA

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
11/14/16 SAM ADLINGTON [Signature] SCS ENGINEERS
 Date Name Signature Company

FIELD INFORMATION FORM



Site Name: OSL
 Site No.:
 Sample Point: MW-34C
 Sample ID:

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO
 PURGE DATE: 111516 (MM DD YY)
 PURGE TIME: 1025 (2400 Hr Clock)
 ELAPSED HRS: 50 (hrs:min)
 WATER VOL IN CASING: (Gallons)
 ACTUAL VOL PURGED: (Gallons)
 WELL VOLs PURGED:

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: Y or N
 Purging Device: C A-Submersible Pump D-Bailer
 B-Peristaltic Pump E-Piston Pump
 Sampling Device: C C-QED Bladder Pump F-Dipper/Bottle
 X-Other:
 Filter Device: Y or N | 0.45 μ or μ (circle or fill in)
 Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other:
 Sample Tube Type: D A-Teflon C-PVC X-Other:
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC): (ft/msl) Depth to Water (DTW) (from TOC): 4073 (ft)
 Groundwater Elevation (site datum, from TOC): (ft/msl)
 Total Well Depth (from TOC): (ft) Stick Up (from ground elevation): (ft)
 Casing ID: (in) Casing Material:

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)	Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (μmhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
		<u>110412</u>	<u>350</u>	<u>7.1</u>	<u>231</u>	<u>13.72</u>	<u> </u>	<u> </u>	<u> </u>
	<u>110449</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	<u>110500</u>	<u> </u>	<u>6.41</u>	<u>231</u>	<u>13.72</u>	<u> </u>	<u>1.58</u>	<u>91.4</u>	<u> </u>
	<u>110513</u>	<u> </u>	<u>6.90</u>	<u>232</u>	<u>13.13</u>	<u>490</u>	<u>0.64</u>	<u>66.7</u>	<u> </u>
	<u>110516</u>	<u> </u>	<u>7.08</u>	<u>231</u>	<u>13.08</u>	<u>894</u>	<u>0.47</u>	<u>57.3</u>	<u> </u>
	<u>110519</u>	<u> </u>	<u>7.23</u>	<u>231</u>	<u>13.05</u>	<u>1120</u>	<u>0.43</u>	<u>49.3</u>	<u> </u>
	<u>111015</u>	<u>200</u>	<u>7.38</u>	<u>232</u>	<u>12.40</u>	<u>1180</u>	<u>0.47</u>	<u>42.8</u>	<u>4073</u>
	<u>111110</u>	<u> </u>	<u>7.42</u>	<u>232</u>	<u>12.63</u>	<u>958</u>	<u>0.54</u>	<u>42.6</u>	<u> </u>
	<u>111115</u>	<u> </u>	<u>7.45</u>	<u>231</u>	<u>12.60</u>	<u>779</u>	<u>0.58</u>	<u>41.6</u>	<u> </u>

Suggested range for 3 consec. readings or note Permit/State requirements: pH +/- 0.2, Conductance +/- 3%, D.O. +/- 10%, eH/ORP +/- 25 mV, DTW Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (umhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: <u>fine</u> Units
<u>111516</u>	<u>7.45</u>	<u>231</u>	<u>12.60</u>	<u>779</u>	<u>0.58</u>	<u>41.6</u>	<u>1115</u>

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: particulates, cloudy Odor: Color: Other:
 Weather Conditions (required daily, or as conditions change): Direction/Speed: Outlook: Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required):
Performed extended purge to clear up water

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
11.15.16 Sam Graber [Signature] SCS
 Date Name Signature Company

FIELD INFORMATION FORM



Site Name: WSL
 Site No.: 111516
 Sample Point: MW-34A
 Sample ID

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID: _____

PURGE INFO
 PURGE DATE: 111516 (MM DD YY)
 PURGE TIME: 118 (2400 Hr Clock)
 ELAPSED HRS: 1142 (hrs:min)
 WATER VOL IN CASING: _____ (Gallons)
 ACTUAL VOL PURGED: _____ (Gallons)
 WELL VOLS PURGED: _____

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: Y or N
 Purging Device: C A-Submersible Pump D-Bailer
 B-Peristaltic Pump E-Piston Pump
 Sampling Device: C C-QED Bladder Pump F-Dipper/Bottle
 X-Other: _____
 Filter Device: Y or N 0.45 μ or _____ μ (circle or fill in)
 Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other _____
 Sample Tube Type: D A-Teflon C-PVC X-Other: _____
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC): _____ (ft/msl)
 Depth to Water (DTW) (from TOC): 3841 (ft)
 Groundwater Elevation (site datum, from TOC): _____ (ft/msl)
 Total Well Depth (from TOC): _____ (ft)
 Stick Up (from ground elevation): _____ (ft)
 Casing ID: _____ (in)
 Casing Material: _____

Note: Total Well Depth, Stick Up, Casing Id. etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit ml/min	pH (std)	Conductance (SC/EC) (μmhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
<u>11:45</u>	<u>350</u>	<u>7.18</u>	<u>189</u>	<u>12.58</u>		<u>12.44</u>	<u>192.7</u>	
<u>11:50</u>		<u>6.90</u>	<u>194</u>	<u>12.61</u>		<u>10.84</u>	<u>110.74</u>	
<u>11:53</u>		<u>6.85</u>	<u>190</u>	<u>12.61</u>		<u>10.67</u>	<u>111.7</u>	
<u>11:56</u>		<u>6.84</u>	<u>186</u>	<u>12.54</u>		<u>10.58</u>	<u>114.0</u>	
<u>11:58</u>		<u>6.810</u>	<u>178</u>	<u>12.48</u>		<u>10.50</u>	<u>119.3</u>	
<u>12:00</u>		<u>6.79</u>	<u>177</u>	<u>12.47</u>	<u>1.25</u>	<u>10.51</u>	<u>119.6</u>	<u>3841</u>

Suggested range for 3 consec. readings or note Permit/State requirements:
 pH: +/- 0.2
 Conductance: +/- 3%
 Temp: -
 Turbidity: -
 D.O.: +/- 10%
 eH/ORP: +/- 25 mV
 DTW: Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. **If more fields above are needed, use separate sheet or form.**

FIELD DATA
 SAMPLE DATE (MM DD YY): 111516
 pH (std): 6.79
 CONDUCTANCE (umhos/cm @ 25°C): 177
 TEMP. (°C): 12.47
 TURBIDITY (ntu): 1.25
 DO (mg/L-ppm): 0.51
 eH/ORP (mV): 119.6
 Other: Time Units: 1200

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: Clear Odor: _____ Color: _____ Other: _____
 Weather Conditions (required daily, or as conditions change): _____ Direction/Speed: _____ Outlook: _____ Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required):

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
11/15/16 Date Sam Garber Name [Signature] Signature SCS Company

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM



Site Name:
 Site No.:
 Sample Point: MW-36A
Sample ID

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID: _____

PURGE INFO

PURGE DATE: 11 15 16 PURGE TIME: 12 32 ELAPSED HRS: 1 19 WATER VOL IN CASING: ACTUAL VOL PURGED: WELL VOLs PURGED:
(MM DD YY) (2400 Hr Clock) (hrs:min) (Gallons) (Gallons)

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment... Dedicated: Y or N Filter Device: or N 0.45 µ or µ (circle or fill in)
 Purging Device: C A-Submersible Pump D-Bailer Filter Type: A A-In-line Disposable C-Vacuum
 B-Peristaltic Pump E-Piston Pump B-Pressure X-Other
 Sampling Device: C C-QED Bladder Pump F-Dipper/Bottle A-Teflon C-PVC X-Other:
 X-Other: _____ Sample Tube Type: D B-Stainless Steel D-Polypropylene

WELL DATA

Well Elevation (at TOC): (ft/msl) Depth to Water (DTW) (from TOC): 30.43 (ft) Groundwater Elevation (site datum, from TOC): (ft/msl)
 Total Well Depth (from TOC): (ft) Stick Up (from ground elevation): (ft) Casing ID: (in) Casing Material:

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)	Sample Time (2400 Hr Clock)	Rate/Unit (ML/min)	pH (std)	Conductance (SC/EC) (µmhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
		<u>12:35</u>	<u>30p</u>	<u>7.06</u>	<u>127</u>	<u>9.78</u>		<u>4.32</u>	<u>1273</u>
	<u>12:40</u>		<u>6.90</u>	<u>128</u>	<u>9.75</u>		<u>3.12</u>	<u>1244</u>	
	<u>12:43</u>		<u>6.80</u>	<u>128</u>	<u>9.72</u>		<u>2.40</u>	<u>1329</u>	
	<u>12:46</u>		<u>6.81</u>	<u>128</u>	<u>9.76</u>		<u>2.65</u>	<u>1327</u>	
	<u>12:48</u>		<u>6.81</u>	<u>128</u>	<u>9.71</u>		<u>2.75</u>	<u>1329</u>	
	<u>12:51</u>	<u>W</u>	<u>6.81</u>	<u>128</u>	<u>9.71</u>	<u>1.75</u>	<u>2.90</u>	<u>1333</u>	<u>30.75</u>

Suggested range for 3 consec. readings or note Permit/State requirements: pH +/- 0.2, Conductance +/- 3%, D.O. +/- 10%, eH/ORP +/- 25 mV, DTW Stabilize

FIELD DATA

SAMPLE DATE (MM DD YY): 11 15 16 pH (std): 6.81 CONDUCTANCE (umhos/cm @ 25°C): 128 TEMP. (°C): 9.71 TURBIDITY (ntu): 1.75 DO (mg/L-ppm): 2.90 eH/ORP (mV): 1333 Other: time Units:

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: clear Odor: Color: Other:
 Weather Conditions (required daily, or as conditions change): _____ Direction/Speed: _____ Outlook: _____ Precipitation: Y or N
 Specific Comments (including purge/well volume calculations if required): _____

FIELD COMMENTS

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

11/15/16 Sum Graber [Signature] SLC

Date Name Signature Company

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client. PINK - Field Copy

FIELD INFORMATION FORM



Site Name: OU5L
 Site No.:
 Sample Point: M10-15R
 Sample ID:

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO

PURGE DATE: 11 15 16 PURGE TIME: 12 1 ELAPSED HRS: 1 3 2 9
 (MM DD YY) (2400 Hr Clock) (hrs:min)

WATER VOL IN CASING: ACTUAL VOL PURGED: WELL VOLs PURGED:
 (Gallons) (Gallons)

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment... Dedicated: Y or N Filter Device: Y or N 0.45 μ or μ (circle or fill in)

Purging Device: C A-Submersible Pump D-Bailer Filter Type: A A-In-line Disposable C-Vacuum
 B Peristaltic Pump E-Piston Pump B-Pressure X-Other
 Sampling Device: C C-QED Bladder Pump F-Dipper/Bottle Filter Type: D A-Teflon C-PVC X-Other:
 X-Other: Sample Tube Type: D B-Stainless Steel D-Polypropylene

WELL DATA

Well Elevation (at TOC): (ft/msl) Depth to Water (DTW) (from TOC): 1830 (ft) Groundwater Elevation (site datum, from TOC): (ft/msl)

Total Well Depth (from TOC): (ft) Stick Up (from ground elevation): (ft) Casing ID: (in) Casing Material:

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit (ml/min)	pH (std)	Conductance (SC/EC) (μmhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
13:30	350	7.46	143	10.50		13.42	110.4	
13:35		7.36	151	10.49		12.62	113.2	
13:38		7.25	154	10.47		11.38	116.9	
13:41		7.30	154	10.45		11.09	112.8	
13:44		7.34	154	10.45		10.98	110.8	
13:47		7.36	155	10.44		10.90	109.7	
13:50		7.37	155	10.45	1.21	10.85	109.0	18.35

Suggested range for 3 consec. readings or note Permit/State requirements:
 pH: +/- 0.2 Conductance: +/- 3% Temp: - Turbidity: - D.O.: +/- 10% eH/ORP: +/- 25 mV DTW: Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA

SAMPLE DATE: 11 15 16 pH (std): 7.37 CONDUCTANCE (umhos/cm @ 25°C): 155 TEMP. (°C): 10.45 TURBIDITY (ntu): 1.21 DO (mg/L-ppm): 0.85 eH/ORP (mV): 109.0 Other: Time Units: 1350

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: clear Odor: No Color: - Other: -
 Weather Conditions (required daily, or as conditions change): Direction/Speed: - Outlook: - Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required):

FIELD COMMENTS

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

11 15 16 Sam Graber [Signature] SLC
 Date Name Signature Company

FIELD INFORMATION FORM



Site Name: OVSL
 Site No.:
 Sample Point: MW-2B1
 Sample ID:

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO
 PURGE DATE: 11/15/16 (MM DD YY)
 PURGE TIME: 14:30 (2400 Hr Clock)
 ELAPSED HRS: 23 (hrs:min)
 WATER VOL IN CASING: (Gallons)
 ACTUAL VOL PURGED: (Gallons)
 WELL VOLS PURGED: (ft/msl)

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment...Dedicated: Y or N
 Purging Device: C A-Submersible Pump D-Bailer
 Sampling Device: C B-Peristaltic Pump E-Piston Pump
 X-Other: C-QED Bladder Pump F-Dipper/Bottle
 Filter Device: Y or N 0.45 μ or μ (circle or fill in)
 Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other:
 Sample Tube Type: D A-Teflon C-PVC X-Other:
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC): (ft/msl)
 Depth to Water (DTW) (from TOC): 620 (ft)
 Groundwater Elevation (site datum, from TOC): (ft/msl)
 Total Well Depth (from TOC): (ft)
 Stick Up (from ground elevation): (ft)
 Casing ID: (in)
 Casing Material:
 Note: Total Well Depth, Stick Up, Casing Id. etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)	Sample Time (2400 Hr Clock)	Rate/Unit (u/min)	pH (std)	Conductance (SC/EC) (umhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
		14:33	>50	7.43	250	13.46		0.59	91.8
	14:33		7.40	245	13.47		0.36	97.4	
	14:41		7.38	243	13.48		0.32	95.9	
	14:44		7.34	242	13.46		0.35	93.2	
	14:47		7.32	242	13.41		0.21	82.1	
	14:50		7.31	242	13.43	18.00	0.19	81.4	7.40
	14:53		7.29	241	13.35	17.21	0.17	80.2	

Suggested range for 3 consec. readings or note Permit/State requirements: pH +/- 0.2, Conductance +/- 3%, Temp. --, Turbidity --, D.O. +/- 10%, eH/ORP +/- 25 mV, Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA
 SAMPLE DATE: 11/15/16 (MM DD YY)
 pH (std): 7.29
 CONDUCTANCE (umhos/cm @ 25°C): 241
 TEMP. (°C): 13.35
 TURBIDITY (ntu): 7.21
 DO (mg/L-ppm): 0.17
 eH/ORP (mV): 80.2
 Other: time Units: 1453

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: clear Odor: no Color: - Other: -
 Weather Conditions (required daily, or as conditions change): Direction/Speed: - Outlook: - Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required):

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
11/15/16 Sam Graber [Signature] OVSL
 Date Name Signature Company

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM



Site Name: OSL
 Site No.:
 Sample Point: MW-23A
 Sample ID:

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO
 PURGE DATE: 11/16/16 PURGE TIME: 12:42 ELAPSED HRS: 23
 (MM DD YY) (2400 Hr Clock) (hrs:min)
 WATER VOL IN CASING: ACTUAL VOL PURGED: WELL VOLs PURGED:
 (Gallons) (Gallons)
 Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: or N
 Filter Device: or N 0.45 μ or μ (circle or fill in)
 Purging Device: C A-Submersible Pump D-Bailer
 B-Peristaltic Pump E-Piston Pump
 Sampling Device: C C-QED Bladder Pump F-Dipper/Bottle
 Filter Type: 4 A-In-line Disposable C-Vacuum
 B-Pressure X-Other
 X-Other: Sample Tube Type: D A-Teflon C-PVC X-Other:
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC): (ft/msl) Depth to Water (DTW) (from TOC): 1206 (ft) Groundwater Elevation (site datum, from TOC): (ft/msl)
 Total Well Depth (from TOC): (ft) Stick Up (from ground elevation): (ft) Casing ID: (in) Casing Material:
 Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (μ mhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
12:45	350	5.36	90	12:36		4.52	117.71	
12:50		5.67	87	12:40		4.28	116.63	
12:53		5.90	87	12:44		4.12	115.62	
12:56		5.97	87	12:46		4.12	115.18	
12:59		6.04	88	12:47		4.09	114.83	
13:02		6.08	88	12:49		4.05	114.63	
13:05		6.11	88	12:49	1.64	4.02	114.50	1206

Suggested range for 3 consec. readings or note Permit/State requirements:
 pH: +/- 0.2 Conductance: +/- 3% Temp: - Turbidity: - D.O.: +/- 10% eH/ORP: +/- 25 mV DTW: Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (μ mhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: <u>Time</u> Units
11/16/16	6.11	88	12:49	1.64	4.02	114.50	1305

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: clear Odor: - Color: - Other: -
 Weather Conditions (required daily, or as conditions change): Direction/Speed: - Outlook: - Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required):

FIELD COMMENTS

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

11/16/16 Sam Gruber SCS
 Date Name Signature Company

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM



Site Name: DUSL
 Site No.:
 Sample Point: MW-32
Sample ID

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO

<u>111616</u>	<u>1347</u>	<u>118</u>			
PURGE DATE <small>(MM DD YY)</small>	PURGE TIME <small>(2400 Hr Clock)</small>	ELAPSED HRS <small>(hrs:min)</small>	WATER VOL IN CASING <small>(Gallons)</small>	ACTUAL VOL PURGED <small>(Gallons)</small>	WELL VOLs PURGED

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment... Dedicated: Y or N

Filter Device: Y or N 0.45 µ or _____ µ (circle or fill in)

Purging Device: C A-Submersible Pump D-Bailer
 B-Peristaltic Pump E-Piston Pump

Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other _____

Sampling Device: C C-QED Bladder Pump F-Dipper/Bottle

X-Other: _____

Sample Tube Type: D A-Teflon C-PVC X-Other: _____
 B-Stainless Steel D-Polypropylene

WELL DATA

Well Elevation (at TOC): _____ (ft/msl) Depth to Water (DTW) (from TOC): 108 (ft) Groundwater Elevation (site datum, from TOC): _____ (ft/msl)

Total Well Depth (from TOC): _____ (ft) Stick Up (from ground elevation): _____ (ft) Casing ID: _____ (in) Casing Material: _____

Note: Total Well Depth, Stick Up, Casing Id. etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit (µl/min)	pH (std)	Conductance (SC/EC) (µmhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
<u> 13:50 </u>	<u> 350 </u>	<u> 6.94 </u>	<u> 249 </u>	<u> 12.03 </u>		<u> 13.77 </u>	<u> 73.6 </u>	
<u> 13:53 </u>		<u> 7.13 </u>	<u> 249 </u>	<u> 12.07 </u>		<u> 12.04 </u>	<u> 42.7 </u>	
<u> 13:56 </u>		<u> 7.43 </u>	<u> 249 </u>	<u> 12.09 </u>		<u> 1.34 </u>	<u> 13.9 </u>	
<u> 13:59 </u>		<u> 7.55 </u>	<u> 250 </u>	<u> 12.11 </u>		<u> 1.14 </u>	<u> 3.2 </u>	
<u> 14:02 </u>		<u> 7.57 </u>	<u> 249 </u>	<u> 12.12 </u>		<u> 1.06 </u>	<u> -0.3 </u>	
<u> 14:05 </u>		<u> 7.60 </u>	<u> 251 </u>	<u> 12.13 </u>	<u> 1.50 </u>	<u> 1.18 </u>	<u> -2.3 </u>	<u> 1.12 </u>

Suggested range for 3 consec. readings or note Permit/State requirements:
 pH +/- 0.2 Conductance +/- 3% Temp. - Turbidity - D.O. +/- 10% eH/ORP +/- 25 mV Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. **If more fields above are needed, use separate sheet or form.**

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (µmhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: <u> Time </u>
<u> 111616 </u>	<u> 7.60 </u>	<u> 251 </u>	<u> 12.13 </u>	<u> 1.50 </u>	<u> 1.18 </u>	<u> -2.3 </u>	Units: <u> 1405 </u>

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: Clear Odor: No Color: No Other: _____

Weather Conditions (required daily, or as conditions change): _____ Direction/Speed: - Outlook: overcast Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required):

 pic getting into sample tubing

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

 11/16/16 Sam Gruber _____ SCS

Date Name Signature Company

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM



Site Name: OSL
 Site No.:
 Sample Point: M642
 Sample ID:

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO
 PURGE DATE (MM DD YY): 11/16/16
 PURGE TIME (2400 Hr Clock): 1442
 ELAPSED HRS (hrs:min): 18
 WATER VOL IN CASING (Gallons):
 ACTUAL VOL PURGED (Gallons):
 WELL VOLs PURGED:

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: Y or N
 Purging Device: C A-Submersible Pump D-Bailer
 B-Peristaltic Pump E-Piston Pump
 Sampling Device: C C-QED Bladder Pump F-Dipper/Bottle
 X-Other:
 Filter Device: Y or N 0.45 μ or μ (circle or fill in)
 Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other:
 Sample Tube Type: D A-Teflon C-PVC X-Other:
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC) (ft/msl) Depth to Water (DTW) (from TOC) 2641 (ft)
 Groundwater Elevation (site datum, from TOC) (ft/msl)
 Total Well Depth (from TOC) (ft) Stick Up (from ground elevation) (ft)
 Casing ID (in) Casing Material

Note: Total Well Depth, Stick Up, Casing Id. etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit (ml/min)	pH (std)	Conductance (SC/EC) (μmhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
14:45	390	7.48	540	12.60		1.09	-466	
14:48		7.54	547	12.60		1.052	-489	
14:51		7.54	549	12.60		1.042	-506	
14:54		7.52	549	12.58		1.036	-519	
14:57		7.50	551	12.59		1.033	-527	
15:00		7.49	550	12.57	3.75	1.030	-535	26.44

Suggested range for 3 consec. readings or note Permit/State requirements:
 pH: +/- 0.2 Conductance: +/- 3% Temp: - Turbidity: - D.O.: +/- 10% eH/ORP: +/- 25 mV DTW: Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA
 SAMPLE DATE (MM DD YY): 11/16/16 pH (std): 7.49 CONDUCTANCE (umhos/cm @ 25°C): 550 TEMP. (°C): 12.57 TURBIDITY (ntu): 3.75 DO (mg/L-ppm): 0.30 eH/ORP (mV): -535 Other: fine
 Units: 1500

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: clear Odor: no Color: no Other: -
 Weather Conditions (required daily, or as conditions change): Direction/Speed: Outlook: Precipitation: Y or N

FIELD COMMENTS
 Specific Comments (including purge/well volume calculations if required):

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
11/16/16 Sam Gruber [Signature] SCS
 Date Name Signature Company

FIELD INFORMATION FORM



Site Name: OVSC

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID: _____

Site No.: _____
 Sample Point: MW-33A
 Sample ID

PURGE INFO	7 1 6	4 3 2	1 1 8			
	PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs:min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)	WELL VOLS PURGED
	<i>Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.</i>					

PURGE/SAMPLE EQUIPMENT	Purging and Sampling Equipment... Dedicated: <input checked="" type="checkbox"/> or <input type="checkbox"/> N		Filter Device: <input checked="" type="checkbox"/> or <input type="checkbox"/> N		0.45 µ or _____ µ (circle or fill in)	
	Purging Device: <input checked="" type="checkbox"/> C	A-Submersible Pump	D-Bailer	Filter Type: <input checked="" type="checkbox"/> A	A-In-line Disposable	C-Vacuum
	Sampling Device: <input checked="" type="checkbox"/> C	B-Peristaltic Pump	E-Piston Pump		B-Pressure	X-Other: _____
	X-Other: _____	C-QED Bladder Pump	F-Dipper/Bottle	Sample Tube Type: <input checked="" type="checkbox"/> D	A-Teflon	C-PVC
					B-Stainless Steel	D-Polypropylene

WELL DATA	Well Elevation (at TOC) _____ (ft/msl)	Depth to Water (DTW) (from TOC) <u>441</u> (ft)	Groundwater Elevation (site datum, from TOC) _____ (ft/msl)
	Total Well Depth (from TOC) _____ (ft)	Stick Up (from ground elevation) _____ (ft)	Casing ID _____ (in)
			Casing Material _____
<i>Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.</i>			

STABILIZATION DATA (Optional)	Sample Time (2400 Hr Clock)	Rate/Unit <u>mL/min</u>	pH (std)	Conductance (SC/EC) (µmhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
	9:35	390	5.59	89	10.45		2.27	874	
	9:40	↓	6.35	86	10.35		0.72	521	
	9:43	↓	6.53	85	10.22		0.45	446	
	9:47	↓	6.62	84	10.06	9.52	0.46	408	
	9:50	↓	6.67	84	9.99	8.61	0.43	392	
	:								
	:								
	:								
	:								
	:								

Suggested range for 3 consec. readings or note Permit/State requirements:
 pH: +/- 0.2
 Conductance: +/- 3%
 Temp: --
 Turbidity: --
 D.O.: +/- 10%
 eH/ORP: +/- 25 mV
 DTW: Stabilize

FIELD DATA	SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (µmhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: <u>rise</u>
	11/17/16	6.67	34	9.99	8.61	0.43	392	Units: <u>rise</u>
<i>Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site.</i>								

Sample Appearance: clear Odor: - Color: - Other: -
 Weather Conditions (required daily, or as conditions change): _____
 Direction/Speed: - Outlook: - Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required): _____

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

11/17/16 Sam Gruber _____ SCS

 Date Name Signature Company

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM



Site Name: OU5L
 Site No.:
 Sample Point: MW-33C
 Sample ID:

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO

PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs:min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)	WELL VOLs PURGED
7 1 6	0 2 7	1 7 2 3			

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment... Dedicated: Y or N

Filter Device: Y or N | 0.45 μ or μ (circle or fill in)

Purging Device: C | A-Submersible Pump | D-Bailer
 B-Peristaltic Pump | E-Piston Pump

Sampling Device: C | C-QED Bladder Pump | F-Dipper/Bottle

X-Other:

Filter Type: A | A-In-line Disposable | C-Vacuum
 B-Pressure | X-Other:

Sample Tube Type: D | A-Teflon | C-PVC | X-Other:
 B-Stainless Steel | D-Polypropylene

WELL DATA

Well Elevation (at TOC)	Depth to Water (DTW) (from TOC)	Groundwater Elevation (site datum, from TOC)
	1 6 3 (ft)	(ft/msl)
Total Well Depth (from TOC)	Stick Up (from ground elevation)	Casing ID (in) Casing Material
(ft)	(ft)	(in)

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (μ mhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
110:30	350	6.85	157	9.35		9.34	75.9	
110:33								
110:36		7.10	159	9.34		0.62	56.5	
110:41		7.50	159	9.23		0.42	25.0	
110:44		7.94	159	9.23		0.32	-119.6	
110:47		8.15	159	9.23		0.30	-42.7	
110:50	V	8.71	159	9.24	1.12	0.26	-61.4	

Suggested range for 3 consec. readings or note Permit/State requirements:

+/- 0.2	+/- 3%	+/- 10%	+/- 25 mV	Stabilize
---------	--------	---------	-----------	-----------

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. **If more fields above are needed, use separate sheet or form.**

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (μ mhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: <u>fine</u>
1 1 7 1 6	8 3 1	1 5 9	9 2 4	1 1 2	0 2 6	- 6 1 4	1 0 5 0

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: **Odor:** **Color:** **Other:**

Weather Conditions (required daily, or as conditions change): **Direction/Speed:** **Outlook:** **Precipitation:** Y or N

Specific Comments (including purge/well volume calculations if required):

FIELD COMMENTS

Dup 1 taken at 1100

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

_____/_____/_____
 Date Name Signature Company

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM



Site Name: USC
 Site No.: _____
 Sample Point: 4W-24
 Sample ID

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID: _____

PURGE INFO

PURGE DATE: 11/17/16 (MM DD YY)
 PURGE TIME: 12:57 (2400 Hr Clock)
 ELAPSED HRS: 23 (hrs:min)
 WATER VOL IN CASING: _____ (Gallons)
 ACTUAL VOL PURGED: _____ (Gallons)
 WELL VOLS PURGED: _____

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment... Dedicated: Y or N
 Filter Device: Y or N | 0.45 μ or _____ μ (circle or fill in)
 Purging Device: C | A-Submersible Pump | D-Bailer
 B-Peristaltic Pump | E-Piston Pump
 Sampling Device: C | C-QED Bladder Pump | F-Dipper/Bottle
 X-Other: _____
 Filter Type: A | A-In-line Disposable | C-Vacuum
 B-Pressure | X-Other: _____
 Sample Tube Type: D | A-Teflon | C-PVC | X-Other: _____
 B-Stainless Steel | D-Polypropylene

WELL DATA

Well Elevation (at TOC): _____ (ft/msl) | Depth to Water (DTW) (from TOC): 3220 (ft) | Groundwater Elevation (site datum, from TOC): _____ (ft/msl)
 Total Well Depth (from TOC): _____ (ft) | Stick Up (from ground elevation): _____ (ft) | Casing ID: _____ (in) | Casing Material: _____

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit (ml/min)	pH (std)	Conductance (SC/EC) (μmhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
13:010	300	6.76	197	12.19		3.20	1135	
13:015		6.62	126	11.79		0.71	1116	
13:018		6.63	125	11.78		0.50	1100	
13:11		6.63	126	11.79		0.37	1091	
13:14		6.63	127	11.72		0.27	1085	
13:17		6.63	126	11.75		0.25	1081	3220
13:20		6.63	127	11.66	2.12	0.24	1079	

Suggested range for 3 consec. readings or note Permit/State requirements:
 pH: +/- 0.2 | Conductance: +/- 3% | Temp: - | Turbidity: - | D.O.: +/- 10% | eH/ORP: +/- 25 mV | DTW: Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA

SAMPLE DATE (MM DD YY): 11/17/16 | pH (std): 6.63 | CONDUCTANCE (umhos/cm @ 25°C): 127 | TEMP. (°C): 11.66 | TURBIDITY (ntu): 2.12 | DO (mg/L-ppm): 0.24 | eH/ORP (mV): 1079 | Other: fine Units: 1320

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: Clear | Odor: _____ | Color: _____ | Other: _____
 Weather Conditions (required daily, or as conditions change): _____ | Direction/Speed: _____ | Outlook: _____ | Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required): _____

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

11/17/16 | Sam Gruber | [Signature] | SCS
 Date | Name | Signature | Company

FIELD INFORMATION FORM



Site Name: OVSL

Site No.: Sample Point: L-INF
Sample ID

This Waste Management Field Information Form is Required
This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO

PURGE DATE (MM DD YY): 11/14/16 PURGE TIME (2400 Hr Clock): ELAPSED HRS (hrs:min): WATER VOL IN CASING (Gallons): ACTUAL VOL PURGED (Gallons): WELL VOLs PURGED:

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment... Dedicated: Y or N Filter Device: Y or N 0.45 μ or _____ μ (circle or fill in)

Purging Device: B A-Submersible Pump D-Bailer Filter Type: A A-In-line Disposable C-Vacuum
B-Peristaltic Pump E-Piston Pump B-Pressure X-Other _____

Sampling Device: B C-QED Bladder Pump F-Dipper/Bottle Sample Tube Type: D A-Teflon C-PVC X-Other: _____
X-Other: _____ B-Stainless Steel D-Polypropylene

WELL DATA

Well Elevation (at TOC) _____ (ft/msl) Depth to Water (DTW) (from TOC) _____ (ft) Groundwater Elevation (site datum, from TOC) _____ (ft/msl)

Total Well Depth (from TOC) _____ (ft) Stick Up (from ground elevation) _____ (ft) Casing ID _____ (in) Casing Material _____

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (μ mhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
<u>11:40</u>	<u>1st</u>	<u>7.83</u>	<u>4383</u>	<u>18.24</u>	<u>3138</u>	<u>6.16</u>	<u>1040</u>	<u> </u>
	<u>2nd</u>							
	<u>3rd</u>							
	<u>4th</u>							

Suggested range for 3 consec. readings or note Permit/State requirements: pH +/- 0.2, Conductance +/- 3%, DO +/- 10%, eH/ORP +/- 25 mV, DTW Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA

SAMPLE DATE (MM DD YY): 11/14/16 pH (std): 7.83 CONDUCTANCE (μ mhos/cm @ 25°C): 4383 TEMP. (°C): TURBIDITY (ntu): 3138 DO (mg/L-ppm): 6.16 eH/ORP (mV): 1040 Other: Time Units:

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: CLEAR Odor: _____ Color: _____ Other: _____

Weather Conditions (required daily, or as conditions change): _____ Direction/Speed: _____ Outlook: OVERCAST Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required): _____

FIELD COMMENTS

SAMPLE COLLECTED FROM POND COVER HATCH ON NORTH SIDE OF POND, FROM THE 6" INFLUENT PIPE.

1x 1000ml Poly, 2x 500ml H₂SO₄ AMBER, 1x 500ml HNO₃ Poly, 6x VO.A

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

11/14/16 SAM ADLINGTON [Signature] SCS ENG.

Date Name Signature Company

FIELD INFORMATION FORM



Site Name: OVSL
 Site No.: Sample Point: 03BWL-TD
Sample ID

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID: _____

PURGE INFO
 PURGE DATE: 11/14/16 PURGE TIME: 00:10 ELAPSED HRS:
(MM DD YY) (2400 Hr Clock) (hrs:min)
 WATER VOL IN CASING: ACTUAL VOL PURGED: WELL VOLS PURGED:
(Gallons) (Gallons)

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: Y or N
 Purging Device: B A-Submersible Pump D-Bailer
 Sampling Device: B B-Peristaltic Pump E-Piston Pump
 X-Other: _____ C-QED Bladder Pump F-Dipper/Bottle
 Filter Device: Y or N 0.45 μ or _____ μ (circle or fill in)
 Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other _____
 Sample Tube Type: D A-Teflon C-PVC X-Other: _____
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC): (ft/msl) Depth to Water (DTW) (from TOC): (ft)
 Groundwater Elevation (site datum, from TOC): (ft/msl)
 Total Well Depth (from TOC): (ft) Stick Up (from ground elevation): (ft)
 Casing ID: (in) Casing Material:
Note: Total Well Depth, Stick Up, Casing Id. etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)	Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (μmhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L-ppm)	eH/ORP (mV)	DTW (ft)
		<u>10:20</u>	<u>1st</u>	<u>7.04</u>	<u>176</u>	<u>12.52</u>	<u>32.60</u>	<u>9.05</u>	<u>116.0</u>
	<u>10:25</u>	<u>2nd</u>	<u>6.98</u>	<u>145</u>	<u>13.29</u>	<u>25.77</u>	<u>8.53</u>	<u>129.3</u>	
		<u>3rd</u>							
		<u>4th</u>							

Suggested range for 3 consec. readings or note Permit/State requirements: pH +/- 0.2, Conductance +/- 3%, D.O. +/- 10%, eH/ORP +/- 25 mV, DTW Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. **If more fields above are needed, use separate sheet or form.**

FIELD DATA
 SAMPLE DATE (MM DD YY): 11/14/16 pH (std): 6.98 CONDUCTANCE (umhos/cm @ 25°C): 145 TEMP. (°C): 13.29 TURBIDITY (ntu): 25.77 DO (mg/L-ppm): 8.53 eH/ORP (mV): 129.3 Other: Time
 Units: 10.25
Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: CLEAR Odor: Color: Other:
 Weather Conditions (required daily, or as conditions change): _____ Direction/Speed: _____ Outlook: OVERCAST Precipitation: Y or N
 Specific Comments (including purge/well volume calculations if required): _____

FIELD COMMENTS
STANDING WATER IN SUMP, NOT FLOWING - INSTRUCTED TO COLLECT SAMPLE. PERISTALTIC SPEED = 7 ≈ 300 ml/min
DTW = 7.03 Ø = 4" ID
DTB = 11.95
1x 1000ml Poly, 2x 500ml H₂SO₄ AMBER, 1x 500ml HNO₃ Poly, 6x VOA

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
11/14/16 SAM ADUNGTON [Signature] SCS ENGR.
 Date Name Signature Company

SCS ENGINEERS				OVSL		Page 2 of 2
	Date	Time	DTW	Measured by (initials)	Comments	Last Quarter DTW
MW-2A1	11/16/16		7.48			9.12
MW-2B1			6.20			6.72
MW-30A		942	23.12			24.00
MW-30B			22.97		22.97	23.88
MW-31		1018	1.93			NM
MW-32			1.08			1.50
MW-33A			4.41			5.62
MW-33B			1.72			2.13
MW-33C			1.63			2.17
MW-34A			38.91			39.5
MW-34B			38.74			39.41
MW-34C			40.73			41.21
MW-35			71.17		Needs clearing	72.07
MW-36			30.54			31.14
MW-36A			30.43			31.00
MW-37		955	3.30			NM
MW-38		1015	3.26			3.67
MW-39			17.16		Needs clearing	21.34
MW-4			11.79			14.95
MW-40A			13.79			15.51
MW-40B			14.02			15.44
MW-40C		940	15.21			15.84
MW-41A			24.11			24.18
MW-41B			24.68			24.64
MW-41C			26.17			26.16
MW-42			26.41			27.85
MW-43			25.15			25.16
MW-5	↓	10:27	1.82			2.57
MW-9	11/16	9:10	2.22			NM

Well	Date	Time	DTW	Measured by (initials)	Comments	Last Quarter DTW	
MW-1	-	-	-	-	Not Measured, Hazard/No Access		
MW-10	11/16					NM	
MW-11	↓		-		Lost	4.25	
MW-12			47.85			NM	
MW-13			27.81			28.94	
MW-13A			45.76			46.34	
MW-13B		↓	59.30			60.30	
MW-14		-	-	-	-	Not Measured, Damaged Well	
MW-15R		11/16		18.30			18.72
MW-16		↓		59.30		Needs clearing	57.65
MW-17				33.06			NM
MW-18				64.26			NM
MW-19A	1205		31.62			32.58	
MW-19B			31.70			32.62	
MW-19C			32.89			33.80	
MW-19D			32.09			32.73	
MW-20			35.01			35.91	
MW-21			41.09			5.35	
MW-23A			12.06	12.06		NM	
MW-23B		12.39			12.41		
MW-23C		12.66			12.92		
MW-24		32.20			21.74		
MW-26		11.97			NM		
MW-27		22.33			21.74		
MW-28		5.51			NM		
MW-29A		14.68			13.35		
MW-29B		16.23			17.12		
MW-29C	↓		10.68			11.73	

SCS ENGINEERS

February 25, 2016
File No. 04204027.19

**Subject: First Quarter 2016 Compliance Monitoring Event
Olympic View Sanitary Landfill, Kitsap County, Washington**

Sampling Event Dates: 02/22/16 through 02/24/16
Personel: Sam Graber and Stephen Palachuk

NOTES/SAMPLING DECODING:

- Dedicated pumps were used for purging and sampling all wells.
- Duplicate samples were collected at MW-13B (DUP1) and MW-23A (DUP2).
- Geotech water level meters were used to record all water level elevations.
- In addition to the monitoring wells where groundwater was collected for chemical analysis, additional wells were monitored for groundwater level elevations. A summary of measured water levels are included with the field documentation.
- Vegetation that was blocking access to certain well locations was cleared in early August of 2016.
- Several well locks need replacement on the site.
- The samples were sent to TestAmerica Denver for analysis at the close of each sampling day, except samples for low level arsenic which were held until the end of the sampling event and provided to Analytical Resources, Inc. in Tukwila, Washington.

Sample Date	Location ID	Sample ID	Comments
02/22/2016	MW-13B	0216-01	
02/22/2016	MW-13B	0216-02	DUP 1
02/22/2016	MW-13A	0216-03	
02/22/2016	MW-35	0216-04	
02/22/2016	MW-43	0216-05	
02/22/2016	MW-42	0216-06	
02/22/2016	MW-19C	0216-07	
02/22/2016	MW-4	0216-08	
02/23/2016	MW-2B1	0216-09	
02/23/2016	MW-34A	0216-10	
02/23/2016	MW-34C	0216-11	
02/23/2016	MW-20	0216-12	

Sample Date	Location ID	Sample ID	Comments
02/23/2016	MW-23A	0216-13	
02/23/2016	MW-23A	0216-14	DUP 2
02/24/2016	MW-16	0216-15	
02/24/2016	MW-24	0216-16	
02/24/2016	MW-39	0216-17	
02/24/2016	MW-15R	0216-18	
02/24/2016	MW-36A	0216-19	
02/24/2016	MW-32	0216-20	
02/24/2016	MW-33C	0216-21	
3/8/2016	LP-LCD	0216-22	

SCS ENGINEERS						
				OVSL		Page 2 of 2
	Date	Time	DTW	Measured by (initials)	Comments	Last Quarter DTW
MW-2A1			6.55		Lock broken	9.12
MW-2B1			5.51		Lock broken	6.72
MW-30A			22.12			24.00
MW-30B			22.03		No lock	23.88
MW-31			1.83		hinge broken	NM
MW-32		843	1.00		Stick cap hinge broken	1.50
MW-33A			9.40			5.62
MW-33B			1.30			2.13
MW-33C			1.20			2.17
MW-34A			38.04		No Lock	39.5
MW-34B			37.93		No Lock	39.41
MW-34C			39.88		Lock broken / porplecc	41.21
MW-35		1110	70.14			72.07
MW-36			29.76		No Lock	31.14
MW-36A			29.64			31.00
MW-37			3.50			NM
MW-38			3.13			3.67
MW-39		10:37	16.24			21.34
MW-4			-		hit bottom at 28.50	14.95
MW-40A			-		hit bottom at 21.44'	15.51
MW-40B			12.23			15.44
MW-40C			15.49		lock broken	15.84
MW-41A			-		DTB - 31.80'	24.18
MW-41B			21.24			24.64
MW-41C			23.10	1155		26.16
MW-42			26.10		No lock	27.85
MW-43	2/23/16		-		hit bottom at 29'	25.16
MW-5			1.25			2.57
MW-9			-		hit bottom at 18.3'	NM

lock broken

Well	Date	Time	DTW	Measured by (initials)	Comments	Last Quarter DTW
MW-1	-	-	-	-	Not Measured, Hazard/No Access	
MW-10			2.80			NM
MW-11			-		Lost	4.25
MW-12			41.20		No Lock	NM
MW-13			-		hit bottom at 38.38	28.94
MW-13A		1120	55.02			46.34
MW-13B		1120	57.71			60.30
MW-14	-	-	-	-	Not Measured, Damaged Well	
MW-15R			17.67		No Lock	18.72
MW-16			53.70		Stick up lid doesn't sit flush	57.65
MW-17			45.50			NM
MW-18			53.70			NM
MW-19A			30.38			32.58
MW-19B			30.15		Lock broken	32.62
MW-19C	2/23	825	31.73		well cap pushed up, not flush	33.80
MW-19D			30.33		No lock	32.73
MW-20			34.12		lock broken	35.91
MW-21			7.34			5.35
MW-23A			9.90'		broken Lock	NM
MW-23B			10.13'		Lock broken	12.41
MW-23C			10.10'		Lock broken	12.92
MW-24		1035	28.53			21.74
MW-26			8.65		Broken Lock	NM
MW-27			33.90			21.74
MW-28			4.75			NM
MW-29A			-		hit bottom @ 19'	13.35
MW-29B			15.40			17.12
MW-29C			9.00		lock broken	11.73

FIELD INFORMATION FORM



Site Name: OUSL
 Site No.:
 Sample Point: MW-13B
 Sample ID:

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO
 PURGE DATE: 022216 (MM DD YY)
 PURGE TIME: 1450 (2400 Hr Clock)
 ELAPSED HRS: (hrs:min)
 WATER VOL IN CASING: (Gallons)
 ACTUAL VOL PURGED: (Gallons)
 WELL VOL PURGED:

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: Y or N
 Purging Device: C (A-Submersible Pump, B-Peristaltic Pump, C-QED Bladder Pump, D-Bailer, E-Piston Pump, F-Dipper/Bottle)
 Sampling Device: C
 X-Other:
 Filter Device: Y or N, 0.45 μ or μ (circle or fill in)
 Filter Type: A (A-In-line Disposable, B-Pressure, C-Vacuum, X-Other)
 Sample Tube Type: D (A-Teflon, B-Stainless Steel, C-PVC, D-Polypropylene, X-Other)

WELL DATA
 Well Elevation (at TOC): (ft/msl)
 Depth to Water (DTW) (from TOC): 57.82 (ft)
 Groundwater Elevation (site datum, from TOC): (ft/msl)
 Total Well Depth (from TOC): (ft)
 Stick Up (from ground elevation): (ft)
 Casing ID: (in)
 Casing Material:
Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

Sample Time (2400 Hr Clock)	Rate/Unit (ml/min)	pH (std)	Conductance (SC/EC) (μ mhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
14:50	250	6.45	1177	9.65		5.74	1165.8	
14:55		6.79	1176	9.40		6.10	1165.1	
14:58		6.88	1176	9.36		6.15	1164.2	
15:01		6.94	1176	9.34		6.10	1163.3	
15:04		6.96	1176	9.32		6.09	1163.1	
15:07		6.98	1176	9.31		6.06	1163.0	
15:10		7.01	1176	9.30	1.17	6.04	1162.8	58.10

Suggested range for 3 consec. readings or note Permit/State requirements:
 pH: +/- 0.2
 Conductance: +/- 3%
 Temp: -
 Turbidity: -
 D.O.: +/- 10%
 eH/ORP: +/- 25 mV
 DTW: Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA
 SAMPLE DATE (MM DD YY): 022216
 pH (std): 7.01
 CONDUCTANCE (umhos/cm @ 25°C): 1176
 TEMP. (°C): 9.30
 TURBIDITY (ntu): 1.17
 DO (mg/L-ppm): 6.04
 eH/ORP (mV): 1162.8
 Other: fine
 Units:
Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: clear Odor: NO Color: Other:
 Weather Conditions (required daily, or as conditions change): Direction/Speed: Outlook: Precipitation: Y or N
 Specific Comments (including purge/well volume calculations if required):

FIELD COMMENTS
Dup 1 collected here @ 1530
pH pcu 1507 7.98
1510 8.05

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
2/22/16 Sam Graber [Signature] SCS
 Date Name Signature Company
 DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM



Site Name: OSL

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID: _____

Site No.: 1420 Sample Point: 14-13A
 Sample ID

PURGE INFO
 PURGE DATE: 02/22/16 PURGE TIME: 14:00 ELAPSED HRS: 20
 (MM DD YY) (2400 Hr Clock) (hrs:min) (Gallons) (Gallons) (Gallons)
 Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: Y or N
 Purging Device: C A-Submersible Pump D-Bailer
 Sampling Device: C B-Peristaltic Pump E-Piston Pump
 X-Other: _____ C-QED Bladder Pump F-Dipper/Bottle
 Filter Device: Y or N 0.45 μ or _____ μ (circle or fill in)
 Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other _____
 Sample Tube Type: D A-Teflon C-PVC X-Other: _____
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC): _____ (ft/msl) Depth to Water (DTW) (from TOC): 65.20 (ft)
 Total Well Depth (from TOC): _____ (ft) Stick Up (from ground elevation): 56.10 (ft)
 Casing ID: _____ (in) Casing Material: _____
 Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (μmhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
14:00	250	6.76	1177	9.43		5.78	166.9	
14:05		6.64	1178	9.49		5.76	167.2	
14:08		6.68	1177	9.53		5.72	165.8	
14:11		6.71	1176	9.52		5.68	165.2	
14:14		6.71	1176	9.54		5.64	165.0	
14:17		6.71	1176	9.56		5.63	164.9	
14:20		6.69	1177	9.59	1.03	5.58	164.8	55.50

Suggested range for 3 consec. readings or note Permit/State requirements:
 pH: +/- 0.2 Conductance: +/- 3% Temp: - Turbidity: -- D.O.: +/- 10% eH/ORP: +/- 25 mV DTW: Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA
 SAMPLE DATE (MM DD YY): 02/22/16 pH (std): 6.69 CONDUCTANCE (μmhos/cm @ 25°C): 1177 TEMP. (°C): 9.59 TURBIDITY (ntu): 1.03 DO (mg/L-ppm): 5.58 eH/ORP (mV): 164.8 Other: fine
 Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site). Units: _____

Sample Appearance: clear Odor: No Color: - Other: _____
 Weather Conditions (required daily, or as conditions change): _____ Direction/Speed: _____ Outlook: _____ Precipitation: Y or N
 Specific Comments (including purge/well volume calculations if required): _____

FIELD COMMENTS
24 pm
1400 7.29
1408 7.54
1420 7.37

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
2/22/16 Sara Gruber [Signature] SCS
 Date Name Signature Company

FIELD INFORMATION FORM



Site Name: WSL

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID: _____

Site No.: _____
 Sample Point: MW-35
 Sample ID

PURGE INFO

PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs:min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)	WELL VOLS PURGED
022216	1230	20			

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment... Dedicated: Y or N

Filter Device: Y or N 0.45 μ or _____ μ (circle or fill in)

Purging Device: C A-Submersible Pump D-Bailer
 B B-Peristaltic Pump E-Piston Pump
 C C-QED Bladder Pump F-Dipper/Bottle

Filter Type: A A-In-line Disposable C-Vacuum
 B B-Pressure X-Other _____

Sampling Device: C A-Teflon C-PVC X-Other: _____
 D B-Stainless Steel D-Polypropylene

X-Other: _____ Sample Tube Type: D

WELL DATA

Well Elevation (at TOC)	(ft/msl)	Depth to Water (DTW) (from TOC)	(ft)	Groundwater Elevation (site datum, from TOC)	(ft/msl)
		7020			

Total Well Depth (from TOC) _____ (ft) Stick Up (from ground elevation) _____ (ft)

Casing ID _____ (in) Casing Material _____

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (μmhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
12:30	250	6.34	168	10.78		6.04	172.0	
12:35		6.41	164	10.55	1.40	5.80	174.2	
12:38		6.50	165	10.47		5.76	172.6	
12:41		6.51	164	10.46		5.76	172.5	
12:44		6.53	164	10.40	1.22	5.74	171.6	
12:47		6.55	164	10.36		5.75	171.3	70.30
12:50	✓	6.58	164	10.31	0.99	5.73	170.8	

Suggested range for 3 consec. readings or note Permit/State requirements:
 pH: +/- 0.2 Conductance: +/- 3% Temp: - Turbidity: - D.O.: +/- 10% eH/ORP: +/- 25 mV DTW: Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. **If more fields above are needed, use separate sheet or form.**

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (umhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: <u>none</u>
022216	6.58	164	10.31		5.73	170.8	1250

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: Clear Odor: Nil Color: _____ Other: _____

Weather Conditions (required daily, or as conditions change): _____ Direction/Speed: _____ Outlook: _____ Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required): _____

FIELD COMMENTS

pH pen Good conditions, ~~rather~~ great connections in

1235 6.15 sample tubing is not air tight. Potential

1250 7.58 O2 getting into sample?

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

2,22,16 Sam Graber [Signature] SCS

 Date Name Signature Company

FIELD INFORMATION FORM



Site Name: 0VSL
 Site No.:
 Sample Point: MW-43
 Sample ID:

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO
 PURGE DATE (MM DD YY): 022216
 PURGE TIME (2400 Hr Clock): 11:03
 ELAPSED HRS (hrs:min): 03
 WATER VOL IN CASING (Gallons):
 ACTUAL VOL PURGED (Gallons):
 WELL VOLS PURGED:

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: Y or N
 Purging Device: C A-Submersible Pump D-Bailer
 Sampling Device: C B-Peristaltic Pump E-Piston Pump
 X-Other: C-QED Bladder Pump F-Dipper/Bottle
 Filter Device: Y or N 0.45 μ or μ (circle or fill in)
 Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other:
 Sample Tube Type: D A-Teflon C-PVC X-Other:
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC): (ft/msl)
 Depth to Water (DTW) (from TOC): 2900 (ft)
 Groundwater Elevation (site datum, from TOC): (ft/msl)
 Total Well Depth (from TOC): (ft)
 Stick Up (from ground elevation): (ft)
 Casing ID: (in) Casing Material:

Note: Total Well Depth, Stick Up, Casing Id. etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (μmhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
11:13	325 1 st	5.35 1 st	44	8.42	3837	4.26	112	290
11:18	2 nd	5.46 2 nd	40	8.18	3463	4.07	109	290
11:21	3 rd	5.45 3 rd	39	8.17	198	4.15	110	290
11:24	4 th	5.47 4 th	40	8.13	1495	4.07	106	290
11:27		5.49	40	8.12	1116	4.09	107	290
11:30		5.50	39	8.13	1323	4.09	109	290
11:33		5.50	40	8.10	1171	4.11	111	290
11:36		5.50	40	8.11	527	4.07	108	290

Suggested range for 3 consec. readings or note Permit/State requirements: pH +/- 0.2, Conductance +/- 3%, Temp. -, Turbidity --, D.O. +/- 10%, eH/ORP +/- 25 mV, DTW Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA
 SAMPLE DATE (MM DD YY): 022216
 pH (std): 5.50
 CONDUCTANCE (umhos/cm @ 25°C): 40
 TEMP. (°C): 8.11
 TURBIDITY (ntu): 527
 DO (mg/L-ppm): 4.07
 eH/ORP (mV): 108
 Other: the
 Units:
 Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: Clear Odor: Color: Other:
 Weather Conditions (required daily, or as conditions change): Direction/Speed: Outlook: Precipitation: Y N

Specific Comments (including purge/well volume calculations if required):

FIELD COMMENTS
29' to DTW (while purging water orange)
Low Conductance
(Need Lock)

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
2.22.16 Stephen Palachuk Step Palachuk SCS
 Date Name Signature Company

FIELD INFORMATION FORM


 Site Name: OVSL
 Site No.:
 Sample Point: MW-42
 Sample ID

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

 Laboratory Use Only/Lab ID:

PURGE INFO	<u>022216</u>	<u>12:35</u>	<u> 25</u>	<u> </u>	<u> </u>	<u> </u>
	PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs:min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)	WELL VOLs PURGED

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

Purging and Sampling Equipment... Dedicated: Y or N

Purging Device: <u>C</u>	A-Submersible Pump	D-Bailer	Filter Device: <u>Y</u>	0.45 μ or <u> </u> μ
Sampling Device: <u>C</u>	B-Peristaltic Pump	E-Piston Pump	Filter Type: <u>A</u>	A-In-line Disposable
X-Other: <u> </u>	C-QED Bladder Pump	F-Dipper/Bottle	Sample Tube Type: <u>D</u>	C-Vacuum

B-Pressure X-Other:

A-Teflon C-PVC X-Other:

B-Stainless Steel D-Polypropylene

Well Elevation (at TOC)	<u> </u>	Depth to Water (DTW) (from TOC)	<u>2606</u>	Groundwater Elevation (site datum, from TOC)	<u> </u>
Total Well Depth (from TOC)	<u> </u>	Stick Up (from ground elevation)	<u> </u>	Casing ID (in)	Casing Material

Note: Total Well Depth, Stick Up, Casing Id. etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (μ mhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
12:40	309	6.21	444	12.25	1.923	1.19	-47	26.06
12:45		6.34	466	12.33	1.598	0.21	-72	26.06
12:48		6.36	470	12.32	1.032	0.16	-83	26.07
12:51		6.37	465	12.36	1.278	0.14	-88	26.09
12:54		6.37	469	12.35	1.253	0.14	-92	26.09
12:57		6.38	464	12.45	1.201	0.14	-94	26.09
13:00	✓	6.38	466	12.52	1.138	0.15	-96	26.09

Suggested range for 3 consec. readings or note Permit/State requirements:
 pH: +/- 0.2 | Conductance: +/- 3% | Temp: -- | Turbidity: -- | D.O.: +/- 10% | eH/ORP: +/- 25 mV | DTW: Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (μ mhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: <u>Time</u>
<u>022216</u>	<u>6.38</u>	<u>466</u>	<u>12.52</u>	<u>1.138</u>	<u>0.15</u>	<u>-96</u>	<u>1300</u>

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: Clear Odor: Color: Other:

Weather Conditions (required daily, or as conditions change): Direction/Speed: Outlook: Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required):

(Need Lock)

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

2/22/16 Steph Polach

Date Name Signature Company

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client. PINK - Field Copy

FIELD INFORMATION FORM



Site Name: OVSL

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID: _____

Site No.:
 Sample Point: MW-19C
 Sample ID

PURGE INFO
PURGE DATE (MM DD YY): 022216 **PURGE TIME** (2400 Hr Clock): 1505 **ELAPSED HRS** (hrs:min): :24
WATER VOL IN CASING (Gallons): **ACTUAL VOL PURGED** (Gallons): **WELL VOLS PURGED**:
 Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: or **Filter Device:** or 0.45 μ or _____ μ (circle or fill in)
 Purging Device: A-Submersible Pump D-Bailer A-In-line Disposable C-Vacuum
 Sampling Device: B-Peristaltic Pump E-Piston Pump B-Pressure X-Other
 X-Other: _____ **Filter Type:** A-Teflon C-PVC X-Other: _____
 Sample Tube Type: D B-Stainless Steel D-Polypropylene

WELL DATA
Well Elevation (at TOC) _____ (ft/msl) **Depth to Water (DTW) (from TOC)** 31.62 (ft) **Groundwater Elevation (site datum, from TOC)** _____ (ft/msl)
Total Well Depth (from TOC) _____ (ft) **Stick Up (from ground elevation)** _____ (ft) **Casing ID** _____ (in) **Casing Material** _____
 Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)	Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (μmhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
		15:09	350	6.36	133	10.24	29.92	2.62	72
	15:14		6.55	133	10.23	6.41	10.44	46	31.6
	15:17		6.61	133	10.22	6.62	10.36	40	31.6
	15:20		6.65	134	10.21	6.65	10.31	34	31.6
	15:23		6.64	133	10.23	4.83	10.27	28	31.6
	15:26		6.65	134	10.30	4.30	10.26	28	31.6
	15:29		6.69	134	10.31	4.46	10.25	22	31.6

Suggested range for 3 consec. readings or note Permit/State requirements:
 pH: +/- 0.2 Conductance: +/- 3% Temp: - Turbidity: - D.O.: +/- 10% eH/ORP: +/- 25 mV DTW: Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA
SAMPLE DATE (MM DD YY): 022216 **pH (std)**: 6.69 **CONDUCTANCE** (umhos/cm @ 25°C): 134 **TEMP.** (°C): 10.31 **TURBIDITY** (ntu): 4.46 **DO** (mg/L-ppm): 0.25 **eH/ORP** (mV): 22 **Other:** time **Units:** 1529
Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: Clear **Odor:** _____ **Color:** _____ **Other:** _____
Weather Conditions (required daily, or as conditions change): _____ **Direction/Speed:** _____ **Outlook:** _____ **Precipitation:** or **N**
Specific Comments (including purge/well volume calculations if required): _____

FIELD COMMENTS
Lock in good working order
pvc fitting in manifold not snug on line about
3-4" above grade

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
02,22,16 Stephan Paluch [Signature] 505
 Date Name Signature Company

FIELD INFORMATION FORM



Site Name: OVSL

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

Site No.: _____
 Sample Point: MW-4
Sample ID

PURGE INFO
 PURGE DATE (MM DD YY): 1352
 PURGE TIME (2400 Hr Clock): 26
 ELAPSED HRS (hrs:min): _____
 WATER VOL IN CASING (Gallons): _____
 ACTUAL VOL PURGED (Gallons): _____
 WELL VOLs PURGED (ft/msl): _____

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: Y or N
 Filter Device: Y or N | 0.45 μ or _____ μ (circle or fill in)
 Purging Device: A-Submersible Pump | D-Bailer
 Sampling Device: C | B-Peristaltic Pump | E-Piston Pump | F-Dipper/Bottle
 X-Other: _____
 Filter Type: A | A-In-line Disposable | C-Vacuum | B-Pressure | X-Other: _____
 Sample Tube Type: D | A-Teflon | C-PVC | X-Other: _____ | B-Stainless Steel | D-Polypropylene

WELL DATA
 Well Elevation (at TOC): _____ (ft/msl)
 Depth to Water (DTW) (from TOC): 2900 (ft)
 Groundwater Elevation (site datum, from TOC): _____ (ft/msl)
 Total Well Depth (from TOC): _____ (ft)
 Stick Up (from ground elevation): _____ (ft)
 Casing ID (in): _____ | Casing Material: _____

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)	Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (μmhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
		<u>13:55</u>	<u>350</u> ^{1"}	<u>6.46</u> ^{1"}	<u>63</u> ^{1"}	<u>9.52</u>	<u>2916</u>	<u>8.95</u>	<u>1106</u>
	<u>14:00</u>	<u>300</u> ^{2"}	<u>5.84</u> ^{2"}	<u>68</u> ^{2"}	<u>9.25</u>	<u>11537</u>	<u>1.71</u>	<u>144</u>	<u>290</u>
	<u>14:03</u>	<u>↓</u> ^{3"}	<u>5.76</u> ^{3"}	<u>70</u> ^{3"}	<u>9.27</u>	<u>11145</u>	<u>2.13</u>	<u>155</u>	<u>290</u>
	<u>14:06</u>	<u>↓</u> ^{4"}	<u>5.75</u> ^{4"}	<u>70</u> ^{4"}	<u>9.28</u>	<u>11138</u>	<u>1.16</u>	<u>161</u>	<u>290</u>
	<u>14:09</u>	<u>↓</u>	<u>5.73</u>	<u>71</u>	<u>9.26</u>	<u>11034</u>	<u>1.06</u>	<u>166</u>	<u>↓</u>
	<u>14:12</u>	<u>↓</u>	<u>5.70</u>	<u>71</u>	<u>9.27</u>	<u>11013</u>	<u>1.03</u>	<u>167</u>	<u>↓</u>
	<u>14:15</u>	<u>↓</u>	<u>5.75</u>	<u>71</u>	<u>9.28</u>	<u>7.8</u>	<u>10.99</u>	<u>172</u>	<u>↓</u>
	<u>14:18</u>	<u>↓</u>	<u>5.73</u>	<u>71</u>	<u>9.29</u>	<u>7.32</u>	<u>10.97</u>	<u>173</u>	<u>↓</u>

Suggested range for 3 consec. readings or note Permit/State requirements: pH +/- 0.2, Conductance +/- 3%, Temp. -, Turbidity -, D.O. +/- 10%, eH/ORP +/- 25 mV, Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA
 SAMPLE DATE (MM DD YY): 022216
 pH (std): 5.73
 CONDUCTANCE (umhos/cm @ 25°C): 71
 TEMP. (°C): 9.29
 TURBIDITY (ntu): 7.3
 DO (mg/L-ppm): 0.97
 eH/ORP (mV): 173
 Other: time
 Units: 1410

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: clear / particles Odor: _____ Color: _____ Other: _____
 Weather Conditions (required daily, or as conditions change): _____ Direction/Speed: _____ Outlook: _____ Precipitation: Y or N

FIELD COMMENTS
 Specific Comments (including purge/well volume calculations if required):
(Need New Lock) DTW = 29'

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
2,22,16 Stefan Palocz [Signature]
 Date Name Signature Company

FIELD INFORMATION FORM



Site Name: OWSL

Site No.:

Sample Point: mw-2B1
Sample ID

This Waste Management Field Information Form is Required
This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO

PURGE DATE: 022316 (MM DD YY)

PURGE TIME: 1505 (2400 Hr Clock)

ELAPSED HRS: (hrs:min)

WATER VOL IN CASING: (Gallons)

ACTUAL VOL PURGED: (Gallons)

WELL VOLS PURGED:

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment... Dedicated: or N

Filter Device: or N 0.45 µ or µ (circle or fill in)

Purging Device: C A-Submersible Pump D-Bailer

Sampling Device: C B-Peristaltic Pump E-Piston Pump

X-Other: C-QED Bladder Pump F-Dipper/Bottle

Filter Type: A

A-In-line Disposable C-Vacuum

B-Pressure X-Other:

A-Teflon C-PVC X-Other:

B-Stainless Steel D-Polypropylene

Sample Tube Type: D

WELL DATA

Well Elevation (at TOC): (ft/msl)

Depth to Water (DTW) (from TOC): 551 (ft)

Groundwater Elevation (site datum, from TOC): (ft/msl)

Total Well Depth (from TOC): (ft)

Stick Up (from ground elevation): (ft)

Casing ID: (in)

Casing Material:

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)	Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (µmhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
		<u>15:05</u>		<u>6.80</u>	<u>174</u>	<u>13.62</u>		<u>0.63</u>	<u>162.1</u>
	<u>15:10</u>		<u>6.75</u>	<u>177</u>	<u>13.59</u>		<u>0.21</u>	<u>160.9</u>	
	<u>15:13</u>		<u>6.77</u>	<u>177</u>	<u>13.58</u>		<u>0.15</u>	<u>159.4</u>	
	<u>15:16</u>		<u>6.76</u>	<u>177</u>	<u>13.59</u>		<u>0.14</u>	<u>159.2</u>	
	<u>15:19</u>		<u>6.75</u>	<u>178</u>	<u>13.59</u>	<u>2.87</u>	<u>0.12</u>	<u>158.7</u>	
	<u>15:22</u>		<u>6.73</u>	<u>177</u>	<u>13.58</u>	<u>2.14</u>	<u>0.11</u>	<u>158.1</u>	
	<u>15:25</u>		<u>6.70</u>	<u>177</u>	<u>13.55</u>		<u>0.10</u>	<u>158.1</u>	

Suggested range for 3 consec. readings or note Permit/State requirements: +/- 0.2 +/- 3% -- -- +/- 10% +/- 25 mV Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA

SAMPLE DATE: 022316 (MM DD YY)

pH (std): 6.70

CONDUCTANCE (umhos/cm @ 25°C): 177

TEMP. (°C): 13.55

TURBIDITY (ntu): 2.14

DO (mg/L-ppm): 0.10

eH/ORP (mV): 158.1

Other: fine

Units: 1525

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: clear Odor: Color: Other:

Weather Conditions (required daily, or as conditions change): Direction/Speed: Outlook: Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required):

FIELD COMMENTS

pH pen

1519 6.52

1522 6.50

1525

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

2/23/16 Sam Graber [Signature] SCS

Date Name Signature Company

FIELD INFORMATION FORM



Site Name: 0USL
 Site No.:

--	--	--	--	--

 Sample Point: MW-34A
 Sample ID: _____

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID: _____

PURGE INFO	<table border="1" style="width: 100%;"><tr><td>0</td><td>2</td><td>23</td><td>16</td></tr></table>	0	2	23	16	<table border="1" style="width: 100%;"><tr><td>14</td><td>08</td></tr></table>	14	08	<table border="1" style="width: 100%;"><tr><td></td><td>20</td></tr></table>		20	<table border="1" style="width: 100%;"><tr><td></td><td></td><td></td><td></td><td></td></tr></table>						<table border="1" style="width: 100%;"><tr><td></td><td></td><td></td><td></td><td></td></tr></table>						<table border="1" style="width: 100%;"><tr><td></td><td></td></tr></table>		
0	2	23	16																							
14	08																									
	20																									
	PURGE DATE <small>(MM DD YY)</small>	PURGE TIME <small>(2400 Hr Clock)</small>	ELAPSED HRS <small>(hrs:min)</small>	WATER VOL IN CASING <small>(Gallons)</small>	ACTUAL VOL PURGED <small>(Gallons)</small>	WELL VOLS PURGED																				
	<i>Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.</i>																									

Purging and Sampling Equipment... Dedicated: or N

Purging Device: C | A-Submersible Pump | D-Bailer
 Sampling Device: C | B-Peristaltic Pump | E-Piston Pump | F-Dipper/Bottle
 X-Other: _____

Filter Device: or N | 0.45 µ or _____ µ (circle or fill in)
 Filter Type: A | A-In-line Disposable | C-Vacuum | B-Pressure | X-Other _____
 Sample Tube Type: 0 | A-Teflon | C-PVC | X-Other _____ | B-Stainless Steel | D-Polypropylene

WELL DATA

Well Elevation (at TOC) <table border="1" style="width: 100%;"><tr><td></td><td></td><td></td><td></td><td></td></tr></table> <small>(ft/msl)</small>						Depth to Water (DTW) (from TOC) <table border="1" style="width: 100%;"><tr><td></td><td></td><td>38</td><td>04</td></tr></table> <small>(ft)</small>			38	04	Groundwater Elevation (site datum, from TOC) <table border="1" style="width: 100%;"><tr><td></td><td></td><td></td><td></td><td></td></tr></table> <small>(ft/msl)</small>					
		38	04													
Total Well Depth (from TOC) <table border="1" style="width: 100%;"><tr><td></td><td></td><td></td><td></td><td></td></tr></table> <small>(ft)</small>						Stick Up (from ground elevation) <table border="1" style="width: 100%;"><tr><td></td><td></td><td></td><td></td><td></td></tr></table> <small>(ft)</small>						Casing ID (in) <table border="1" style="width: 100%;"><tr><td></td><td></td></tr></table>				

Note: Total Well Depth, Stick Up, Casing Id. etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (µmhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
14:08		6.63	114	12.12		6.44	157.5	
14:13		6.56	109	12.12		6.28	158.2	
14:16		6.50	103	12.12	1.64	6.00	160.7	
14:19		6.49	106	12.19		5.80	161.0	
14:22		6.48	107	12.22		5.69	161.4	
14:25		6.48	108	12.23		5.60	161.8	
14:28		6.47	109	12.24	1.23	5.57	162.1	

Suggested range for 3 consec. readings or note Permit/State requirements:
 pH: +/- 0.2 | Conductance: +/- 3% | Temp: - | Turbidity: - | D.O.: +/- 10% | eH/ORP: +/- 25 mV | DTW: Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/State. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. **If more fields above are needed, use separate sheet or form.**

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (umhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: <u>fine</u>
022316	6.47	109	12.24	1.23	5.57	162.1	Units: 1428

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/State).

Sample Appearance: clear | Odor: _____ | Color: _____ | Other: _____
 Weather Conditions (required daily, or as conditions change): _____ | Direction/Speed: _____ | Outlook: Clear | Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required):

pH pen
 1425 6.43
 1428 6.34

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

2, 23, 16 | Sam Graber | | SLC
 _____ | _____ | _____ | _____
 Date | Name | Signature | Company

FIELD INFORMATION FORM



Site Name: OSL

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID: _____

Site No.: _____
 Sample Point: 14-34C
 Sample ID

PURGE INFO

PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs:min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)	WELL VOLS PURGED
0 2 23 16	1 3 0 7	3 1			

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment... Dedicated: Y or N

Filter Device: Y or N | 0.45 μ | or _____ μ (circle or fill in)

Purging Device: C | A-Submersible Pump | D-Bailer
 B-Peristaltic Pump | E-Piston Pump
 C-QED Bladder Pump | F-Dipper/Bottle

Filter Type: A | A-In-line Disposable | C-Vacuum
 B-Pressure | X-Other _____

Sampling Device: C | A-Teflon | C-PVC | X-Other: _____
 X-Other: _____ | B-Stainless Steel | D-Polypropylene

Sample Tube Type: D

WELL DATA

Well Elevation (at TOC) _____ (ft/msl) | Depth to Water (DTW) (from TOC) 398 (ft) | Groundwater Elevation (site datum, from TOC) _____ (ft/msl)

Total Well Depth (from TOC) _____ (ft) | Stick Up (from ground elevation) _____ (ft) | Casing ID _____ (in) | Casing Material _____

Note: Total Well Depth, Stick Up, Casing Id. etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (μmhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
13:07	250	6.62	263	12.91		0.67	84.0	
13:12		6.66	261	12.94	24.2	0.37	32.0	
13:15		6.67	262	12.94		0.31	21.5	
13:18		6.71	262	12.96	12.1	0.26	11.4	
13:21		6.73	262	12.95	7.32	0.24	6.5	
13:24		6.74	261	12.98	5.80	0.22	3.9	
13:27					8.82		-	
13:32		6.79	262	12.96	32.8	0.18	-2.2	
13:35		6.80	261	12.98	25.6	0.18	-2.9	
13:38		6.81	262	13.00	22.0	0.17	-3.6	

Suggested range for 3 consec. readings or note Permit/State requirements:
 pH: +/- 0.2 | Conductance: +/- 3% | Temp: - | Turbidity: - | D.O.: +/- 10% | eH/ORP: +/- 25 mV | DTW: Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. **If more fields above are needed, use separate sheet or form.**

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (umhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: <u>fine</u>
022316	6.81	262	13.00	22.0	0.17	-3.6	Units: 1338

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: turbidity, fluctuating | Odor: _____ | Color: L orange | Other: _____

Weather Conditions (required daily, or as conditions change): _____ | Direction/Speed: _____ | Outlook: clear | Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required): _____

FIELD COMMENTS

Sample was cloudy to start | pH pen

* Orange particulates in sample. | 1315 6.83

| 1318 6.77

| 1338 6.90

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

2, 23, 16 | Sam Corntzer | Corntzer | SCS

 Date | Name | Signature | Company

FIELD INFORMATION FORM



Site Name: OVSL
 Site No.:
 Sample Point: MW-116
 Sample ID:

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO
 PURGE DATE: 02/24/16 (MM DD YY)
 PURGE TIME: 9:10 (2400 Hr Clock)
 ELAPSED HRS: 20 (hrs:min)
 WATER VOL IN CASING: (Gallons)
 ACTUAL VOL PURGED: (Gallons)
 WELL VOLS PURGED:

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: or N
 Purging Device: C A-Submersible Pump D-Bailer
 Sampling Device: C B-Peristaltic Pump E-Piston Pump
 X-Other: C-QED Bladder Pump F-Dipper/Bottle
 Filter Device: 0 or N 0.45 μ or μ (circle or fill in)
 Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other
 Sample Tube Type: D A-Teflon C-PVC X-Other:
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC): (ft/msl)
 Depth to Water (DTW) (from TOC): 5376 (ft)
 Groundwater Elevation (site datum, from TOC): (ft/msl)
 Total Well Depth (from TOC): (ft)
 Stick Up (from ground elevation): (ft)
 Casing ID: (in) Casing Material:

Note: Total Well Depth, Stick Up, Casing Id. etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (μ mhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
9:12	250	6.40	45	9.00		7.39	2120.9	
9:17		6.41	41	9.99		7.21	220.0	
9:20		6.42	41	9.00		7.13	219.4	
9:23		6.44	42	9.00		7.02	218.6	539.0
9:26		6.45	41	9.00		6.99	218.0	
9:29		6.47	41	9.02		6.94	217.0	539.4
9:32	✓	6.49	41	9.02	0.95	6.89	216.1	

Suggested range for 3 consec. readings or note Permit/State requirements:
 pH: +/- 0.2 Conductance: +/- 3% Temp: - Turbidity: - D.O.: +/- 10% eH/ORP: +/- 25 mV DTW: Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA
 SAMPLE DATE (MM DD YY): 02/24/16
 pH (std): 6.49
 CONDUCTANCE (μ mhos/cm @ 25°C): 41
 TEMP. (°C): 9.02
 TURBIDITY (ntu): 0.95
 DO (mg/L-ppm): 6.89
 eH/ORP (mV): 216.1
 Other: fine
 Units: 932

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: Odor: Color: Other:
 Weather Conditions (required daily, or as conditions change): Direction/Speed: Outlook: overcast Precipitation: Y or N
 Specific Comments (including purge/well volume calculations if required):

FIELD COMMENTS
pH pm
926 6.92
929 6.72
932 6.65
Slight particulates in sample, possibly organic?

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
2, 24, 16 Sam Gruber [Signature] SLC
 Date Name Signature Company

FIELD INFORMATION FORM



Site Name: 0VSL
 Site No.: Sample Point: MW-24
 Sample ID

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO
 PURGE DATE: 022416 (MM DD YY)
 PURGE TIME: 1202 (2400 Hr Clock)
 ELAPSED HRS: 20 (hrs:min)
 WATER VOL IN CASING: (Gallons)
 ACTUAL VOL PURGED: (Gallons)
 WELL VOLS PURGED:

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: Y or N
 Purging Device: C A-Submersible Pump D-Bailer
 Sampling Device: C B-Peristaltic Pump E-Piston Pump
 X-Other: C-QED Bladder Pump F-Dipper/Bottle
 Filter Device: Y or N 0.45 μ or μ (circle or fill in)
 Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other
 Sample Tube Type: D A-Teflon C-PVC X-Other:
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC): (ft/msl)
 Depth to Water (DTW) (from TOC): 2362 (ft)
 Groundwater Elevation (site datum, from TOC): (ft/msl)
 Total Well Depth (from TOC): (ft)
 Stick Up (from ground elevation): (ft)
 Casing ID: (in) Casing Material:

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (μmhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L-ppm)	eH/ORP (mV)	DTW (ft)
12:02	20	6.85	140	12.21		0.48	134.1	
12:07		6.84	141	12.07		0.32	163.7	
12:10		6.82	143	12.06		0.29	151.6	
12:13		6.81	145	11.97	8.46	0.25	142.5	
12:16		6.80	146	11.98		0.22	134.6	
12:19		6.78	147	11.95	2.85	0.21	130.6	
12:22		6.63	147	11.95		0.19	125.9	

Suggested range for 3 consec. readings or note Permit/State requirements:
 pH: +/- 0.2 Conductance: +/- 3% Temp: - Turbidity: - D.O.: +/- 10% eH/ORP: +/- 25 mV DTW: Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA
 SAMPLE DATE (MM DD YY): 022416
 pH (std): 6.63
 CONDUCTANCE (umhos/cm @ 25°C): 147
 TEMP. (°C): 11.95
 TURBIDITY (ntu): 2.85
 DO (mg/L-ppm): 0.19
 eH/ORP (mV): 125.9
 Other: fine
 Units: 1222

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: clear Odor: Color: Other: black particulates
 Weather Conditions (required daily, or as conditions change): Direction/Speed: Outlook: cloudy Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required):
pH pen # low flow
1216 6.54 # black particulates in sample
1219 6.48 * gas inlet line disconnected from regulator
1222 6.43 connection same diameter as extra tubing
= 0.25" O.D. discharge tubing 3/8" OD.

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
2/24/16 Sam Graber [Signature] SLS
 Date Name Signature Company

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM



Site Name: 0VSL
 Site No.:
 Sample Point: MW-39
 Sample ID:

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO
 PURGE DATE (MM DD YY): 022416
 PURGE TIME (2400 Hr Clock): 1201
 ELAPSED HRS (hrs:min): 23
 WATER VOL IN CASING (Gallons):
 ACTUAL VOL PURGED (Gallons):
 WELL VOLS PURGED:

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: Y or N
 Purging Device: C A-Submersible Pump D-Bailer
 Sampling Device: C B-Peristaltic Pump E-Piston Pump
 X-Other: C-QED Bladder Pump F-Dipper/Bottle
 Filter Device: Y or N 0.45 μ or μ (circle or fill in)
 Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other:
 Sample Tube Type: D A-Teflon C-PVC X-Other:
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC): (ft/msl) Depth to Water (DTW) (from TOC): 1645 (ft)
 Groundwater Elevation (site datum, from TOC): (ft/msl)
 Total Well Depth (from TOC): (ft) Stick Up (from ground elevation): (ft)
 Casing ID: (in) Casing Material:

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)	Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (μ mhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
		<u>12:04</u>	<u>350</u>	<u>6.13</u>	<u>264</u>	<u>10.82</u>	<u>5936</u>	<u>2.63</u>	<u>135</u>
	<u>12:09</u>	<u> </u>	<u>5.95</u>	<u>129</u>	<u>10.17</u>	<u>3544</u>	<u>0.94</u>	<u>4</u>	<u>17.21</u>
	<u>12:12</u>	<u> </u>	<u>5.92</u>	<u>128</u>	<u>10.09</u>	<u>1044</u>	<u>1.05</u>	<u>14</u>	<u>17.30</u>
	<u>12:15</u>	<u> </u>	<u>5.91</u>	<u>133</u>	<u>10.09</u>	<u>1089</u>	<u>1.11</u>	<u>15</u>	<u>17.42</u>
	<u>12:18</u>	<u> </u>	<u>5.93</u>	<u>138</u>	<u>10.09</u>	<u>821</u>	<u>1.19</u>	<u>16</u>	<u>17.42</u>
	<u>12:21</u>	<u> </u>	<u>5.95</u>	<u>142</u>	<u>10.09</u>	<u>839</u>	<u>1.12</u>	<u>16</u>	<u>17.45</u>
	<u>12:24</u>	<u> </u>	<u>5.98</u>	<u>142</u>	<u>10.15</u>	<u>746</u>	<u>1.21</u>	<u>19</u>	<u>17.48</u>
	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>

Suggested range for 3 consec. readings or note Permit/State requirements: pH +/- 0.2, Conductance +/- 3%, D.O. +/- 10%, eH/ORP +/- 25 mV, DTW Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. **If more fields above are needed, use separate sheet or form.**

FIELD DATA	SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (μ mhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: Units
	<u>022416</u>	<u>5.98</u>	<u>142</u>	<u>10.15</u>	<u>746</u>	<u>1.21</u>	<u>19</u>	<u> </u>

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: Clear Odor: Color: Other:
 Weather Conditions (required daily, or as conditions change): Direction/Speed: Outlook: Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required):
Lock broken

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
2, 24, 16 Stephen Polodak [Signature] SCS
 Date Name Signature Company

FIELD INFORMATION FORM



Site Name: ONSL

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID: _____

Site No.: _____ Sample Point: MM-1SR
Sample ID

PURGE INFO

<u>022416</u>	<u>0950</u>	<u>1:23</u>			
PURGE DATE <small>(MM DD YY)</small>	PURGE TIME <small>(2400 Hr Clock)</small>	ELAPSED HRS <small>(hrs:min)</small>	WATER VOL IN CASING <small>(Gallons)</small>	ACTUAL VOL PURGED <small>(Gallons)</small>	WELL VOLS PURGED

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment... Dedicated: Y or N

Filter Device: Y or N 0.45 μ or _____ μ (circle or fill in)

Purging Device: C A-Submersible Pump D-Bailer
 B B-Peristaltic Pump E-Piston Pump
 C C-QED Bladder Pump F-Dipper/Bottle

Filter Type: A A-In-line Disposable C-Vacuum
 B B-Pressure X-Other _____

Sampling Device: C A-Teflon C-PVC X-Other: _____
 D B-Stainless Steel D-Polypropylene

X-Other: _____ Sample Tube Type: D

WELL DATA

Well Elevation (at TOC) _____ (ft/msl)	Depth to Water (DTW) (from TOC) <u>17.71</u> (ft)	Groundwater Elevation (site datum, from TOC) _____ (ft/msl)
Total Well Depth (from TOC) _____ (ft)	Stick Up (from ground elevation) _____ (ft)	Casing ID _____ (in) Casing Material _____

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (μmhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
<u>09:53</u>	<u>300</u>	<u>6.57</u>	<u>150</u>	<u>10.33</u>	<u>6.67</u>	<u>12.87</u>	<u>112</u>	<u>17.71</u>
<u>09:58</u>		<u>6.47</u>	<u>153</u>	<u>10.34</u>	<u>3.65</u>	<u>1.49</u>	<u>11.8</u>	<u>17.72</u>
<u>10:01</u>		<u>6.44</u>	<u>154</u>	<u>10.36</u>	<u>5.01</u>	<u>1.38</u>	<u>11.9</u>	
<u>10:04</u>		<u>6.45</u>	<u>152</u>	<u>10.38</u>	<u>3.63</u>	<u>1.36</u>	<u>12.0</u>	
<u>10:07</u>		<u>6.44</u>	<u>151</u>	<u>10.39</u>	<u>2.73</u>	<u>1.13</u>	<u>12.2</u>	
<u>10:10</u>		<u>6.44</u>	<u>152</u>	<u>10.39</u>		<u>1.27</u>	<u>12.3</u>	
<u>10:13</u>	↓	<u>6.43</u>	<u>152</u>	<u>10.37</u>	<u>4.19</u>	<u>1.27</u>	<u>12.3</u>	↓

Suggested range for 3 consec. readings or note Permit/State requirements: +/- 0.2 +/- 3% - +/- 10% +/- 25 mV Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. **If more fields above are needed, use separate sheet or form.**

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (μmhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: _____
<u>022416</u>	<u>6.43</u>	<u>152</u>	<u>10.37</u>	<u>4.19</u>	<u>1.27</u>	<u>12.3</u>	

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: Clear Odor: _____ Color: _____ Other: _____

Weather Conditions (required daily, or as conditions change): _____ Direction/Speed: _____ Outlook: _____ Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required): _____

FIELD COMMENTS

No Lock

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

2, 24, 16 Stephen Polach [Signature] SCS

_____ _____ _____ _____

Date Name Signature Company

FIELD INFORMATION FORM



Site Name: OU5L

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID: _____

Site No.: _____
 Sample Point: MW-36A
Sample ID

PURGE INFO
 PURGE DATE: 022416 (MM DD YY)
 PURGE TIME: 1057 (2400 Hr Clock)
 ELAPSED HRS: 123 (hrs:min)
 WATER VOL IN CASING: _____ (Gallons)
 ACTUAL VOL PURGED: _____ (Gallons)
 WELL VOLs PURGED: _____

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: Y or N
 Purging Device: C A-Submersible Pump D-Bailer
 Sampling Device: C B-Peristaltic Pump E-Piston Pump
 X-Other: _____
 Filter Device: Y or N 0.45 μ or _____ μ (circle or fill in)
 Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other: _____
 Sample Tube Type: D A-Teflon C-PVC X-Other: _____
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC): _____ (ft/msl)
 Depth to Water (DTW) (from TOC): 2972 (ft)
 Groundwater Elevation (site datum, from TOC): _____ (ft/msl)
 Total Well Depth (from TOC): _____ (ft)
 Stick Up (from ground elevation): _____ (ft)
 Casing ID: _____ (in)
 Casing Material: _____

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)	Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (μmhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	DO (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
		<u>11:00</u>	<u>350</u>	<u>6.19</u>	<u>131</u>	<u>9.54</u>	<u>6.25</u>	<u>13.38</u>	<u>144</u>
	<u>11:05</u>		<u>6.10</u>	<u>135</u>	<u>9.52</u>	<u>6.14</u>	<u>12.27</u>	<u>152</u>	<u>2972</u>
	<u>11:08</u>		<u>6.11</u>	<u>136</u>	<u>9.53</u>	<u>7.53</u>	<u>12.24</u>	<u>155</u>	<u>3024</u>
	<u>11:11</u>		<u>6.08</u>	<u>136</u>	<u>9.54</u>	<u>7.77</u>	<u>12.19</u>	<u>157</u>	<u>3026</u>
	<u>11:14</u>		<u>6.10</u>	<u>137</u>	<u>9.54</u>	<u>6.48</u>	<u>12.17</u>	<u>160</u>	<u>3027</u>
	<u>11:17</u>		<u>6.10</u>	<u>136</u>	<u>9.57</u>	<u>5.32</u>	<u>12.15</u>	<u>161</u>	
	<u>11:20</u>		<u>6.11</u>	<u>137</u>	<u>9.58</u>	<u>5.31</u>	<u>12.16</u>	<u>161</u>	

Suggested range for 3 consec. readings or note Permit/State requirements: pH +/- 0.2, Conductance +/- 3%, DO +/- 10%, eH/ORP +/- 25 mV, Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA
 SAMPLE DATE (MM DD YY): 022416
 pH (std): 6.11
 CONDUCTANCE (umhos/cm @ 25°C): 137
 TEMP. (°C): 9.58
 TURBIDITY (ntu): 5.31
 DO (mg/L-ppm): 2.16
 eH/ORP (mV): 161
 Other: _____ Units: _____

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: Clear Odor: _____ Color: _____ Other: _____
 Weather Conditions (required daily, or as conditions change): _____ Direction/Speed: _____ Outlook: _____ Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required): _____

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
2/24/16 Stephen Polachuk [Signature] SCS
 Date Name Signature Company

FIELD INFORMATION FORM



Site Name: ONSL

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID: _____

Site No.: _____ Sample Point: MW-32
Sample ID

PURGE INFO

022416	0348	22			
PURGE DATE <small>(MM DD YY)</small>	PURGE TIME <small>(2400 Hr Clock)</small>	ELAPSED HRS <small>(hrs:min)</small>	WATER VOL IN CASING <small>(Gallons)</small>	ACTUAL VOL PURGED <small>(Gallons)</small>	WELL VOLS PURGED

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment Dedicated: Y or N Filter Device: Y or N 0.45 μ or _____ μ (circle or fill in)

Purging Device: C A-Submersible Pump D-Bailer Filter Type: A A-In-line Disposable C-Vacuum

Sampling Device: C B-Peristaltic Pump E-Piston Pump B-Pressure X-Other _____

X-Other: _____ Sample Tube Type: D A-Teflon C-PVC X-Other: _____

B-Stainless Steel D-Polypropylene

WELL DATA

Well Elevation (at TOC) _____ (ft/msl)	Depth to Water (DTW) (from TOC) _____ (ft)	Groundwater Elevation (site datum, from TOC) _____ (ft/msl)
Total Well Depth (from TOC) _____ (ft)	Stick Up (from ground elevation) _____ (ft)	Casing ID _____ (in) Casing Material _____

Note: Total Well Depth, Stick Up, Casing Id. etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (μmhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
08:50	325	6.18	243	11.85	5.37	5.12	1.1	1.0
08:55		6.55	242	11.96	4.25	0.51	-2.5	
08:58		6.59	242	11.97	3.9	0.47	-3.2	
09:01		6.62	239	11.98	4.13	0.43	-3.8	
09:04		6.63	242	12.0	4.33	0.43	-4.2	
09:07		6.64	239	12.0	2.89	0.41	-4.5	
09:10	✓	6.64	242	12.0	3.81	0.4	-4.7	

Suggested range for 3 consec. readings or note Permit/State requirements: pH: +/- 0.2 Conductance: +/- 3% D.O.: +/- 10% eH/ORP: +/- 25 mV DTW: Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. **If more fields above are needed, use separate sheet or form.**

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (umhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: _____
022416	6.64	242	12.0	3.81	0.4	-4.7	Units _____

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: Clear Odor: _____ Color: _____ Other: _____

Weather Conditions (required daily, or as conditions change): _____ Direction/Speed: _____ Outlook: _____ Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required):

Lock broken - Marsh overgrown still able to sample

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

2,24,16 Stephen Palachuk [Signature] SCS

Date Name Signature Company

FIELD INFORMATION FORM



Site Name: OVSL
 Site No.:
 Sample Point: MW-20
 Sample ID

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID: _____

PURGE INFO
 PURGE DATE: 02/23/16 (MM DD YY)
 PURGE TIME: 14:18 (2400 Hr Clock)
 ELAPSED HRS: (hrs:min)
 WATER VOL IN CASING: (Gallons)
 ACTUAL VOL PURGED: (Gallons)
 WELL VOLS PURGED:

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: Y or N
 Purging Device: C A-Submersible Pump D-Bailer
 Sampling Device: C B-Peristaltic Pump E-Piston Pump
 X-Other: _____ C-QED Bladder Pump F-Dipper/Bottle
 Filter Device: Y or N 0.45 μ or _____ μ (circle or fill in)
 Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other _____
 Sample Tube Type: D A-Teflon C-PVC X-Other: _____
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC): _____ (ft/msl)
 Depth to Water (DTW) (from TOC): 3410 (ft)
 Groundwater Elevation (site datum, from TOC): _____ (ft/msl)
 Total Well Depth (from TOC): _____ (ft)
 Stick Up (from ground elevation): _____ (ft)
 Casing ID: _____ (in) Casing Material: _____

Note: Total Well Depth, Stick Up, Casing Id, etc, are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)	Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (μ mhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
		<u>14:24</u>		<u>6.21</u>	<u>226</u>	<u>14.47</u>	<u>9.23</u>	<u>549</u>	<u>150</u>
	<u>14:29</u>		<u>6.03</u>	<u>227</u>	<u>14.47</u>	<u>11.33</u>	<u>533</u>	<u>162</u>	<u>34.10</u>
	<u>14:32</u>		<u>6.03</u>	<u>229</u>	<u>14.48</u>	<u>3.10</u>	<u>536</u>	<u>165</u>	<u>34.19</u>
	<u>14:35</u>		<u>6.03</u>	<u>230</u>	<u>14.46</u>	<u>4.02</u>	<u>538</u>	<u>167</u>	<u>34.2</u>
	<u>14:38</u>		<u>6.02</u>	<u>230</u>	<u>14.48</u>	<u>7.27</u>	<u>538</u>	<u>168</u>	<u>34.2</u>
	<u>14:41</u>		<u>6.03</u>	<u>229</u>	<u>14.44</u>	<u>6.2</u>	<u>539</u>	<u>170</u>	<u> </u>
	<u>14:44</u>		<u>6.02</u>	<u>230</u>	<u>14.46</u>	<u>3.17</u>	<u>541</u>	<u>171</u>	<u> </u>

Suggested range for 3 consec. readings or note Permit/State requirements:
 pH: +/- 0.2 Conductance: +/- 3% Temp: -- Turbidity: -- D.O.: +/- 10% eH/ORP: +/- 25 mV DTW: Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. **If more fields above are needed, use separate sheet or form.**

FIELD DATA
 SAMPLE DATE (MM DD YY): 02/23/16
 pH (std): 6.02
 CONDUCTANCE (μ mhos/cm @ 25°C): 230
 TEMP. (°C): 14.46
 TURBIDITY (ntu): 3.17
 DO (mg/L-ppm): 5.41
 eH/ORP (mV): 171
 Other: _____ Units: _____

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: clear Odor: _____ Color: _____ Other: _____
 Weather Conditions (required daily, or as conditions change): _____ Direction/Speed: _____ Outlook: _____ Precipitation: Y or N

FIELD COMMENTS
 Specific Comments (including purge/well volume calculations if required): _____

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
2/23/16 Stephen Palocz ASR SCS
 Date Name Signature Company

FIELD INFORMATION FORM



Site Name: OVSL
 Site No.:
 Sample Point: MW-23A
 Sample ID:

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO
 PURGE DATE (MM DD YY): 02/23/16
 PURGE TIME (2400 Hr Clock): 13:10
 ELAPSED HRS (hrs:min): 22
 WATER VOL IN CASING (Gallons):
 ACTUAL VOL PURGED (Gallons):
 WELL VOLS PURGED:

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: Y or N
 Purging Device: C A-Submersible Pump D-Bailer
 Sampling Device: C B-Peristaltic Pump E-Piston Pump
 X-Other: C-QED Bladder Pump F-Dipper/Bottle
 Filter Device: Y or N 0.45 μ or μ (circle or fill in)
 Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other:
 Sample Tube Type: D A-Teflon C-PVC X-Other:
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC): (ft/msl)
 Depth to Water (DTW) (from TOC): 990 (ft)
 Groundwater Elevation (site datum, from TOC): (ft/msl)
 Total Well Depth (from TOC): (ft)
 Stick Up (from ground elevation): (ft)
 Casing ID: (in) Casing Material:

Note: Total Well Depth, Stick Up, Casing Id. etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)	Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (μmhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
		13:12	400	6.02	174	12.82	1553	0.84	2107
	13:17		6.12	174	12.78	708	0.31	184	993
	13:20		6.13	174	12.8	635	0.27	165	993
	13:23		6.14	175	12.79	746	0.25	165	
	13:26		6.13	175	12.79	1451	0.25	161	
	13:29	375	6.13	176	12.73	746	0.25	161	
	13:32	↓	6.15	175	12.75	786	0.24	155	↓

Suggested range for 3 consec. readings or note Permit/State requirements: pH +/- 0.2, Conductance +/- 3%, D.O. +/- 10%, eH/ORP +/- 25 mV, DTW Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. **If more fields above are needed, use separate sheet or form.**

FIELD DATA
 SAMPLE DATE (MM DD YY): 02/23/16
 pH (std): 6.15
 CONDUCTANCE (umhos/cm @ 25°C): 175
 TEMP. (°C): 12.75
 TURBIDITY (ntu): 786
 DO (mg/L-ppm): 0.24
 eH/ORP (mV): 155
 Other:
Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: Clear / some particulates Odor: Color: Other:
 Weather Conditions (required daily, or as conditions change): Direction/Speed: Outlook: Precipitation: Y (or N)

FIELD COMMENTS
 Specific Comments (including purge/well volume calculations if required):
Dup(2) taken @ 13:42
as MW-23A (DUP)

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
2/23/16 Stephen Palczuk [Signature] SCS
 Date Name Signature Company
 DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample. YELLOW - Returned to Client. PINK - Field Copy

FIELD INFORMATION FORM



Site Name: DUSC

Site No.: Sample Point: MW-33C Sample ID:

This Waste Management Field Information Form is Required. This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO

PURGE DATE: 022216 (MM DD YY) PURGE TIME: 1410 (2400 Hr Clock) ELAPSED HRS: 20 (hrs:min)

WATER VOL IN CASING: (Gallons) ACTUAL VOL PURGED: (Gallons) WELL VOLS PURGED:

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment Dedicated: Y or N Filter Device: Y or N 0.45 μ or μ (circle or fill in)

Purging Device: C A-Submersible Pump D-Bailer Filter Type: A A-In-line Disposable C-Vacuum

Sampling Device: C B-Peristaltic Pump E-Piston Pump B-Pressure X-Other:

X-Other: Sample Tube Type: D A-Teflon C-PVC X-Other:

B-Stainless Steel D-Polypropylene

WELL DATA

Well Elevation (at TOC): (ft/msl) Depth to Water (DTW) (from TOC): 1.20 (ft) Groundwater Elevation (site datum, from TOC): (ft/msl)

Total Well Depth (from TOC): (ft) Stick Up (from ground elevation): (ft) Casing ID: (in) Casing Material:

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit (ML/min)	pH (std)	Conductance (SC/EC) (μ mhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
14:10	250	6.71	159	8.92		0.83	152.3	
14:15		6.93	159	8.93		0.28	129.7	
14:18		7.01	160	8.95		0.21	120.7	
14:21		7.04	159	8.93		0.18	115.4	
14:24		7.07	160	8.90		0.16	109.5	
14:27		7.12	160	8.93	6.20	0.14	100.5	
14:30		7.17	160	8.89	4.75	0.12	90.2	

Suggested range for 3 consec. readings or note Permit/State requirements:

+/- 0.2	+/- 3%	--	--	+/- 10%	+/- 25 mV	Stabilize
---------	--------	----	----	---------	-----------	-----------

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (μ mhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: <u>FM</u>
<u>022416</u>	<u>7.17</u>	<u>160</u>	<u>8.88</u>	<u>4.75</u>	<u>0.12</u>	<u>90.2</u>	<u>1430</u>

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: Odor: Color: Other:

Weather Conditions (required daily, or as conditions change): Direction/Speed: Outlook: clear Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required):

pit pen

* Gas line disconnected from quick Fit. *

1424 8.21 observed water in gas inlet tubing. Called Sam A, Dunn Decided

1430 8.29 to get sample. Did not observe water in inlet tubing as such

Possibly happen 1st time because of high pressure = 40 psi

- flow seems sufficient but slightly weak

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

2,24,16 Sam Grubar [Signature] SCS

Date Name Signature Company

FIELD INFORMATION FORM



Site Name: OVSL

This Waste Management Field Information Form is Required. This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms...

Laboratory Use Only/Lab ID:

Site No.: 503702 Sample Point: LPLCD

Table with columns: PURGE DATE (03/08/16), PURGE TIME (10:15), ELAPSED HRS, WATER VOL IN CASING, ACTUAL VOL PURGED, WELL VOL PURGED.

PURGING AND SAMPLING EQUIPMENT. Purging and Sampling Equipment... Dedicated: [Y] or [N]. Purging Device: [] A-Submersible Pump, B-Peristaltic Pump, C-QED Bladder Pump, F-Dipper/Bottle. Sampling Device: [] X-Other: [].

WELL DATA. Well Elevation (at TOC), Depth to Water (DTW) (from TOC), Groundwater Elevation (site datum, from TOC), Total Well Depth (from TOC), Stick Up (from ground elevation), Casing ID, Casing Material.

Table for STABILIZATION DATA (Optional) with columns for Sample Time, Rate/Unit, pH, Conductance, Temp, Turbidity, D.O., eH/ORP, DTW.

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State).

Table for FIELD DATA with columns: SAMPLE DATE, pH, CONDUCTANCE, TEMP, TURBIDITY, DO, eH/ORP, Other: TIME.

Sample Appearance: off color / Particulates. Odor: Slight. Color: golden. Other: . Weather Conditions (required daily, or as conditions change): Direction/Speed: N 0. Outlook: Overcast / Rain. Precipitation: Y or [N].

FIELD COMMENTS section with multiple lines for text entry.

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols... Date: 3/8/16 Name: Bradley Beach Signature: [Signature] Company: SCS-FS

GROUNDWATER SAMPLING INSTRUMENT CALIBRATION DOCUMENTATION FORM

	Conductivity	pH4	pH 7	DO	Turbidity	Comments/Exceptions
Date	2/22/16					
Time	1000					
Weather (sky or precip, temp)	cloudy					
Type of Calibration	Standard	Standard	Standard	Standard	Standard	pH 4 cal. failed.
Standard Value	1413 445	4.01	7.00	100% or ~8.5	1000, 10, 0.2 800, 100, 20, <0.1	Went down to = 4.5
Pre-Cal Reading	1370		6.87			then started going back up to 4.95
Post Cal Reading	1413		7.00	8.01	804, 102, 21.2, 0.46	0.84
Discrepancy	pH failed to cal, will use pH pen					
Calib. Successful?	not for pH					
Calibration by	SEB					
Instrument Type, ID	MP20 / YSI 556			MicoTPW / HACH2000		
Calibration Location	OJL					

* If Direct Reading is Unavailable, Assume pressure = 760 mm - 2.5 (altitude in ft/100)

GROUNDWATER SAMPLING INSTRUMENT CALIBRATION DOCUMENTATION FORM

	Conductivity	pH4	pH 7	DO	Turbidity	Comments/Exceptions
Date	2/22/2016					
Time	1000					
Weather (sky or precip, temp)	Cloudy					
Type of Calibration	1 Standard	Standard	Standard	Standard	Standard	
Standard Value	1413 745	4.01	7.00	100% or ~8.5	1000, 10, 0.2 800, 100, 20, <0.1	
Pre-Cal Reading	1409	4.00	7.04			
Post Cal Reading	1413	4.01	7.00	7.43	979.7, 11.50, 0.46	
Discrepancy	No					
Calib. Successful?	Yes					
Calibration by	SDP					
Instrument Type, ID	MP20 / YSI 556			MicoTPW / HACH2000		
Calibration Location	ONSL					

* If Direct Reading is Unavailable, Assume pressure = 760 mm - 2.5 (altitude in ft/100)

GROUNDWATER SAMPLING INSTRUMENT CALIBRATION DOCUMENTATION FORM

	Conductivity	pH4	pH 7	DO	Turbidity	Comments/Exceptions
Date	✓ 23/16					
Time	1230					
Weather (sky or precip, temp)	sunny					
Type of Calibration	Standard	Standard	Standard	Standard	Standard	
Standard Value	1413 445	4.01	7.00	100% or ~8.5	1000, 10, 0.2 800, 100, 20, <0.1	
Pre-Cal Reading	1429	4.39	6.70			
Post Cal Reading	1413		7.00	9.17	792, 101, 2.0, 0.35	
Discrepancy	pH Failed to cal. will use pH pen					
Calib. Successful?						
Calibration by	SEB					
Instrument Type, ID	MP20 / YSI 556			MicoTPW / HACH2000		
Calibration Location	OUSL					

* If Direct Reading is Unavailable, Assume pressure = 760 mm - 2.5 (altitude in ft/100)

GROUNDWATER SAMPLING INSTRUMENT CALIBRATION DOCUMENTATION FORM

	Conductivity	pH4	pH 7	DO	Turbidity	Comments/Exceptions
Date	2/23/16					
Time	12:30					
Weather (sky or precip, temp)	Clear / Sunny					
Type of Calibration	Standard	Standard	Standard	Standard	Standard	
Standard Value	1413 445	4.01	7.00	100% or ~8.5	1000, 10, 0.2 800, 100, 20, <0.1	
Pre-Cal Reading	1500	3.96	6.93		903.5, 6.26, 0.00	
Post Cal Reading	1413	4.01	7.00	8.15		
Discrepancy	NO					
Calib. Successful?	Yes					
Calibration by	SP					
Instrument Type, ID	MP20 / YSI 556			MicoTPW / HACH2000		
Calibration Location	OVS L					

* If Direct Reading is Unavailable, Assume pressure = 760 mm - 2.5 (altitude in ft/100)

GROUNDWATER SAMPLING INSTRUMENT CALIBRATION DOCUMENTATION FORM

	Conductivity	pH4	pH 7	DO	Turbidity	Comments/Exceptions
Date	2/24/16					
Time	300					
Weather (sky or precip, temp)	overcast					
Type of Calibration	Standard	Standard	Standard	Standard	Standard	
Standard Value	1413 445	4.01	7.00	100% or ~8.5	1000, 10, 0.2 800, 100, 20, <0.1	
Pre-Cal Reading	1427	5.00	7.00 ↓			
Post Cal Reading	1413	—	7.00	9.77	881, 99.7, 20.5, 0.94	
Discrepancy	pH 7 seems to cal. better than pH 4. pH 4 failed to cal.					
Calib. Successful?	Not for pH					
Calibration by	SEB					
Instrument Type, ID	MP20 / YSI 556			MicoTPW / HACH2000		
Calibration Location	OUSL					

* If Direct Reading is Unavailable, Assume pressure = 760 mm - 2.5 (altitude in ft/100)

GROUNDWATER SAMPLING INSTRUMENT CALIBRATION DOCUMENTATION FORM

	Conductivity	pH4	pH 7	DO	Turbidity	Comments/Exceptions
Date	2/24/16					
Time	0800					
Weather (sky or precip, temp)	cloudy					
Type of Calibration	Standard	Standard	Standard	Standard	Standard	
Standard Value	1413 445	4.01	7.00	100% or ~8.5	1000, 10, 0.2 800, 100, 20, <0.1	
Pre-Cal Reading	1417	4.04	6.99	8.02	984.1, 7.67, 0.00	
Post Cal Reading	1413	4.01	7.00			
Discrepancy	NO					
Calib. Successful?	Yes					
Calibration by	SDP					
Instrument Type, ID	MP20 / YSI 556			MicoTPW / HACH2000		
Calibration Location	OVS L					

* If Direct Reading is Unavailable, Assume pressure = 760 mm - 2.5 (altitude in ft/100)

SCS ENGINEERS

May 19, 2016
File No. 04204027.19

**Subject: Second Quarter 2016 Compliance Monitoring Event
Olympic View Sanitary Landfill, Kitsap County, Washington**

Sampling Event Dates: 5/16/16 through 5/19/16
Personel: Sam Graber and Matt O'hare

NOTES/SAMPLING DECODING:

- Dedicated pumps were used for purging and sampling all wells.
- Duplicate samples were collected at MW-19C (DUP2) and MW-23A (DUP3).
- Geotech and Solinst water level meters were used to record all water level elevations.
- In addition to the monitoring wells where groundwater was collected for chemical analysis, additional wells were monitored for groundwater level elevations. A summary of measured water levels are included with the field documentation.
- Some vegetation that was blocking access to certain well locations was cleared during this event by SCS Field Services.
- Several well locks need replacement on the site.
- The samples were sent to TestAmerica Denver for analysis at the close of each sampling day, except samples for low level arsenic which were held until the end of the sampling event and provided to Analytical Resources, Inc. in Tukwila, Washington.

Sample Date	Location ID	Sample ID	Comments
5/16/16	MW-43	0516-01	
5/16/16	MW-29A	0516-02	
5/16/16	MW-32	0516-03	
5/16/16	MW-4	0516-04	
5/16/16	MW-42	0516-05	
5/16/16	MW-39	0516-06	
5/16/16	MW-16	0516-07	
5/16/16	MW-13B	0516-08	
5/16/16	MW-35	0516-09	
5/16/16	MW-13A	0516-10	
5/17/16	MW-34C	0516-11	

Sample Date	Location ID	Sample ID	Comments
5/17/16	MW-34A	0516-12	
5/17/16	MW-36A	0516-13	
5/17/16	MW-15R	0516-14	
5/17/16	MW-19C	0516-15	
5/17/16	MW-19C	0516-16	Dup-2
5/17/16	MW-24	0516-17	
5/17/16	MW-23A	0516-18	
5/17/16	MW-23A	0516-19	Dup-3
5/17/16	MW-20	0516-20	
5/17/16	MW-2B1	0516-21	
5/18/16	MW-33A	0516-22	
5/18/16	MW-33C	0516-23	
6/20/2016	LP-LCD	0516-24	

FIELD INFORMATION FORM



Site Name: OVSL
 Site No.:
 Sample Point: MW-43
 Sample ID:

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO
 PURGE DATE: 051616 PURGE TIME: 1040 ELAPSED HRS: 23
 WATER VOL IN CASING: ACTUAL VOL PURGED: WELL VOLs PURGED:
Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: Y or N
 Purging Device: C A-Submersible Pump D-Bailer
 B-Peristaltic Pump E-Piston Pump
 Sampling Device: C C-QED Bladder Pump F-Dipper/Bottle
 X-Other:
 Filter Device: Y or N 0.45 μ or μ (circle or fill in)
 Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other:
 Sample Tube Type: D A-Teflon C-PVC X-Other:
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC): (ft/msl) Depth to Water (DTW) (from TOC): 2418 (ft)
 Groundwater Elevation (site datum, from TOC): (ft/msl)
 Total Well Depth (from TOC): (ft) Stick Up (from ground elevation): (ft)
 Casing ID: (in) Casing Material:
Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)	Sample Time (2400 Hr Clock)	Rate/Unit ml/min	pH* (std)	Conductance (SC/EC) (μmhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
		10:43	300	5.67	44	8.83		1.44	1210
	10:48		4.71	41	8.78		0.37	1318	
	10:51		4.76	41	8.78		0.32	1283	
	10:54		4.73	41	8.78		0.26	1188	
	10:57		3.95	41	8.78	3.52	0.22	1229	
	11:00		3.53	41	8.80		0.19	1241	
	11:03	✓	3.41	41	8.82	3.49	0.18	1245	

Suggested range for 3 consec. readings or note Permit/State requirements: pH +/- 0.2, Conductance 1/- 3%, Temp. --, Turbidity --, D.O. +/- 10%, eH/ORP +/- 25 mV, DTW Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by W/M, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/State. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. **If more fields above are needed, use separate sheet or form.**

FIELD DATA
 SAMPLE DATE (MM DD YY): 051616 pH (std): 3.41 CONDUCTANCE (μmhos/cm @ 25°C): 41 TEMP. (°C): 8.82 TURBIDITY (ntu): 3.49 DO (mg/L - ppm): 0.18 eH/ORP (mV): 1245 Other: fine
 Units: 1103
Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/State).

Sample Appearance: Odor: Color: Other:
 Weather Conditions (required daily, or as conditions change): Direction/Speed: Outlook: overcast Precipitation: Y or N
 Specific Comments (including purge/well volume calculations if required):

FIELD COMMENTS
orange particulates in sample to start. Purged out. downwind from exhaust
*6.30
psi refill discharge
40/10/5

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
5/16/16 Sam Graber SCS
 Date Name Signature Company

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM



Site Name: 051616
 Site No.: Sample Point: 4W-29A
Sample ID

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO
 PURGE DATE: 051616 (MM DD YY)
 PURGE TIME: 1400 (2400 Hr Clock)
 ELAPSED HRS: 1400 (hrs:min)
 WATER VOL IN CASING: (Gallons)
 ACTUAL VOL PURGED: (Gallons)
 WELL VOLS PURGED:

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: Y or N
 Purging Device: C A-Submersible Pump D-Bailer
 Sampling Device: C B-Peristaltic Pump E-Piston Pump
 X-Other: C-QED Bladder Pump F-Dipper/Bottle
 Filter Device: Y or N 0.45 μ or μ (circle or fill in)
 Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other
 Sample Tube Type: D A-Teflon C-PVC X-Other:
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC): (ft/msl) Depth to Water (DTW) (from TOC): 1333 (ft)
 Groundwater Elevation (site datum, from TOC): (ft/msl)
 Total Well Depth (from TOC): (ft) Stick Up (from ground elevation): (ft)
 Casing ID: (in) Casing Material:
Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)	Sample Time (2400 Hr Clock)	Rate/Unit (nl/min)	pH (std) *	Conductance (SC/EC) (μmhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
		<u>14:05</u>	<u>300</u>	<u>5.015</u>	<u>82</u>	<u>8.72</u>		<u>0.96</u>	<u>54.1</u>
	<u>14:10</u>		<u>4.52</u>	<u>83</u>	<u>8.77</u>		<u>0.31</u>	<u>169.5</u>	
	<u>14:13</u>		<u>4.50</u>	<u>85</u>	<u>8.77</u>	<u>19.12</u>	<u>0.23</u>	<u>168.5</u>	
	<u>14:16</u>		<u>4.46</u>	<u>83</u>	<u>8.76</u>	<u>13.41</u>	<u>0.18</u>	<u>166.8</u>	
	<u>14:19</u>		<u>4.43</u>	<u>85</u>	<u>8.75</u>		<u>0.17</u>	<u>166.1</u>	
	<u>14:22</u>		<u>4.40</u>	<u>84</u>	<u>8.74</u>		<u>0.16</u>	<u>165.7</u>	
	<u>14:25</u>		<u>4.40</u>	<u>84</u>	<u>8.75</u>	<u>12.44</u>	<u>0.15</u>	<u>165.4</u>	

Suggested range for 3 consec. readings or note Permit/State requirements: pH +/- 0.2, Conductance +/- 3%, Temp. --, Turbidity --, D.O. +/- 10%, eH/ORP +/- 25 mV, DTW Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA
 SAMPLE DATE (MM DD YY): 051616 pH (std): 4.40
 CONDUCTANCE (umhos/cm @ 25°C): 84 TEMP. (°C): 8.73
 TURBIDITY (ntu): 2.44 DO (mg/L-ppm): 0.15
 eH/ORP (mV): 65.4 Other: 1425 Units

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: clear Odor: Color: Other:
 Weather Conditions (required daily, or as conditions change): Direction/Speed: Outlook: overcast Precipitation: Y or N
 Specific Comments (including purge/well volume calculations if required):

FIELD COMMENTS
orange water at first, purged till clear
*6.49

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
5.16.16 Sam Corater SCS
 Date Name Signature Company

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM



Site Name: OSL
 Site No.:
 Sample Point: MW-32
 Sample ID:

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e., with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO
 PURGE DATE: 05/16/16 (MM DD YY)
 PURGE TIME: 1305 (2400 Hr Clock)
 ELAPSED HRS: (hrs:min)
 WATER VOL IN CASING: (Gallons)
 ACTUAL VOL PURGED: (Gallons)
 WELL VOLS PURGED:

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: Y or N
 Purging Device: C A-Submersible Pump D-Bailer
 B-Peristaltic Pump E-Piston Pump
 Sampling Device: C C-QED Bladder Pump F-Dipper/Bottle
 X-Other:
 Filter Device: Y or N | 0.45 µ or µ (circle or fill in)
 Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other
 Sample Tube Type: D A-Teflon C-PVC X-Other:
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC): (ftmsl)
 Depth to Water (DTW) (from TOC): 132 (ft)
 Groundwater Elevation (site datum, from TOC): (ftmsl)
 Total Well Depth (from TOC): (ft)
 Stick Up (from ground elevation): (ft)
 Casing ID: (in) Casing Material:

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

Sample Time (2400 Hr Clock)	Rate/Unit (ml/min)	pH (std) *	Conductance (SC/EC) (µmhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
13:07	300	5.14	241	12.23		2.35	89.0	
13:12		5.05	233	12.11		0.52	62.8	
13:15		5.08	237	12.10	16.43	0.33	53.4	
13:18		5.10	236	12.12		0.23	45.5	
13:21		5.09	236	12.11		0.19	41.2	
13:24		5.08	236	12.12		0.16	38.8	
13:27	↓	5.08	235	12.13	12.87	0.15	37.5	

Suggested range for 3 consec. readings or note Permit/State requirements: pH +/- 0.2, Conductance +/- 3%, Temp. --, Turbidity --, D.O. +/- 10%, eH/ORP +/- 25 mV, DTW Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA
 SAMPLE DATE (MM DD YY): 05/16/16
 pH (std) *: 5.08
 CONDUCTANCE (µmhos/cm @ 25°C): 235
 TEMP. (°C): 12.13
 TURBIDITY (ntu): 2.87
 DO (mg/L - ppm): 0.15
 eH/ORP (mV):
 Other: fine
 Units: 1327

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: Odor: Color: Other:
 Weather Conditions (required daily, or as conditions change): Direction/Speed: Outlook: Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required):
 * pH possibly off
6.96

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
5/16/16 Sam Gratsar SCS
 Date Name Signature Company

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM



Site Name: 0VSL
 Site No.:
 Sample Point: MW-4
Sample ID

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO
 PURGE DATE: 051616 (MM DD YY)
 PURGE TIME: 1142 (2400 Hr Clock)
 ELAPSED HRS: 123 (hrs:min)
 WATER VOL IN CASING: (Gallons)
 ACTUAL VOL PURGED: (Gallons)
 WELL VOL PURGED:

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: or N
 Purging Device: C A-Submersible Pump D-Bailer
 B-Peristaltic Pump E-Piston Pump
 Sampling Device: C C-QED Bladder Pump F-Dipper/Bottle
 X-Other:
 Filter Device: or N 0.45 μ or μ (circle or fill in)
 Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other:
 Sample Tube Type: D A-Teflon C-PVC X-Other:
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC): (ft/msl)
 Depth to Water (DTW) (from TOC): 13.45 (ft)
 Groundwater Elevation (site datum, from TOC): (ft/msl)
 Total Well Depth (from TOC): (ft)
 Stick Up (from ground elevation): (ft)
 Casing ID: (in)
 Casing Material: PVC

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)	Sample Time (2400 Hr Clock)	Rate/Unit <u>AL/min</u>	pH (std)	Conductance (SC/EC) (μ mhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
		<u>11:45</u>	<u>300</u>	<u>4.50</u>	<u>1122</u>	<u>10.14</u>		<u>1.67</u>	<u>133.1</u>
	<u>11:50</u>		<u>4.33</u>	<u>1135</u>	<u>9.73</u>		<u>0.33</u>	<u>137.0</u>	
	<u>11:53</u>		<u>4.36</u>	<u>1135</u>	<u>9.72</u>	<u>3.85</u>	<u>0.24</u>	<u>132.6</u>	
	<u>11:56</u>		<u>4.45</u>	<u>1135</u>	<u>9.72</u>		<u>0.19</u>	<u>127.9</u>	
	<u>11:59</u>		<u>4.49</u>	<u>1135</u>	<u>9.71</u>		<u>0.17</u>	<u>126.1</u>	
	<u>12:02</u>		<u>4.50</u>	<u>1135</u>	<u>9.70</u>		<u>0.15</u>	<u>124.9</u>	
	<u>12:05</u>	<input checked="" type="checkbox"/>	<u>4.52</u>	<u>1135</u>	<u>9.69</u>	<u>1.65</u>	<u>0.14</u>	<u>124.4</u>	

Suggested range for 3 consec. readings or note Permit/State requirements: pH +/- 0.2, Conductance +/- 3%, D.O. +/- 10%, eH/ORP +/- 25 mV, Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA
 SAMPLE DATE (MM DD YY): 051616
 pH (std): 4.52
 CONDUCTANCE (μ mhos/cm @ 25°C): 1135
 TEMP. (°C): 9.69
 TURBIDITY (ntu): 1.65
 DO (mg/L - ppm): 0.14
 eH/ORP (mV): 124.4
 Other: 1205

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: Odor: Color: clear Other:
 Weather Conditions (required daily, or as conditions change): Direction/Speed: Outlook: overcast Precipitation: Y or N
 Specific Comments (including purge/well volume calculations if required):

FIELD COMMENTS
black particulates in sample
*6.65

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
5, 16, 16 Sam Graber SCS
 Date Name Signature Company

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM



Site Name: 05C
 Site No.: Sample Point: MW-42
Sample ID

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO
 PURGE DATE: 051616 PURGE TIME: 1455 ELAPSED HRS:
(MM DD YY) (2400 Hr Clock) (hrs:min)
 WATER VOL IN CASING: ACTUAL VOL PURGED: WELL VOLS PURGED:
(Gallons) (Gallons)

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: Y or N
 Filter Device: Y or N 0.45 μ or μ (circle or fill in)
 Purging Device: C A-Submersible Pump D-Bailer
 B-Peristaltic Pump E-Piston Pump
 Sampling Device: C C-QED Bladder Pump F-Dipper/Bottle
 Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other
 X-Other: Sample Tube Type: D A-Teflon C-PVC X-Other:
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC): (ft/msl) Depth to Water (DTW) (from TOC): 2722 (ft) Groundwater Elevation (site datum, from TOC): (ft/msl)
 Total Well Depth (from TOC): (ft) Stick Up (from ground elevation): (ft) Casing ID: (in) Casing Material:
Note: Total Well Depth, Stick Up, Casing Id. etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

Sample Time (2400 Hr Clock)	Rate/Unit (ml/min)	pH (std)	Conductance (SC/EC) (μmhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
14:58	300	4.81	501	11.91		1.64	1.6	
15:03		4.73	537	11.83	30.8	0.32	-116.1	
15:06		4.77	539	11.81		0.25	-119.5	
15:09		4.78	541	11.82	11.3	0.22	-121.9	
15:12		4.82	541	11.81		0.16	-124.6	
15:15		4.84	541	11.79	6.48	0.15	-125.4	
15:18		4.85	539	11.80	4.69	0.14	-126.3	

Suggested range for 3 consec. readings or note Permit/State requirements: pH ±0.2, Conductance 1/-3%, Temp. --, Turbidity --, D.O. +/- 10%, eH/ORP +/- 25 mV, DTW Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA
 SAMPLE DATE (MM DD YY): 051616 pH (std): 4.85 CONDUCTANCE (umhos/cm @ 25°C): 539 TEMP. (°C): 11.80 TURBIDITY (ntu): 4.69 DO (mg/L-ppm): 0.14 eH/ORP (mV): -263 Other: Time
Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: Odor: Color: Other:
 Weather Conditions (required daily, or as conditions change): Direction/Speed: Outlook: Precipitation: Y or N
 Specific Comments (including purge/well volume calculations if required):

FIELD COMMENTS
Slight orange particulates at beginning.
* pH pen final reading = 6.4

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
5, 16, 16 Sam Graber A SCS
Date Name Signature Company

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM



Site Name: CVSL
 Site No.: Sample Point: MW-39
 Sample ID

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID: _____

PURGE INFO
 PURGE DATE: 05/16/16 PURGE TIME: 13:52 ELAPSED HRS: 06:05
 WATER VOL IN CASING: _____ ACTUAL VOL PURGED: _____ WELL VOLs PURGED: _____
(MM DD YY) (2400 Hr Clock) (hrs:min) (Gallons) (Gallons)
 Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: Y or N
 Filter Device: Y or N 0.45 µ or _____ µ (circle or fill in)
 Purging Device: A-Submersible Pump D-Bailer
 Filter Type: A In-line Disposable C-Vacuum
 B-Peristaltic Pump E-Piston Pump B-Pressure X-Other _____
 Sampling Device: A C-QED Bladder Pump F-Dipper/Bottle
 X-Other: _____ Sample Tube Type: C
 A-Teflon C-PVC X-Other: _____
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC): _____ (ft/msl) Depth to Water (DTW) (from TOC): 11898 (ft) Groundwater Elevation (site datum, from TOC): _____ (ft/msl)
 Total Well Depth (from TOC): _____ (ft) Stick Up (from ground elevation): _____ (ft) Casing ID: _____ (in) Casing Material: _____
 Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (µmhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
13:57	250 1"	5.99 1"	260	1035	1.1	0.85	-101	19.10
14:02	↓ 2"	6.01 2"	262	1050	1.4	0.35	-114	19.05
14:07	↓ 3"	6.02 3"	266	1029	2.8	0.29	-97	19.03
14:12	↓ 4"	6.02 4"	264	1030	2.1	0.25	-187	19.03

Suggested range for 3 consec. readings or note Permit/State requirements: pH: ±0.2, Conductance: 1-3%, Temp: ±0.5, Turbidity: ±10%, eH/ORP: ±25 mV, DTW: Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA
 SAMPLE DATE (MM DD YY): 05/16/16 pH (std): 6.02 CONDUCTANCE (µmhos/cm @ 25°C): 264 TEMP. (°C): 10.30
 TURBIDITY (ntu): 2.1 DO (mg/L - ppm): 0.25 eH/ORP (mV): -187 Other: 1412
Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: clear Odor: None Color: clear Other: _____
 Weather Conditions (required daily, or as conditions change): _____ Direction/Speed: _____ Outlook: overcast Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required):
Locked & Functioning

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
S.16.16 Matthew [Signature] SCS Engineers
 Date Name Signature Company

FIELD INFORMATION FORM



Site Name: 0VSL
 Site No.:
 Sample Point: MW-116
 Sample ID

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID: _____

PURGE INFO
 PURGE DATE: 05/16/16 PURGE TIME: 12:58 ELAPSED HRS: 00:57
 WATER VOL IN CASING: ACTUAL VOL PURGED: WELL VOLS PURGED:
(MM DD YY) (2400 Hr Clock) (hrs:min) (Gallons) (Gallons)

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: Y or N
 Purging Device: A A-Submersible Pump D-Bailer
 B-Peristaltic Pump E-Piston Pump
 Sampling Device: A C-QED Bladder Pump F-Dipper/Bottle
 X-Other: _____
 Filter Device: A or N 0.45 μ or _____ μ (circle or fill in)
 Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other _____
 Sample Tube Type: C A-Teflon C-PVC X-Other: _____
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC): (ft/msl) Depth to Water (DTW) (from TOC): 5191 (ft)
 Groundwater Elevation (site datum, from TOC): (ft/msl)
 Total Well Depth (from TOC): (ft) Stick Up (from ground elevation): (ft)
 Casing ID: (in) Casing Material:
Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)	Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (μ mhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
		<u>13:03</u>	<u>250</u>	<u>6.35</u>	<u>106</u>	<u>9.49</u>	<u>9.6</u>	<u>5.22</u>	<u>180</u>
	<u>13:08</u>	<u> </u>	<u>6.15</u>	<u>103</u>	<u>9.40</u>	<u>6.6</u>	<u>6.22</u>	<u>183</u>	<u>52.00</u>
	<u>13:13</u>	<u> </u>	<u>6.11</u>	<u>102</u>	<u>9.37</u>	<u>5.1</u>	<u>6.37</u>	<u>186</u>	<u>52.00</u>
	<u>13:18</u>	<u> </u>	<u>6.11</u>	<u>102</u>	<u>9.38</u>	<u>4.2</u>	<u>6.32</u>	<u>187</u>	<u>52.00</u>
	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>

Suggested range for 3 consec. readings or note Permit/State requirements: pH +/- 0.2, Conductance 1/- 3%, Temp. --, Turbidity --, D.O. +/- 10%, eH/ORP +/- 25 mV, DTW Stabilize
Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. **If more fields above are needed, use separate sheet or form.**

FIELD DATA
 SAMPLE DATE (MM DD YY): 05/16/16 pH (std): 6.11 CONDUCTANCE (μ mhos/cm @ 25°C): 102 TEMP. (°C): 9.38 TURBIDITY (ntu): 4.2 DO (mg/L - ppm): 6.32 eH/ORP (mV): 187 Other: Final Units: Final
Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: Clear Odor: None Color: Clear Other: _____
 Weather Conditions (required daily, or as conditions change): _____ Direction/Speed: - Outlook: Overcast Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required):
Needs lock mechanism replaced -> chain?

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
S. 16.16 Matt O'Hare MATA SCS Engineers
 Date Name Signature Company

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample. YELLOW - Returned to Client. PINK - Field Copy

FIELD INFORMATION FORM



Site Name: OU5L
 Site No.:
 Sample Point: MW-113B
 Sample ID:

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO
 PURGE DATE: 05/16/16 PURGE TIME: 11:55 ELAPSED HRS: 00:05
 WATER VOL IN CASING: ACTUAL VOL PURGED: WELL VOLS PURGED:

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment: Dedicated: (Y) or (N) Filter Device: (Y) or (N) 0.45 μ or μ (circle or fill in)
 Purging Device: A A-Submersible Pump D-Bailer Filter Type: A A-In-line Disposable C-Vacuum
 Sampling Device: A B-Peristaltic Pump E-Piston Pump B-Pressure X-Other:
 X-Other: C-QED Bladder Pump F-Dipper/Bottle Sample Tube Type: C A-Teflon C-PVC X-Other:
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC): (ft/msl) Depth to Water (DTW) (from TOC): 57.79 (ft) Groundwater Elevation (site datum, from TOC): (ft/msl)
 Total Well Depth (from TOC): (ft) Stick Up (from ground elevation): (ft) Casing ID: (in) Casing Material:
Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)	Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (μ mhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
		<u>12:00</u>	<u>250</u>	<u>6.62</u>	<u>169</u>	<u>10.04</u>	<u>6.7</u>	<u>5.75</u>	<u>165</u>
	<u>12:05</u>	<u>1</u>	<u>6.89</u>	<u>169</u>	<u>9.94</u>	<u>4.9</u>	<u>6.16</u>	<u>155</u>	<u>57.80</u>
	<u>12:08</u>	<u>1</u>	<u>7.18</u>	<u>169</u>	<u>9.92</u>	<u>5.0</u>	<u>6.28</u>	<u>149</u>	<u>57.80</u>
	<u>12:12</u>	<u>1</u>	<u>7.29</u>	<u>168</u>	<u>9.92</u>	<u>3.3</u>	<u>6.26</u>	<u>146</u>	<u>57.80</u>
	<u>12:15</u>	<u>1</u>	<u>7.31</u>	<u>168</u>	<u>9.93</u>	<u>4.3</u>	<u>6.28</u>	<u>144</u>	<u>57.80</u>

Suggested range for 3 consec. readings or note Permit/State requirements: pH +/- 0.2, Conductance 1/- 3%, Temp. --, Turbidity --, D.O. +/- 10%, eH/ORP +/- 25 mV, DTW Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA
 SAMPLE DATE (MM DD YY): 05/16/16 pH (std): 7.31 CONDUCTANCE (μ mhos/cm @ 25°C): 168 TEMP. (°C): 9.93 TURBIDITY (ntu): 4.3 DO (mg/L - ppm): 6.28 eH/ORP (mV): 144 Other: 1215
Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: Clear Odor: None Color: Clear Other:
 Weather Conditions (required daily, or as conditions change): Direction/Speed: None Outlook: Overcast Precipitation: Y or (N)

FIELD COMMENTS
Lock Needs Replacement

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
5.16.16 M. J. O'Hare [Signature] SCS Engineers
 Date Name Signature Company

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM



Site Name: DUCL
 Site No.:
 Sample Point: MW-35T
Sample ID

This Waste Management Field Information Form is Required.
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO

<u>05/16/16</u>	<u>11:25</u>	<u>00:05</u>			
PURGE DATE <small>(MM DD YY)</small>	PURGE TIME <small>(2400 Hr Clock)</small>	ELAPSED HRS <small>(hrs:min)</small>	WATER VOL IN CASING <small>(Gallons)</small>	ACTUAL VOL PURGED <small>(Gallons)</small>	WELL VOLs PURGED

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vol Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment... Dedicated: Y or N

Filter Device: Y or N | 0.45 µ | or | µ (circle or fill in)

Purging Device: A | A-Submersible Pump | D-Bailer
 B-Peristaltic Pump | E-Piston Pump
 Sampling Device: A | C-QED Bladder Pump | F-Dipper/Bottle

Filter Type: A | B-Pressure | X-Other _____

X-Other: _____ | Sample Tube Type: C | A-Teflon | C-PVC | X-Other: _____
 B-Stainless Steel | D-Polypropylene

WELL DATA

Well Elevation (at TOC) (ft/MSL)	Depth to Water (DTW) (from TOC) <u>71</u> <u>40</u> (ft)	Groundwater Elevation (site datum, from TOC) (ft/MSL)
Total Well Depth (from TOC) (ft)	Stick Up (from ground elevation) (ft)	Casing ID (in) Casing Material

Note: Total Well Depth, Stick Up, Casing Id. etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (µmhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L-ppm)	eH/ORP (mV)	DTW (ft)
<u>10:30</u>	<u>300</u>	<u>6.48</u>	<u>156</u>	<u>20.30</u>	<u>4.7</u>	<u>6.15</u>	<u>197</u>	<u>71.48</u>
<u>10:35</u>	<u>275</u>	<u>6.82</u>	<u>156</u>	<u>10.14</u>	<u>4.2</u>	<u>6.06</u>	<u>183</u>	<u>71.48</u>
<u>10:40</u>	<u>↓</u>	<u>6.90</u>	<u>156</u>	<u>10.12</u>	<u>3.6</u>	<u>6.05</u>	<u>178</u>	<u>71.48</u>
<u>10:43</u>	<u>↓</u>	<u>6.94</u>	<u>156</u>	<u>10.11</u>	<u>4.1</u>	<u>6.03</u>	<u>177</u>	<u>71.48</u>
<u>10:46</u>	<u>↓</u>	<u>6.95</u>	<u>156</u>	<u>10.12</u>	<u>4.7</u>	<u>6.05</u>	<u>175</u>	<u>71.48</u>

Suggested range for 3 consec. readings or note Permit/State requirements: pH +/- 0.2 | Conductance +/- 3% | Temp. -- | Turbidity -- | DO +/- 10% | eH/ORP +/- 25 mV | Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (umhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: <u>Time</u> Units
<u>05/16/16</u>	<u>6.95</u>	<u>156</u>	<u>10.12</u>	<u>4.7</u>	<u>6.05</u>	<u>175</u>	<u>7046</u>

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: Clear | Odor: None | Color: None | Other: _____
 Weather Conditions (required daily, or as conditions change): _____ | Direction/Speed: None | Outlook: Dazzle | Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required):
Well locked Key #2

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
5.16.16 Math O'Hare [Signature] SCS Engineers.

 Date Name Signature Company

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM



Site Name: 052

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID: _____

Site No.: _____
 Sample Point: MW-13A
 Sample ID

PURGE INFO

<u>05/16/16</u>	<u>11:14</u>	<u>00:05</u>			
PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs:min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)	WELL VOLS PURGED

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment... Dedicated: Y or N

Filter Device: Y or N 0.45 μ or _____ μ (circle or fill in)

Purging Device: A-Submersible Pump D-Bailer
 B-Peristaltic Pump E-Piston Pump

Filter Type: A-In-line Disposable C-Vacuum
 B-Pressure X-Other _____

Sampling Device: A C-QED Bladder Pump F-Dipper/Bottle

Sample Tube Type: C A-Teflon C-PVC X-Other: _____
 B-Stainless Steel D-Polypropylene

WELL DATA

Well Elevation (at TOC) _____ (ft/mst) Depth to Water (DTW) (from TOC) 54.04 (m) Groundwater Elevation (site datum, from TOC) _____ (ft/mst)

Total Well Depth _____ (ft) Stick Up _____ (m) Casing ID _____ (in) Casing Material _____

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (μ mhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
<u>11:19</u>	<u>250</u> 1 st	<u>6.76</u> 1 st	<u>170</u>	<u>9.84</u>	<u>3.2</u>	<u>5.94</u>	<u>171</u>	<u>54.04</u>
<u>11:24</u>	<u>1</u> 2 nd	<u>6.86</u> 2 nd	<u>169</u>	<u>9.78</u>	<u>2.0</u>	<u>5.97</u>	<u>168</u>	<u>54.09</u>
<u>11:29</u>	<u>1</u> 3 rd	<u>6.87</u> 3 rd	<u>169</u>	<u>9.77</u>	<u>1.4</u>	<u>5.95</u>	<u>166</u>	<u>54.09</u>
<u>11:34</u>	<u>1</u> 4 th	<u>6.87</u> 4 th	<u>169</u>	<u>9.77</u>	<u>1.5</u>	<u>5.92</u>	<u>164</u>	<u>54.09</u>

Suggested range for 3 consec. readings or note Permit/State requirements:

- pH: ± 0.2
- Conductance: $\pm 3\%$
- Temp: ± 0.2
- Turbidity: $\pm 10\%$
- eH/ORP: ± 25 mV
- DTW: Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. **If more fields above are needed, use separate sheet or form.**

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (μ mhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L - ppm)	eH/ORP (mV)	Other: <u>1134</u>
<u>05/16/16</u>	<u>6.87</u>	<u>169</u>	<u>9.77</u>	<u>1.5</u>	<u>5.92</u>	<u>164</u>	<u>1134</u>

Final Field Readings are required (i.e. record field measurements; final stabilized readings; passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: Clear Odor: None Color: None Other: _____

Weather Conditions (required daily, or as conditions change): _____ Direction/Speed: None Outlook: Overcast Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required):

Lock Needs Replacement

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

5/16/16 Matt O'Hare MAR SES Engineers

Date Name Signature Company

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM



Site Name: DUSE
 Site No.: [] [] [] [] [] [] [] [] [] [] [] []

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory (Use Only/Lab ID: [] [] [] [] [] [] [] [] [] [] [] []

PURGE INFO

PURGE DATE (MM DD YY): 05/17/16 PURGE TIME (2400 Hr Clock): LD140 ELAPSED HRS (hrs:min): 00:05 WATER VOL IN CASING (Gallons): [] [] [] [] [] [] [] [] [] [] [] []
 ACTUAL VOL PURGED (Gallons): [] [] [] [] [] [] [] [] [] [] [] []
 WELL VOLs PURGED: [] [] [] [] [] [] [] [] [] [] [] []

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment... Dedicated: Y or N Filter Device: Y or N 0.45 µ or [] µ (circle or fill in)

Purging Device: A-Submersible Pump D-Bailer Filter Type: A A-In-line Disposable C-Vacuum
 B-Peristaltic Pump E-Piston Pump B-Pressure X-Other _____
 C-QED Bladder Pump F-Dipper/Bottle A-Teflon C-PVC X-Other: _____
 X-Other: _____ Sample Tube Type: _____ B-Stainless Steel D-Polypropylene

WELL DATA

Well Elevation (at TOC) [] [] [] [] [] [] (ft/msl) Depth to Water (DTW) (from TOC) 4130 (ft) Groundwater Elevation (site datum, from TOC) [] [] [] [] [] [] (ft/msl)

Total Well Depth (from TOC) [] [] [] [] [] [] (ft) Stick Up (from ground elevation) [] [] [] [] [] [] (ft) Casing ID [] [] (in) Casing Material [] [] [] [] [] []

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (µmhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
10:55	250 1 st	6.40	234	13.17	302.4	4.40	-13	40.13
11:00	1 2 nd	6.42	234	13.26	240.6	0.44	-14	40.15
11:05	↓ 3 rd	6.43	235	13.31	133.0	0.36	-20	40.15
11:10	4 th	6.44	234	13.34	128.1	0.33	-22	40.15

Suggested range for 3 consec. readings or note Permit/State requirements: pH: ±0.2 Conductance: 1/- 3% Temp: -- Turbidity: -- D.O.: ±10% eH/ORP: ±25 mV DTW: Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (µmhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L - ppm)	eH/ORP (mV)	Other: <u>Time</u>
05/17/16	6.44	234	13.34	128.1	0.33	-22	1110

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: _____ Odor: _____ Color: _____ Other: _____
 Weather Conditions (required daily, or as conditions change): _____ Direction/Speed: _____ Outlook: _____ Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required):
Extended purge due to high turbidity >1100
lock Needs Replacement

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
5.17.16 Sam Grabsar _____ SCS
 Date Name Signature Company

FIELD INFORMATION FORM



Site Name: QVSC
 Site No.:
 No.:

Sample Point: MW-34A
 Sample ID:

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO
 PURGE DATE: 05/17/16 PURGE TIME: 11:35 ELAPSED HRS: 01:05
 (MM DD YY) (2400 Hr Clock) (hrs:min)
 WATER VOL IN CASING: ACTUAL VOL PURGED: WELL VOLS PURGED:
 (Gallons) (Gallons)

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: Y or N
 Purging Device: A A-Submersible Pump D-Bailer
 B-Peristaltic Pump E-Piston Pump
 Sampling Device: A C-QED Bladder Pump F-Dipper/Bottle
 X-Other:
 Filter Device: Y or N 0.45 μ or μ (circle or fill in)
 Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other
 A-Teflon C-PVC X-Other:
 B-Stainless Steel D-Polypropylene
 Sample Tube Type:

WELL DATA
 Well Elevation (at TOC): (ft/msl) Depth to Water (DTW) (from TOC): 3897 (ft) Groundwater Elevation (site datum, from TOC): (ft/msl)
 Total Well Depth (from TOC): (ft) Stick Up (from ground elevation): (ft) Casing ID: (in) Casing Material:
 Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (μmhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
11:40	290	5.76	114	12.87	2.8	5.81	144	3899
11:45	↓	5.72	115	12.64	2.7	5.77	153	3899
11:50	↓	5.71	115	12.69	3.1	5.69	163	3899
11:55		5.74	116	12.65	2.9	5.55	168	3899
:								
:								
:								
:								
:								
:								

Suggested range for 3 consec. readings or note Permit/State requirements:
 pH: ± 0.2 Conductance: 1/- 3% Temp: -- Turbidity: -- D.O.: +/- 10% eH/ORP: +/- 25 mV DTW: Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA
 SAMPLE DATE (MM DD YY): 05/17/16 pH (std): 5.74 CONDUCTANCE (umhos/cm @ 25°C): 116 TEMP. (°C): 12.65 TURBIDITY (ntu): 2.9 DO (mg/L - ppm): 5.55 eH/ORP (mV): 168 Other: Final
 Units:

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: Clear Odor: None Color: Clear Other:
 Weather Conditions (required daily, or as conditions change): Direction/Speed: Outlook: Precipitation: Y or N

FIELD COMMENTS
 Specific Comments (including purge/well volume calculations if required):
MW-34B - 39.75 DTW
Needs lock replacement

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
5/17/16 Matt O'Hara SS Physics
 Date Name Signature Company

FIELD INFORMATION FORM



Site Name: OU5C
 Site No.:

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e., with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO
 PURGE DATE: 05/17/16 (MM DD YY)
 PURGE TIME: 09:44 (2400 Hr Clock)
 ELAPSED HRS: 00:05 (hrs:min)
 WATER VOL IN CASING: (Gallons)
 ACTUAL VOL PURGED: (Gallons)
 WELL VOLs PURGED:

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: Y or N
 Purging Device: A A-Submersible Pump D-Bailer
 Sampling Device: A B-Peristaltic Pump E-Piston Pump
 X-Other: C-QED Bladder Pump F-Dipper/Bottle
 Filter Device: Y or N 0.45 μ or μ (circle or fill in)
 Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other
 Sample Tube Type: A-Teflon C-PVC X-Other:
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC): (ft/msl)
 Depth to Water (DTW) (from TOC): 3105 (ft)
 Groundwater Elevation (site datum, from TOC): (ft/msl)
 Total Well Depth (from TOC): (ft)
 Stick Up (from ground elevation): (ft)
 Casing ID: (in)
 Casing Material:

Note: Total Well Depth, Stick Up, Casing ID, etc., are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)	Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (μ mhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
		<u>09:49</u>	<u>250</u>	<u>5.97</u>	<u>146</u>	<u>9.66</u>	<u>05</u>	<u>2.00</u>	<u>168</u>
	<u>09:54</u>	<u>1</u>	<u>5.90</u>	<u>148</u>	<u>9.67</u>	<u>1.1</u>	<u>1.63</u>	<u>173</u>	<u>31.08</u>
	<u>09:59</u>	<u>1</u>	<u>5.87</u>	<u>147</u>	<u>9.65</u>	<u>1.5</u>	<u>1.59</u>	<u>176</u>	<u>31.08</u>
	<u>10:04</u>	<u>1</u>	<u>5.88</u>	<u>146</u>	<u>9.66</u>	<u>1.6</u>	<u>1.58</u>	<u>177</u>	<u>31.08</u>

Suggested range for 3 consec. readings or note Permit/State requirements: pH \pm 0.2, Conductance \pm 3%, DO \pm 10%, eH/ORP \pm 25 mV, Stabilize

Stabilization Data Fields are Optional (i.e., complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. **If more fields above are needed, use separate sheet or form.**

FIELD DATA
 SAMPLE DATE (MM DD YY): 05/17/16
 pH (std): 5.88
 CONDUCTANCE (μ mhos/cm @ 25°C): 146
 TEMP. (°C): 9.66
 TURBIDITY (ntu): 1.6
 DO (mg/L - ppm): 1.58
 eH/ORP (mV): 177
 Other: 1004 Units

Final Field Readings are required (i.e., record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: Clear Odor: None Color: Clear Other:
 Weather Conditions (required daily, or as conditions change): Direction/Speed: Outlook: Sunny Precipitation: Y or N
 Specific Comments (including purge/well volume calculations if required):

FIELD COMMENTS
Mw-36 - 31.14
Well Locked

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
05.17.16 Matthew O'Hare WTR S&S Engineers
 Date Name Signature Company

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM



Site Name: Dux

This Waste Management Field Information Form is Required

This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e., with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID: _____

Site No.: [] [] [] []

Sample Point: MW-11 STR

Sample ID

PURGE INFO	<u>051716</u>	<u>0910</u>	<u>01015</u>	[] [] [] []	[] [] [] []	[] [] [] []
	PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs:min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)	WELL VOLs PURGED

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGING AND SAMPLING EQUIPMENT ... Dedicated: Y or N

Purging Device: A A-Submersible Pump D-Bailer
 B B-Peristaltic Pump E-Piston Pump
 C C-QED Bladder Pump F-Dipper/Bottle

Filter Device: Y or N 0.45 µ or _____ µ (circle or fill in)

Filter Type: A A-In-line Disposable C-Vacuum
 B B-Pressure X-Other _____

Sampling Device: A
 X-Other: _____

Sample Tube Type: C A-Teflon C-PVC X-Other: _____
 B B-Stainless Steel D-Polypropylene

WELL DATA

Well Elevation (at TOC) [] [] [] [] (ft/msl) Depth to Water (DTW) (from TOC) 11819 (ft)

Total Well Depth (from TOC) [] [] [] [] (ft) Stick Up (from ground elevation) [] [] [] [] (ft)

Groundwater Elevation (site datum, from TOC) [] [] [] [] (ft/msl)

Casing ID [] [] (in) Casing Material [] [] [] []

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)	Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (µmhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
		<u>09:05</u>	<u>250</u>	<u>6.10</u>	<u>159</u>	<u>10.53</u>	<u>3.8</u>	<u>0.64</u>	<u>159</u>
	<u>09:10</u>	<u>1</u>	<u>6.25</u>	<u>157</u>	<u>10.52</u>	<u>1.9</u>	<u>0.35</u>	<u>152</u>	<u>1820</u>
	<u>09:15</u>	<u>1</u>	<u>6.28</u>	<u>157</u>	<u>10.53</u>	<u>2.0</u>	<u>0.30</u>	<u>148</u>	<u>1820</u>
	<u>09:20</u>	<u>1</u>	<u>6.32</u>	<u>157</u>	<u>10.52</u>	<u>1.7</u>	<u>0.28</u>	<u>146</u>	<u>1820</u>

Suggested range for 3 consec. readings or note Permit/State requirements: pH +/- 0.2, Conductance +/- 3%, D.O. +/- 10%, eH/ORP +/- 25 mV, DTW Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA	SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (µmhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L - ppm)	eH/ORP (mV)	Other: <u>Time</u> Units
	<u>051716</u>	<u>6.32</u>	<u>157</u>	<u>10.52</u>	<u>1.7</u>	<u>0.28</u>	<u>146</u>	<u>0920</u>

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: Clear Odor: None Color: Clear Other: _____

Weather Conditions (required daily, or as conditions change): _____ Direction/Speed: _____ Outlook: Sunny Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required): _____

FIELD COMMENTS

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

5/17/16 Matt O'Hare [Signature] SCS Engineers

Date Name Signature Company

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample. YELLOW - Returned to Client. PINK - Field Copy

FIELD INFORMATION FORM



Site Name: QVSC
 Site No.:
 Sample Point: MW-19C
 Sample ID:

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO
 PURGE DATE (MM DD YY): 05/17/16
 PURGE TIME (2400 Hr Clock): 14:36
 ELAPSED HRS (hrs:min): 00:05
 WATER VOL IN CASING (Gallons):
 ACTUAL VOL PURGED (Gallons):
 WELL VOLS PURGED:

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: Y N
 Purging Device: A A-Submersible Pump D-Bailer
 Sampling Device: A B-Peristaltic Pump E-Piston Pump
 X-Other: C-QED Bladder Pump F-Dipper/Bottle
 Filter Device: A Y or N 0.45 μ or μ (circle or fill in)
 Filter Type: A A-In-line Disposable C-Vacuum
 X-Other: B-Pressure
 Sample Tube Type: A-Teflon C-PVC X-Other:
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC): (ft/msl)
 Depth to Water (DTW) (from TOC): 32.89 (ft)
 Groundwater Elevation (site datum, from TOC): (ft/msl)
 Total Well Depth (from TOC): (ft)
 Stick Up (from ground elevation): (ft)
 Casing ID: (in)
 Casing Material:

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (umhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
14:41	250	6.57	132	11.18	19.6	1.05	39	32.91
14:46	↓	6.66	134	11.02	7.3	0.35	4	32.90
14:51	↓	6.68	134	10.99	4.2	0.29	-1	32.90
14:56	↓	6.66	134	10.93	4.0	0.27	-1	32.90

Suggested range for 3 consec. readings or note Permit/State requirements: pH +/- 0.2, Conductance +/- 3%, Temp. --, Turbidity --, D.O. +/- 10%, eH/ORP +/- 25 mV, DTW Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by W/M, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. **If more fields above are needed, use separate sheet or form.**

FIELD DATA
 SAMPLE DATE (MM DD YY): 05/17/16
 pH (std): 6.66
 CONDUCTANCE (umhos/cm @ 25°C): 134
 TEMP. (°C): 10.93
 TURBIDITY (ntu): 4.0
 DO (mg/L - ppm): 0.27
 eH/ORP (mV): -1
 Other: Final
 Units: 1456

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: Clear Odor: None Color: Clear Other:
 Weather Conditions (required daily, or as conditions change): Direction/Speed: Outlook: Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required):
DUP-2 taken here @ 1500
19D - 30.77
19B - 32.00
19A - 31.96

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
5/17/16 M. P. H. Jones SCS Engineers
 Date Name Signature Company

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM



Site Name: 0USL
 Site No.:
 Sample Point: 4W-24
 Sample ID

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO
 PURGE DATE (MM DD YY): 05/17/16
 PURGE TIME (2400 Hr Clock): 1352
 ELAPSED HRS (hrs:min):
 WATER VOL IN CASING (Gallons):
 ACTUAL VOL PURGED (Gallons):
 WELL VOL PURGED:

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: Y or N
 Purging Device: C A-Submersible Pump D-Bailer
 B-Peristaltic Pump E-Piston Pump
 Sampling Device: C C-QED Bladder Pump F-Dipper/Bottle
 X-Other:
 Filter Device: Y or N 0.45 μ or μ (circle or fill in)
 Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other
 Sample Tube Type: D A-Teflon C-PVC X-Other:
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC) (ft/msl) Depth to Water (DTW) (from TOC) 2852 (ft)
 Groundwater Elevation (site datum, from TOC) (ft/msl)
 Total Well Depth (from TOC) (ft) Stick Up (from ground elevation) (ft)
 Casing ID (in) Casing Material
 Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)	Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (μ mhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
		<u>13:55</u>	<u>150</u>	<u>6.61</u>	<u>1135</u>	<u>13.23</u>		<u>0.83</u>	<u>84.6</u>
	<u>14:00</u>			<u>1120</u>	<u>12.94</u>		<u>0.59</u>	<u>89.4</u>	
	<u>14:03</u>			<u>1120</u>	<u>13.13</u>		<u>0.52</u>	<u>87.0</u>	
	<u>14:06</u>			<u>1119</u>	<u>13.22</u>	<u>5.16</u>	<u>0.52</u>	<u>85.9</u>	
	<u>14:09</u>		<u>6.61</u>	<u>1118</u>	<u>13.35</u>		<u>0.51</u>	<u>83.7</u>	
	<u>14:12</u>		<u>6.63</u>	<u>1118</u>	<u>13.40</u>		<u>0.50</u>	<u>83.3</u>	
	<u>14:15</u>		<u>6.63</u>	<u>1119</u>	<u>13.41</u>	<u>2.75</u>	<u>0.50</u>	<u>83.0</u>	

Suggested range for 3 consec. readings or note Permit/State requirements: pH +/- 0.2, Conductance +/- 3%, D.O. +/- 10%, eH/ORP +/- 25 mV, Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA
 SAMPLE DATE (MM DD YY): 05/17/16
 pH (std): 6.63
 CONDUCTANCE (umhos/cm @ 25°C): 119
 TEMP. (°C): 13.41
 TURBIDITY (ntu): 2.75
 DO (mg/L-ppm): 0.50
 eH/ORP (mV): 83.0
 Other: fine
 Units: 1415

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: Odor: Color: Other:
 Weather Conditions (required daily, or as conditions change): Direction/Speed: Outlook: Precipitation: Y or N
 Specific Comments (including purge/well volume calculations if required):

FIELD COMMENTS
* used pH pen

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
5/17/16 Sam Gratzler SCS
 Date Name Signature Company

DISTRIBUTION: WHITE/ORIGINAL- Stays with Sample. YELLOW - Returned to Client. PINK - Field Copy

FIELD INFORMATION FORM



Site Name: WVSL
 Site No.:
 Sample Point: MW-231A
 Sample ID

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO
 PURGE DATE (MM DD YY): 051716
 PURGE TIME (2400 Hr Clock): 1222
 ELAPSED HRS (hrs:min): 23
 WATER VOL IN CASING (Gallons):
 ACTUAL VOL PURGED (Gallons):
 WELL VOLs PURGED:

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: Y or N
 Purging Device: C A-Submersible Pump D-Bailer
 Sampling Device: C B-Peristaltic Pump E-Piston Pump
 X-Other: C-QED Bladder Pump F-Dipper/Bottle
 Filter Device: Y or N 0.45 μ or μ (circle or fill in)
 Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other
 Sample Tube Type: D A-Teflon C-PVC X-Other:
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC) (ft) Depth to Water (DTW) (from TOC) 985 (ft)
 Groundwater Elevation (site datum, from TOC) (ft)
 Total Well Depth (from TOC) (ft) Stick Up (from ground elevation) (ft)
 Casing ID (in) Casing Material

Note: Total Well Depth, Stick Up, Casing Id. etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

Sample Time (2400 Hr Clock)	Rate/Unit (ml/min)	pH (std)	Conductance (SC/EC) (μmhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
12:25	300	6.613	143	13.35		0.60	238	
12:30		6.54	143	13.23		0.26	1230	
12:33		6.54	143	13.15		0.20	1179	
12:36		6.54	142	13.31		0.16	1136	
12:39		6.54	142	13.18		0.13	1911	
12:42		6.54	142	13.17		0.12	1813	
12:45	✓	6.54	142	13.17	4.85	0.11	1712	

Suggested range for 3 consec. readings or note Permit/State requirements: pH +/- 0.2, Conductance +/- 3%, D.O. +/- 10%, eH/ORP +/- 25 mV, Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA
 SAMPLE DATE (MM DD YY): 051716
 pH (std): 6.54
 CONDUCTANCE (umhos/cm @ 25°C): 142
 TEMP. (°C): 13.17
 TURBIDITY (ntu): 4.85
 DO (mg/L - ppm): 0.11
 eH/ORP (mV): 7.2
 Other: fine
 Units: 1245

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: Odor: Color: Other:
 Weather Conditions (required daily, or as conditions change): Direction/Speed: Outlook: Precipitation: Y or N
 Specific Comments (including purge/well volume calculations if required):

FIELD COMMENTS
* used pH pen
Dup 3 taken @ 1305

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
5.17.16 Sam Graber SCS
 Date Name Signature Company

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM



Site Name: EUSL
 Site No.:
 Sample Point: WM-201
 Sample ID

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e., with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID: _____

PURGE INFO
 PURGE DATE: 05/17/16 PURGE TIME: 11345 ELAPSED HRS: 00:05
 WATER VOL IN CASING: _____ ACTUAL VOL PURGED: _____ WELL VOLS PURGED: _____
(MM DD YY) (2400 Hr Clock) (hrs:min) (Gallons) (Gallons)
 Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: Y or N
 Purging Device: A A-Submersible Pump D-Bailer
 B-Peristaltic Pump E-Piston Pump
 Sampling Device: A C-QED Bladder Pump F-Dipper/Bottle
 X-Other: _____
 Filter Device: A or N 0.45 μ or _____ μ (circle or fill in)
 Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other _____
 Sample Tube Type: L A-Teflon C-PVC X-Other: _____
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC): _____ (ft/msl) Depth to Water (DTW) (from TOC): 3562 (ft) Groundwater Elevation (site datum, from TOC): _____ (ft/msl)
 Total Well Depth (from TOC): _____ (ft) Stick Up (from ground elevation): _____ (ft) Casing ID: _____ (in) Casing Material: _____
 Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)	Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (μmhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
		<u>13:50</u>	<u>250</u>	<u>6.12</u>	<u>365</u>	<u>15.14</u>	<u>4.0</u>	<u>2.70</u>	<u>127</u>
	<u>13:55</u>	<u>↓</u>	<u>6.25</u>	<u>376</u>	<u>15.08</u>	<u>6.1</u>	<u>2.28</u>	<u>126</u>	<u>3562</u>
	<u>14:00</u>	<u>↓</u>	<u>6.26</u>	<u>377</u>	<u>15.06</u>	<u>5.2</u>	<u>2.18</u>	<u>128</u>	<u>3562</u>
	<u>14:05</u>	<u>↓</u>	<u>6.28</u>	<u>376</u>	<u>15.05</u>	<u>4.3</u>	<u>2.21</u>	<u>130</u>	<u>3562</u>

Suggested range for 3 consec. readings or note Permit/State requirements: pH: ±0.2, Conductance: ±3%, Temp: --, Turbidity: --, D.O.: ±10%, eH/ORP: ±25 mV, DTW: Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA
 SAMPLE DATE (MM DD YY): 05/17/16 pH (std): 6.28 CONDUCTANCE (μmhos/cm @ 25°C): 376 TEMP. (°C): 14.95 TURBIDITY (ntu): 4.3 DO (mg/L - ppm): 2.21 eH/ORP (mV): 130 Other: 1405
 Final Field Readings are required (i.e. record field measurements; final stabilized readings; passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: Clear Odor: None Color: Clear Other: _____
 Weather Conditions (required daily, or as conditions change): _____ Direction/Speed: _____ Outlook: _____ Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required): _____

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
S. J. E. 16 Mark O'Hara SCS Engineers
 Date Name Signature Company

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample. YELLOW - Returned to Client. PINK - Field Copy

FIELD INFORMATION FORM



Site Name: 0V82
 Site No.:
 Sample Point: MW-2B1
 Sample ID:

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO
 PURGE DATE: 05/17/16 PURGE TIME: 12:35 ELAPSED HRS: 00:05
 WATER VOL IN CASING: ACTUAL VOL PURGED: WELL VOLS PURGED:
Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: Y or N
 Purging Device: A-Submersible Pump B-Peristaltic Pump C-QED Bladder Pump D-Bailer E-Piston Pump F-Dipper/Bottle
 Sampling Device: A X-Other:
 Filter Device: Y or N 0.45 μ or μ (circle or fill in)
 Filter Type: A A-In-line Disposable B-Pressure C-Vacuum
 Sample Tube Type: A-Teflon B-Stainless Steel C-PVC D-Polypropylene X-Other:

WELL DATA
 Well Elevation (at TOC): (ft/msl) Depth to Water (DTW) (from TOC): 57.8 (ft) Groundwater Elevation (site datum, from TOC): (ft/msl)
 Total Well Depth (from TOC): (ft) Stick Up (from ground elevation): (ft) Casing ID: (in) Casing Material:
Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)	Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (μ mhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
		12:40	250	6.10	235	14.20	300.4	0.42	7
	12:50	150	6.11	231	14.19	116.2	0.20	3	6.09
	12:55	\downarrow	6.10	231	14.18	28.33	0.17	3	6.05
	13:00	\downarrow	6.11	232	14.04	25.38	0.16	1	6.05
	13:05		6.11	232	14.04	25.71	0.14	1	6.05

Suggested range for 3 consec. readings or note Permit/State requirements: pH: +/- 0.2; Conductance: +/- 3%; Temp: -; Turbidity: -; D.O.: +/- 10%; eH/ORP: +/- 25 mV; DTW: Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA
 SAMPLE DATE (MM DD YY): 05/17/16 pH (std): 6.11 CONDUCTANCE (μ mhos/cm @ 25°C): 232 TEMP. (°C): 14.04 TURBIDITY (ntu): 25.71 DO (mg/L - ppm): 0.14 eH/ORP (mV): 110 Other: 1305
Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: Odor: Color: Other:
 Weather Conditions (required daily, or as conditions change): Direction/Speed: Outlook: Precipitation: Y or N
 Specific Comments (including purge/well volume calculations if required):

FIELD COMMENTS
MW-2A = 6.70
Locks need replacements
High starting turbidity ~ 500 + NTU

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
5.17.16 Matt O'Hara SES
 Date Name Signature Company

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM



Site Name: ASL

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID: _____

Site No.: _____ Sample Point: MW-33A
Sample ID

PURGE INFO

PURGE DATE <small>(MM DD YY)</small>	PURGE TIME <small>(2400 Hr Clock)</small>	ELAPSED HRS <small>(hrs:min)</small>	WATER VOL IN CASING <small>(Gallons)</small>	ACTUAL VOL PURGED <small>(Gallons)</small>	WELL VOLs PURGED
051816	1925	23			

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment... Dedicated: Y or N

Purging Device: C A-Submersible Pump D-Bailer
 B-Peristaltic Pump E-Piston Pump
 C-QED Bladder Pump F-Dipper/Bottle

Filter Device: Y or N 0.45 μ or _____ μ (circle or fill in)
 Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other _____
 Sample Tube Type: D A-Teflon C-PVC X-Other: _____
 B-Stainless Steel D-Polypropylene

WELL DATA

Well Elevation (at TOC) _____ (ft/msl) Depth to Water (DTW) (from TOC) 561 (ft) Groundwater Elevation (site datum, from TOC) _____ (ft/msl)

Total Well Depth (from TOC) _____ (ft) Stick Up (from ground elevation) _____ (ft) Casing ID _____ (in) Casing Material _____

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time <small>(2400 Hr Clock)</small>	Rate/Unit <small>(μM/min)</small>	pH <small>(std)</small>	Conductance (SC/EC) <small>(μmhos/cm @ 25°C)</small>	Temp. <small>(°C)</small>	Turbidity <small>(ntu)</small>	D.O. <small>(mg/L - ppm)</small>	eH/ORP <small>(mV)</small>	DTW <small>(ft)</small>
19:28	300	5.89	1128	19.73		11.14	3210	
19:33		6.41	1137	19.44		10.61	1180	
19:36		6.48	1137	19.41		10.61	1170	
19:39		6.55	1137	19.41		10.61	1110	
19:42		6.58	1137	19.38	113.7	10.66	1710	
19:45		6.60	1137	19.36	112.9	10.59	1610	
19:48	V	6.66	1138	19.35	112.0	10.57	1910	

Suggested range for 3 consec. readings or note Permit/State requirements: pH +/- 0.2, Conductance 1/- 3%, D.O. +/- 10%, eH/ORP +/- 25 mV, DTW Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/State. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA

SAMPLE DATE <small>(MM DD YY)</small>	pH <small>(std)</small>	CONDUCTANCE <small>(umhos/cm @ 25°C)</small>	TEMP. <small>(°C)</small>	TURBIDITY <small>(ntu)</small>	DO <small>(mg/L-ppm)</small>	eH/ORP <small>(mV)</small>	Other: <u>none</u>
051816	6.66	1138	19.35	120	10.57	110	948

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/State).

Sample Appearance: Clear Odor: - Color: - Other: _____
 Weather Conditions (required daily, or as conditions change): _____ Direction/Speed: _____ Outlook: _____ Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required):
purged orange matter out of water for 5 minutes.

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

5, 18, 16 Sam Corabier [Signature] SCS
 Date Name Signature Company

FIELD INFORMATION FORM



Site Name: OWSL
 Site No.:
 Sample Point: MW-33C
 Sample ID:

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO
 PURGE DATE (MM DD YY): 051816
 PURGE TIME (2400 Hr Clock): 10:20
 ELAPSED HRS (hrs:min): 22
 WATER VOL IN CASING (Gallons):
 ACTUAL VOL PURGED (Gallons):
 WELL VOLs PURGED:

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: or N
 Purging Device: C A-Submersible Pump D-Bailer
 Sampling Device: C B-Peristaltic Pump E-Piston Pump
 X-Other: C-QED Bladder Pump F-Dipper/Bottle
 Filter Device: or N | 0.45 μ or μ (circle or fill in)
 Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other:
 Sample Tube Type: D A-Teflon C-PVC X-Other:
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC) (ft/msl) Depth to Water (DTW) (from TOC) 242 (ft) Groundwater Elevation (site datum, from TOC) (ft/msl)
 Total Well Depth (from TOC) (ft) Stick Up (from ground elevation) (ft) Casing ID (in) Casing Material

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit (ML/min)	pH (std)	Conductance (SC/EC) (μmhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
110:22	250	6.98	1154	10.45		13.88	1620	
110:27		6.84	1158	9.73	13.54	10.77	-1290	
110:30		7.00	1158	9.70		10.44	-1030	
110:33		7.34	1159	9.66		10.31	-1350	
110:36		7.41	1159	9.69		10.30	-1420	
110:39		7.53	1158	9.67		10.26	-1510	
110:42		7.59	1158	9.65	11.56	10.25	-1570	

Suggested range for 3 consec. readings or note Permit/State requirements: +/- 0.2 +/- 3% -- -- +/- 10% +/- 25 mV Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. **Use more fields above are needed, use separate sheet or form.**

FIELD DATA
 SAMPLE DATE (MM DD YY): 051816 pH (std): 7.59 CONDUCTANCE (umhos/cm @ 25°C): 158 TEMP. (°C): 9.65 TURBIDITY (ntu): 1.56 DO (mg/L-ppm): 0.25 eH/ORP (mV): -1570 Other: Time Units: 1042

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: clear Odor: Color: Other:
 Weather Conditions (required daily, or as conditions change): Direction/Speed: Outlook: Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required):
DTW @ MW-33B = 2.52

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
5.18.16 Sam Graber SCS
 Date Name Signature Company

GROUNDWATER SAMPLING INSTRUMENT CALIBRATION DOCUMENTATION FORM

	Conductivity	pH4	pH 7	DO	Turbidity	Comments/Exceptions
Date	5/16/16					
Time	930					
Weather (sky or precip, temp)	overcast					
Type of Calibration	Standard	Standard	Standard	Standard	Standard	
Standard Value	1413 745	✓ 4.01	7.00	100% or ~8.5	1000, 10, 0.2 800, 100, 20, <0.1	
Pre-Cal Reading	1440	4.20	7.16			
Post Cal Reading	1413	4.01	7.00	8.05	904, 10.67, 0.52	
Discrepancy	N					
Calib. Successful?	yes					
Calibration by	SEB					
Instrument Type, ID	MP20 / YSI 556			MicoTPW / HACH2000		
Calibration Location	052					

* If Direct Reading is Unavailable, Assume pressure = 760 mm - 2.5 (altitude in ft/100)

GROUNDWATER SAMPLING INSTRUMENT CALIBRATION DOCUMENTATION FORM

	Conductivity	pH4	pH 7	DO	Turbidity	Comments/Exceptions
Date	3/16/16					
Time	900					
Weather (sky or precip, temp)	clear					
Type of Calibration	Standard	Standard	Standard	Standard	Standard	
Standard Value	1413 445	4.01	7.00	100% or ~8.5	1000, 10, 0.2 <u>800, 100, 20, <0.1</u>	
Pre-Cal Reading	1446	4.17	6.17			
Post Cal Reading	1413	4.01	7.00	6.20	792, 100, 20.9, 0.89	
Discrepancy	accepted pit 7 cal out of range.					
Calib. Successful?	yes					
Calibration by	SEB					
Instrument Type, ID	MP20 / <u>YSI 556</u>			MicoTPW / <u>HACH2000</u>		
Calibration Location	OVSL					

* If Direct Reading is Unavailable, Assume pressure = 760 mm - 2.5 (altitude in ft/100)

GROUNDWATER SAMPLING INSTRUMENT CALIBRATION DOCUMENTATION FORM

	Conductivity	pH4	pH 7	DO	Turbidity	Comments/Exceptions
Date	5/17/16					
Time	800					
Weather (sky or precip, temp)	Clear					
Type of Calibration	Standard	Standard	Standard	Standard	Standard	
Standard Value	1413 445	4.01	7.00	100% or ~8.5	1000, 10, 0.2 800, 100, 20, <0.1	
Pre-Cal Reading	1404	3.96	7.06			
Post Cal Reading	1413	4.01	7.00	8.30	980, 11, 0.31	
Discrepancy	No					
Calib. Successful?	Yes					
Calibration by	Matt O'hare					
Instrument Type, ID	MP20 / YSI 556			MicoTPW / HACH2000		
Calibration Location	OJSL					

* If Direct Reading is Unavailable, Assume pressure = 760 mm - 2.5 (altitude in ft/100)

GROUNDWATER SAMPLING INSTRUMENT CALIBRATION DOCUMENTATION FORM

	Conductivity	pH4	pH 7	DO	Turbidity	Comments/Exceptions
Date	5/17/16					
Time	730					
Weather (sky or precip, temp)	clear					
Type of Calibration	Standard	pH pen Standard	pH pen Standard	Standard	Standard	
Standard Value	1413 445	4.01	7.00	100% or ~8.5	1000, 10, 0.2 800, 100, 20, <0.1	
Pre-Cal Reading	1389	4.21	6.80			
Post Cal Reading	1413	4.01	7.00	7.37	786, 101, 20.4, 0.98	
Discrepancy	used pH pen for pH					
Calib. Successful?	yes					
Calibration by	SEB					
Instrument Type, ID	MP20 1 YSI 556 + pH pen			MicoTPW / HACH2000		
Calibration Location	OURL					

* If Direct Reading is Unavailable, Assume pressure = 760 mm - 2.5 (altitude in ft/100)

GROUNDWATER SAMPLING INSTRUMENT CALIBRATION DOCUMENTATION FORM

	Conductivity	pH4	pH 7	DO	Turbidity	Comments/Exceptions
Date	5/13/16					
Time	800					
Weather (sky or precip, temp)	clear					
Type of Calibration	Standard	Standard	Standard	Standard	Standard	
Standard Value	1413 445	4.01	7.00	100% or ~8.5	1000, 10, 0.2 800, 100, 20, <0.1	
Pre-Cal Reading	1391	4.03	6.96			
Post Cal Reading	1413	4.01	7.00	7.20	773, 100, 21.1, 0.95	
Discrepancy	No					
Calib. Successful?	yes					
Calibration by	SEB					
Instrument Type, ID	MP20 / YSI 556			MicoTPW / HACH2000		
Calibration Location	OUSL					

* If Direct Reading is Unavailable, Assume pressure = 760 mm - 2.5 (altitude in ft/100)

SCS ENGINEERS

September 19, 2016

File No. 04204027.19

**Subject: Third Quarter 2016 Compliance Monitoring Event
Olympic View Sanitary Landfill, Kitsap County, Washington**

Sampling Event Dates: 8/29/16 through 9/1/16

Personnel: Sam Graber

NOTES/SAMPLING DECODING:

- Dedicated pumps were used for purging and sampling all wells.
- Duplicate samples were collected at MW-39 (DUP1) and MW-34A (DUP2).
- Geotech and Solinst water level meters were used to record all water level elevations.
- In addition to the monitoring wells where groundwater was collected for chemical analysis, additional wells were monitored for groundwater level elevations. A summary of measured water levels are included with the field documentation.
- Several well locks noted to need replacement on the site.
- The samples were sent to TestAmerica Denver for analysis at the close of each sampling day, except samples for low level arsenic which were held until the end of the sampling event and provided to Analytical Resources, Inc. in Tukwila, Washington.

Sample Date	Location ID	Sample ID	Comments
8/29/2016	MW-43	0816-01	
8/29/2016	MW-42	0816-02	

Sample Date	Location ID	Sample ID	Comments
8/29/2016	MW-19C	0816-03	
8/29/2016	MW-20	0816-04	
8/29/2016	MW-36A	0816-05	
8/29/2016	MW-15R	0816-06	
8/30/2016	MW-23A	0816-07	
8/30/2016	MW-24	0816-08	
8/30/2016	MW-2B1	0816-09	
8/31/2016	MW-13A	0816-10	
8/31/2016	MW-13B	0816-11	
8/31/2016	MW-35	0816-12	
8/31/2016	MW-16	0816-13	
8/31/2016	MW-39	0816-14	
8/31/2016	MW-39	0816-15	Dup-1
8/31/2016	MW-34C	0816-16	
8/31/2016	MW-34A	0816-17	
8/31/2016	MW-34A	0816-18	Dup-2
9/1/2016	MW-4	0816-19	
9/1/2016	MW-32	0816-20	
9/1/2016	MW-33C	0816-21	
9/19/2016	LP-LCD	0816-22	

FIELD INFORMATION FORM



Site Name: OVSL
 Site No.:
 Sample Point: MW-43
 Sample ID:

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO
 PURGE DATE: 082916 (MM DD YY)
 PURGE TIME: 9:45 (2400 Hr Clock)
 ELAPSED HRS: 125 (hrs:min)
 WATER VOL IN CASING: (Gallons)
 ACTUAL VOL PURGED: (Gallons)
 WELL VOLS PURGED:

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: Y or N
 Purging Device: C A-Submersible Pump D-Bailer
 B-Peristaltic Pump E-Piston Pump
 Sampling Device: C C-QED Bladder Pump F-Dipper/Bottle
 X-Other:
 Filter Device: Y or N 0.45 μ or μ (circle or fill in)
 Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other:
 Sample Tube Type: D A-Teflon C-PVC X-Other:
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC): (ft/msl)
 Depth to Water (DTW) (from TOC): 2593 (ft)
 Groundwater Elevation (site datum, from TOC): (ft/msl)
 Total Well Depth (from TOC): (ft)
 Stick Up (from ground elevation): (ft)
 Casing ID: (in)
 Casing Material:

Note: Total Well Depth, Stick Up, Casing Id. etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit (gal/min)	pH (std)	Conductance (SC/EC) (μmhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
09:50	300	4.71	45	11.98		1.98	134.0	
09:55		4.84	44	11.16		0.94	121.0	25.93
09:58		4.98	44	10.99		0.72	103.0	
10:01		5.05	44	10.91	8.25	0.64	97.0	
10:04		5.08	44	10.91	7.38	0.56	90.0	
10:07		5.11	44	10.89	5.53	0.53	86.0	25.93
10:10	↓	5.13	44	10.88	4.21	0.51	84.0	

Suggested range for 3 consec. readings or note Permit/State requirements:
 pH: +/- 0.2
 Conductance: +/- 3%
 Temp.: --
 Turbidity: --
 D.O.: +/- 10%
 eH/ORP: +/- 25 mV
 DTW: Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA
 SAMPLE DATE (MM DD YY): 082916
 pH (std): 5.13
 CONDUCTANCE (umhos/cm @ 25°C): 44
 TEMP. (°C): 10.88
 TURBIDITY (ntu): 4.21
 DO (mg/L-ppm): 0.51
 eH/ORP (mV): 84.0
 Other: time
 Units: 1010

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: Odor: Color: Other:
 Weather Conditions (required daily, or as conditions change): Direction/Speed: Outlook: clear Precipitation: Y or N
 Specific Comments (including purge/well volume calculations if required):

FIELD COMMENTS
orange particulate in water. Purged extra 5 minutes

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
8,29,16 Sam Corbett SCS
 Date Name Signature Company

FIELD INFORMATION FORM



Site Name: OU5L
 Site No.:
 Sample Point: MW-42
 Sample ID:

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO
 PURGE DATE (MM DD YY): 08/29/16
 PURGE TIME (2400 Hr Clock): 10:45
 ELAPSED HRS (hrs:min): 23
 WATER VOL IN CASING (Gallons):
 ACTUAL VOL PURGED (Gallons):
 WELL VOLS PURGED:

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: Y or N
 Filter Device: Y or N 0.45 μ or μ (circle or fill in)
 Purging Device: C A-Submersible Pump D-Bailer
 B-Peristaltic Pump E-Piston Pump
 Sampling Device: C C-QED Bladder Pump F-Dipper/Bottle
 Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other
 X-Other: Sample Tube Type: D A-Teflon C-PVC X-Other:
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC): (ft/msl) Depth to Water (DTW) (from TOC): 2878 (ft)
 Groundwater Elevation (site datum, from TOC): (ft/msl)
 Total Well Depth (from TOC): (ft) Stick Up (from ground elevation): (ft)
 Casing ID: (in) Casing Material:
Note: Total Well Depth, Stick Up, Casing Id. etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit (gal/min)	pH (std)	Conductance (SC/EC) (μmhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
110:48	300	6.01	535	13.26		0.64		
110:53	1	6.018	535	13.14		0.29	-98.0	
110:56		6.113	545	13.12		0.18	-115.0	
110:59		6.113	545	13.12		0.17	-110.0	
111:02		6.114	543	13.13		0.17	-115.0	
111:05		6.115	542	13.13		0.17	-120.0	
111:08	4	6.116	541	13.13	2.27	0.19	-117.0	

Suggested range for 3 consec. readings or note Permit/State requirements:
 pH: +/- 0.2 Conductance: +/- 3% Temp: - Turbidity: - D.O.: +/- 10% eH/ORP: +/- 25 mV DTW: Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. **If more fields above are needed, use separate sheet or form.**

FIELD DATA
 SAMPLE DATE (MM DD YY): 08/29/16
 pH (std): 6.16
 CONDUCTANCE (umhos/cm @ 25°C): 541
 TEMP. (°C): 13.13
 TURBIDITY (ntu): 2.27
 DO (mg/L-ppm): 0.19
 eH/ORP (mV): -117.0
 Other: fine
 Units: 1108
Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: Clear Odor: Color: Other:
 Weather Conditions (required daily, or as conditions change): Direction/Speed: Outlook: Precipitation: Y or N
 Specific Comments (including purge/well volume calculations if required):

FIELD COMMENTS

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
8/29/16 Sam Graber [Signature] SCS
 Date Name Signature Company

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM



Site Name: OKL

This Waste Management Field Information Form is Required
This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

Site No.: _____
Sample Point: MW-19C
Sample ID

PURGE INFO
PURGE DATE: 082916 (MM DD YY)
PURGE TIME: 11:45 (2400 Hr Clock)
ELAPSED HRS: 23 (hrs:min)
WATER VOL IN CASING: _____ (Gallons)
ACTUAL VOL PURGED: _____ (Gallons)
WELL VOLs PURGED: _____

PURGE/SAMPLE EQUIPMENT
Purging and Sampling Equipment... Dedicated: or
Filter Device: or 0.45 μ or _____ μ (circle or fill in)
Filter Type: A
Purging Device: C A-Submersible Pump D-Bailer
B-Peristaltic Pump E-Piston Pump
Sampling Device: C C-QED Bladder Pump F-Dipper/Bottle
X-Other: _____
Sample Tube Type: D
A-Teflon C-PVC X-Other: _____
B-Stainless Steel D-Polypropylene

WELL DATA
Well Elevation (at TOC): _____ (ft/msl)
Depth to Water (DTW) (from TOC): 3446 (ft)
Groundwater Elevation (site datum, from TOC): _____ (ft/msl)
Total Well Depth (from TOC): _____ (ft)
Stick Up (from ground elevation): _____ (ft)
Casing ID: _____ (in)
Casing Material: _____

Note: Total Well Depth, Stick Up, Casing Id. etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (μ mhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
<u>11:48</u>	<u>300</u>	<u>6.40</u>	<u>149</u>	<u>13.78</u>		<u>23.9</u>	<u>-33.0</u>	
<u>11:53</u>		<u>6.35</u>	<u>165</u>	<u>12.04</u>		<u>0.66</u>	<u>-29.0</u>	
<u>11:56</u>		<u>6.38</u>	<u>168</u>	<u>11.98</u>		<u>0.45</u>	<u>-33.0</u>	
<u>11:59</u>		<u>6.42</u>	<u>168</u>	<u>11.84</u>		<u>0.34</u>	<u>-33.0</u>	<u>34652</u>
<u>12:02</u>		<u>6.44</u>	<u>168</u>	<u>11.85</u>		<u>0.28</u>	<u>-31.0</u>	
<u>12:05</u>		<u>6.45</u>	<u>168</u>	<u>11.90</u>		<u>0.26</u>	<u>-30.0</u>	
<u>12:08</u>		<u>6.46</u>	<u>168</u>	<u>11.81</u>	<u>1.90</u>	<u>0.26</u>	<u>-29.0</u>	

Suggested range for 3 consec. readings or note Permit/State requirements: pH +/- 0.2, Conductance +/- 3%, D.O. +/- 10%, eH/ORP +/- 25 mV, DTW Stabilize

FIELD DATA
Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site.)
SAMPLE DATE: 082916 (MM DD YY)
pH (std): 6.46
CONDUCTANCE (umhos/cm @ 25°C): 168
TEMP. (°C): 11.81
TURBIDITY (ntu): 1.90
DO (mg/L-ppm): 0.26
eH/ORP (mV): -29.0
Other: None
Units

Sample Appearance: _____ Odor: _____ Color: _____ Other: _____
Weather Conditions (required daily, or as conditions change): _____ Direction/Speed: _____ Outlook: _____ Precipitation: Y or N
Specific Comments (including purge/well volume calculations if required): _____

FIELD COMMENTS

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
8,29,16 Sam Gralzer [Signature] SCS
Date Name Signature Company

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM



Site Name: Q5C
 Site No.:
 Sample Point: MW-20
 Sample ID:

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO
 PURGE DATE (MM DD YY): 08/29/16
 PURGE TIME (2400 Hr Clock): 12:44
 ELAPSED HRS (hrs:min):
 WATER VOL IN CASING (Gallons):
 ACTUAL VOL PURGED (Gallons):
 WELL VOLS PURGED:

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment: Y or N
 Purging Device: C A-Submersible Pump D-Bailer
 B-Peristaltic Pump E-Piston Pump
 Sampling Device: C C-QED Bladder Pump F-Dipper/Bottle
 X-Other:
 Filter Device: Y or N 0.45 μ or μ (circle or fill in)
 Filter Type: A
 Sample Tube Type: D
 A-In-line Disposable C-Vacuum
 B-Pressure X-Other
 A-Teflon C-PVC X-Other:
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC) (ft/msl) Depth to Water (DTW) (from TOC) 3657 (ft)
 Groundwater Elevation (site datum, from TOC) (ft/msl)
 Total Well Depth (from TOC) (ft) Stick Up (from ground elevation) (ft)
 Casing ID (in) Casing Material
Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

Sample Time (2400 Hr Clock)	Rate/Unit (ML/min)	pH (std)	Conductance (SC/EC) (μ mhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
12:44	350	6.219	356	15.86		2.31	59.0	
12:49		6.214	350	15.70		1.53	66.0	
12:52		6.23	332	15.69		1.30	68.0	
12:53		6.23	353	15.68		1.19	70.0	
12:58		6.23	345	15.64		0.99	71.0	
13:01		6.24	342	15.65		0.89	72.0	
13:04		6.24	337	15.65	0.93	0.80	73.0	37.0

Suggested range for 3 consec. readings or note Permit/State requirements: pH +/- 0.2, Conductance +/- 3%, Temp. -, Turbidity --, D.O. +/- 10%, eH/ORP +/- 25 mV, Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/State. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately in Site. **If more fields above are needed, use separate sheet or form.**

FIELD DATA
 SAMPLE DATE (MM DD YY): 08/29/16
 pH (std): 6.24
 CONDUCTANCE (μ mhos/cm @ 25°C): 337
 TEMP. (°C): 15.65
 TURBIDITY (ntu): 0.93
 DO (mg/L-ppm): 0.80
 eH/ORP (mV): 73.0
 Other: fine
 Units: 1304

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/State).

Sample Appearance: clear Odor: Color: Other:
 Weather Conditions (required daily, or as conditions change): Direction/Speed: Outlook: Precipitation: Y or N

FIELD COMMENTS
 Specific Comments (including purge/well volume calculations if required):
Slight particulates in sample

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
8/29/16 Sam Grabow [Signature] SCS
 Date Name Signature Company

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM



Site Name: 0USL
 Site No.:
 Sample Point: MW-36A
Sample ID

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID: _____

PURGE INFO
 PURGE DATE (MM DD YY): 082916
 PURGE TIME (2400 Hr Clock): 1345
 ELAPSED HRS (hrs:min): | 21
 WATER VOL IN CASING (Gallons): _____
 ACTUAL VOL PURGED (Gallons): _____
 WELL VOLS PURGED: _____

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: Y or N
 Purging Device: C A-Submersible Pump D-Bailer
 Sampling Device: C B-Peristaltic Pump E-Piston Pump
 X-Other: _____
 Filter Device: Y or N 0.45 µ or _____ µ (circle or fill in)
 Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other _____
 Sample Tube Type: D A-Teflon C-PVC X-Other: _____
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC) _____ (ft/msl) Depth to Water (DTW) (from TOC) 3186 (ft)
 Groundwater Elevation (site datum, from TOC) _____ (ft/msl)
 Total Well Depth (from TOC) _____ (ft) Stick Up (from ground elevation) _____ (ft)
 Casing ID _____ (in) Casing Material _____
Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)	Sample Time (2400 Hr Clock)	Rate/Unit <i>(µg/L/min)</i>	pH (std)	Conductance (SC/EC) (µmhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
		<u>13:46</u>	<u>350</u>	<u>6.515</u>	<u>1143</u>	<u>12.55</u>		<u>5.21</u>	<u>190.0</u>
	<u>13:51</u>		<u>6.112</u>	<u>1129</u>	<u>11.12</u>		<u>1.84</u>	<u>1103.0</u>	
	<u>13:54</u>		<u>6.01</u>	<u>1127</u>	<u>10.96</u>		<u>1.38</u>	<u>1110.0</u>	
	<u>13:57</u>		<u>5.916</u>	<u>1126</u>	<u>10.91</u>		<u>1.25</u>	<u>1114.0</u>	
	<u>14:00</u>		<u>5.913</u>	<u>1126</u>	<u>10.87</u>		<u>1.23</u>	<u>1118.0</u>	
	<u>14:03</u>		<u>5.911</u>	<u>1126</u>	<u>10.72</u>		<u>1.22</u>	<u>1121.0</u>	
	<u>14:06</u>	↓	<u>5.910</u>	<u>1126</u>	<u>10.73</u>	<u>1.34</u>	<u>1.23</u>	<u>1123.0</u>	<u>32.15</u>

Suggested range for 3 consec. readings or note Permit/State requirements: +/- 0.2 +/- 3% +/- 10% +/- 25 mV Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. *If more fields above are needed, use separate sheet or form.*

FIELD DATA	SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (µmhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L - ppm)	eH/ORP (mV)	Other: <u>fine</u>
		<u>082916</u>	<u>5.910</u>	<u>1126</u>	<u>10.73</u>	<u>1.34</u>	<u>1.23</u>	<u>1123.0</u>

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site.)

Sample Appearance: _____ Odor: _____ Color: _____ Other: _____
 Weather Conditions (required daily, or as conditions change): _____ Direction/Speed: _____ Outlook: _____ Precipitation: Y or N
 Specific Comments (including purge/well volume calculations if required): _____

FIELD COMMENTS

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
8/29/16 Sam Graber _____ SCS
 Date Name Signature Company

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM



Site Name: 025L
 Site No.:
 Sample Point: MW-15R
Sample ID

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID: _____

PURGE INFO
 PURGE DATE (MM DD YY): 082916
 PURGE TIME (2400 Hr Clock): 1454
 ELAPSED HRS (hrs:min): 22
 WATER VOL IN CASING (Gallons):
 ACTUAL VOL PURGED (Gallons):
 WELL VOLS PURGED:

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: Y or N
 Purging Device: C A-Submersible Pump D-Bailer
 Sampling Device: C B-Peristaltic Pump E-Piston Pump
 X-Other: _____ C-QED Bladder Pump F-Dipper/Bottle
 Filter Device: Y or N 0.45 μ or _____ μ (circle or fill in)
 Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other _____
 Sample Tube Type: D A-Teflon C-PVC X-Other: _____
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC): _____ (ft/msl)
 Depth to Water (DTW) (from TOC): 1933 (ft)
 Groundwater Elevation (site datum, from TOC): _____ (ft/msl)
 Total Well Depth (from TOC): _____ (ft)
 Stick Up (from ground elevation): _____ (ft)
 Casing ID: _____ (in)
 Casing Material: _____
Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by State/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

Sample Time (2400 Hr Clock)	Rate/Unit ml/min	pH (std)	Conductance (SC/EC) (μ mhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
14:56	300	6.19	1157	11.55		0.38	101.0	
15:01		6.25	1157	11.24		0.78	101.0	
15:04		6.29	1158	11.16		0.52	101.0	
15:07		6.30	1157	11.08		0.46	102.0	
15:10		6.31	1157	11.01		0.45	103.0	
15:13		6.31	1156	11.09		0.43	104.0	19636
15:16		6.31	1157	11.05	2.80	0.44	104.0	

Suggested range for 3 consec. readings or note Permit/State requirements: pH +/- 0.2, Conductance +/- 3%, D.O. +/- 10%, eH/ORP +/- 25 mV, DTW Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. **If more fields above are needed, use separate sheet or form.**

FIELD DATA
 SAMPLE DATE (MM DD YY): 082916
 pH (std): 6.31
 CONDUCTANCE (umhos/cm @ 25°C): 1157
 TEMP. (°C): 11.05
 TURBIDITY (ntu): 2.80
 DO (mg/L-ppm): 0.44
 eH/ORP (mV): 104.0
 Other: Final
 Units: 1516

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: Clear Odor: _____ Color: _____ Other: _____
 Weather Conditions (required daily, or as conditions change): _____ Direction/Speed: _____ Outlook: _____ Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required): _____

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
8/29/16 Sam Graber [Signature] SCS
 Date Name Signature Company

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM



Site Name: 055L
 Site No.:
 Sample Point: 1W-24
Sample ID

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO
 PURGE DATE: 083016 (MM DD YY)
 PURGE TIME: 1315 (2400 Hr Clock)
 ELAPSED HRS: 25 (hrs:min)
 WATER VOL IN CASING: (Gallons)
 ACTUAL VOL PURGED: (Gallons)
 WELL VOLs PURGED:

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: or
 Purging Device: C A-Submersible Pump D-Bailer
 Sampling Device: C B-Peristaltic Pump E-Piston Pump
 X-Other: C-QED Bladder Pump F-Dipper/Bottle
 Filter Device: or 0.45 μ or μ (circle or fill in)
 Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other:
 Sample Tube Type: D A-Teflon C-PVC X-Other:
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC): (ft/msl)
 Depth to Water (DTW) (from TOC): 3259 (ft)
 Groundwater Elevation (site datum, from TOC): (ft/msl)
 Total Well Depth (from TOC): (ft)
 Stick Up (from ground elevation): (ft)
 Casing ID: (in) Casing Material:

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)	Sample Time (2400 Hr Clock)	Rate/Unit (gpm)	pH (std)	Conductance (SC/EC) (μmhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
		13:20	150	5.94	1114	15.54		2.00	110.20
	13:25		5.88	1113	14.30		2.39	111.30	
	13:28		5.87	1114	13.36		1.80	111.40	
	13:31		5.89	1115	13.16		1.81	111.30	
	13:34		5.89	1114	12.89		1.55	111.10	
	13:37		5.89	1115	12.79		1.58	111.00	
	13:40	↓	5.89	1115	12.68	3.58	1.66	111.00	326.0

Suggested range for 3 consec. readings or note Permit/State requirements: pH +/- 0.2, Conductance +/- 3%, Temp. --, Turbidity --, D.O. +/- 10%, eH/ORP +/- 25 mV, Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA
 SAMPLE DATE (MM DD YY): 083016
 pH (std): 5.89
 CONDUCTANCE (umhos/cm @ 25°C): 115
 TEMP. (°C): 12.68
 TURBIDITY (ntu): 3.58
 DO (mg/L-ppm): 1.66
 eH/ORP (mV): 110.0
 Other: Time
 Units: 1340

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: Odor: Color: Other:
 Weather Conditions (required daily, or as conditions change): Direction/Speed: Outlook: Precipitation: Y or N
 Specific Comments (including purge/well volume calculations if required):

FIELD COMMENTS
* low flow * Request to get removed from list. Air line broken as well
moderate particulates in sample

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
8,30,16 Sam Graber SCS
 Date Name Signature Company

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM



Site Name: OVSL
 Site No.:
 Sample Point: MW-2B1
 Sample ID:

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO
 PURGE DATE: 083016 PURGE TIME: 1430 ELAPSED HRS: 20
 (MM DD YY) (2400 Hr Clock) (hrs:min)
 WATER VOL IN CASING: ACTUAL VOL PURGED: WELL VOLS PURGED:
 (Gallons) (Gallons)

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: Y or N Filter Device: Y or N 0.45 μ or μ (circle or fill in)
 Purging Device: C A-Submersible Pump D-Bailer Filter Type: A A-In-line Disposable C-Vacuum
 B-Peristaltic Pump E-Piston Pump B-Pressure X-Other
 Sampling Device: C C-QED Bladder Pump F-Dipper/Bottle A-Teflon C-PVC X-Other:
 X-Other: Sample Tube Type: D B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC): (ft/msl) Depth to Water (DTW) (from TOC): 727 (ft) Groundwater Elevation (site datum, from TOC): (ft/msl)
 Total Well Depth (from TOC): (ft) Stick Up (from ground elevation): (ft) Casing ID: (in) Casing Material:
Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by State/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

Sample Time (2400 Hr Clock)	Rate/Unit (gpm)	pH (std)	Conductance (SC/EC) (μ mhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L-ppm)	eH/ORP (mV)	DTW (ft)
14:30	280	5.98	233	15.49		1.36	-110.0	
14:35		6.04	239	15.28		0.54	-20.0	
14:38		6.05	238	15.33		0.42	-24.0	
14:41		6.06	238	15.57		0.36	-26.0	
14:44		6.06	238	15.79	2.26	0.34	-28.0	
14:47		6.06	237	15.64	1.83	0.31	-30.0	
14:50	Y	6.06	233	15.20	1.95	0.28	-29.0	
14:53								

Suggested range for 3 consec. readings or note Permit/State requirements: pH +/- 0.2 Conductance +/- 3% Temp. - Turbidity - D.O. +/- 10% eH/ORP +/- 25 mV Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA
 SAMPLE DATE (MM DD YY): 083016 pH (std): 6.06 CONDUCTANCE (umhos/cm @ 25°C): 233 TEMP. (°C): 15.20 TURBIDITY (ntu): 1.95 DO (mg/L-ppm): 0.28 eH/ORP (mV): -29.0 Other: fin Units: 1450
Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: Odor: Color: Other:
 Weather Conditions (required daily, or as conditions change): Direction/Speed: Outlook: Precipitation: Y or N

FIELD COMMENTS
 Specific Comments (including purge/well volume calculations if required):
Running truck near by

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
8/30/16 Sam Graber SCS
 Date Name Signature Company

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM



Site Name: Q56
 Site No.: [][][][][][][][]
 Sample Point: nw-13A
 Sample ID

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO
 PURGE DATE (MM DD YY): 08/31/16 PURGE TIME (2400 Hr Clock): 7:55 ELAPSED HRS (hrs:min): 1:20
 WATER VOL IN CASING (Gallons): [][][][][][][][] ACTUAL VOL PURGED (Gallons): [][][][][][][][] WELL VOL PURGED:

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment ... Dedicated: or N
 Purging Device: C A-Submersible Pump D-Bailer Filter Device: Y or N 0.45 μ or [] μ (circle or fill in)
 Sampling Device: C B-Peristaltic Pump E-Piston Pump Filter Type: A A-In-line Disposable C-Vacuum
 X-Other: _____ C-QED Bladder Pump F-Dipper/Bottle B-Pressure X-Other: _____
 Sample Tube Type: D A-Teflon C-PVC X-Other: _____
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC): [][][][][][][][] (ft/msl) Depth to Water (DTW) (from TOC): 4663 (ft) Groundwater Elevation (site datum, from TOC): [][][][][][][][] (ft/msl)
 Total Well Depth (from TOC): [][][][][][][][] (ft) Stick Up (from ground elevation): [][][][][][][][] (ft) Casing ID: [][] (in) Casing Material: _____
 Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (μmhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
7:55	350	5.77	1174	110.38		7.38	149.5	
8:00		6.12	1173	110.09		7.60	148.7	
8:03		6.30	1172	110.05		7.00	170.0	
8:06		6.35	1071	110.01		6.90	164.0	
8:09		6.58	1171	110.01		6.90	163.0	4665
8:12		6.64	1171	96.77		6.87	156.0	
8:15		6.65	1171	96.78	0.36	6.87	154.0	

Suggested range for 3 consec. readings or note Permit/State requirements: +/- 0.2 +/- 3% - -- +/- 10% +/- 25 mV Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (umhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: <u>TL</u>
08/31/16	6.65	1171	9.98	0.36	6.87	154.0	815

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site.)

Sample Appearance: clear Odor: _____ Color: _____ Other: _____
 Weather Conditions (required daily, or as conditions change): _____ Direction/Speed: _____ Outlook: _____ Precipitation: or N
 Specific Comments (including purge/well volume calculations if required): _____

FIELD COMMENTS

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
8/31/16 Sam Greber _____ _____ _____
 _____ _____ _____ _____
 Date Name Signature Company

FIELD INFORMATION FORM



Site Name: CUSC

Site No.:

Sample Point: MW-13B

Sample ID

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO

083116	340	20			
PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs:min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)	WELL VOLS PURGED

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment... Dedicated: or Filter Device: or 0.45 μ or _____ μ (circle or fill in)

Purging Device: A-Submersible Pump D-Bailer
 B-Peristaltic Pump E-Piston Pump
 C-QED Bladder Pump F-Dipper/Bottle
 X-Other: _____

Filter Type: A B-Pressure X-Other
 Sample Tube Type: D A-Teflon C-PVC X-Other:
 B-Stainless Steel D-Polypropylene

WELL DATA

Well Elevation (at TOC) _____ (ft/msl)	Depth to Water (DTW) (from TOC) <u>5991</u> (ft)	Groundwater Elevation (site datum, from TOC) _____ (ft/msl)
Total Well Depth (from TOC) _____ (ft)	Stick Up (from ground elevation) _____ (ft)	Casing ID _____ (in) Casing Material _____

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit (AL/MM)	pH (std)	Conductance (SC/EC) (μ mhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
8:40	340	6.62	1172	10.74		6.58	1143.0	
8:45		6.60	1172	10.49		6.79	1132.0	
8:48		6.74	1172	10.45		7.01	1125.0	
8:51		6.94	1172	10.41		7.18	1116.0	
8:54		7.12	1171	10.41		7.23	1112.0	610.10
8:57		7.13	1172	10.45		7.26	1109.0	
9:00		7.23	1171	10.43	0.65	7.26	1108.0	
:								
:								
:								

Suggested range for 3 consec. readings or note Permit/State requirements: pH +/- 0.2, Conductance +/- 3%, DO +/- 10%, eH/ORP +/- 25 mV, Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. **If more fields above are needed, use separate sheet or form**

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (umhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L - ppm)	eH/ORP (mV)	Other: <u>time</u>
083116	7.23	1171	10.43	0.65	7.26	1108.0	Units 900

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: Clear Odor: _____ Color: _____ Other: _____

Weather Conditions (required daily, or as conditions change): _____ Direction/Speed: _____ Outlook: _____ Precipitation: Y or N

FIELD COMMENTS

Specific Comments (including purge/well volume calculations if required): _____

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

<u>8/31/16</u>	<u>Sam Graber</u>	<u>[Signature]</u>	<u>SCS</u>
Date	Name	Signature	Company

FIELD INFORMATION FORM



Site Name: OSL
 Site No.:
 Sample Point: nW-35
Sample ID

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO
 PURGE DATE (MM DD YY): 083116
 PURGE TIME (2400 Hr Clock): 9:50
 ELAPSED HRS (hrs:min): 20
 WATER VOL IN CASING (Gallons):
 ACTUAL VOL PURGED (Gallons):
 WELL VOLs PURGED:

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: Y or N
 Purging Device: C A-Submersible Pump D-Bailer
 Sampling Device: C B-Peristaltic Pump E-Piston Pump
 X-Other: C-QED Bladder Pump F-Dipper/Bottle
 Filter Device: Y or N 0.45 μ or μ (circle or fill in)
 Filter Type: A A-In-line Disposable B-Pressure C-Vacuum
 Sample Tube Type: D A-Teflon B-Stainless Steel C-PVC D-Polypropylene X-Other:

WELL DATA
 Well Elevation (at TOC): (ft/msl)
 Depth to Water (DTW) (from TOC): 7244 (ft)
 Groundwater Elevation (site datum, from TOC): (ft/msl)
 Total Well Depth (from TOC): (ft)
 Stick Up (from ground elevation): (ft)
 Casing ID: (in) Casing Material:

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)	Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (μ mhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
		9:50	3cp	7.011	160	22.6		7.95	127.0
	9:55		6.98	160	11.50		6.81	124.0	
	9:58		7.014	160	11.91		6.89	122.0	
	10:01		7.96	160	10.86		6.89	122.0	
	10:04		7.08	160	10.82		6.86	121.0	72510
	10:07		7.08	159	10.92		6.89	121.0	
	10:10		7.09	159	10.73	10.67	6.88	121.0	

Suggested range for 3 consec. readings or note Permit/State requirements: pH +/- 0.2, Conductance +/- 3%, Temp. -, Turbidity --, D.O. +/- 10%, eH/ORP +/- 25 mV, DTW Stabilize
Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. **If more fields above are needed, use separate sheet or form.**

FIELD DATA
 SAMPLE DATE (MM DD YY): 083116
 pH (std): 7.09
 CONDUCTANCE (μ mhos/cm @ 25°C): 159
 TEMP. (°C): 10.73
 TURBIDITY (ntu): 0.67
 DO (mg/L-ppm): 6.88
 eH/ORP (mV): 121.0
 Other: fine
 Units: 1010

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: Clear Odor: Color: Other:
 Weather Conditions (required daily, or as conditions change): Direction/Speed: Outlook: Precipitation: Y or N
 Specific Comments (including purge/well volume calculations if required):

FIELD COMMENTS

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
8/31/16 Sam Graber SCS
 Date Name Signature Company

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM



Site Name: OKC
 Site No.:
 Sample Point: MW-39
Sample ID

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO
 PURGE DATE (MM DD YY): 083116
 PURGE TIME (2400 Hr Clock): 1155
 ELAPSED HRS (hrs:min): | 20
 WATER VOL IN CASING (Gallons): | |
 ACTUAL VOL PURGED (Gallons): | |
 WELL VOLS PURGED: | |

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment: Dedicated: or N
 Purging Device: C A-Submersible Pump D-Bailer
 Sampling Device: C B-Peristaltic Pump E-Piston Pump
 X-Other: C-QED Bladder Pump F-Dipper/Bottle
 Filter Device: or N 0.45 μ or μ (circle or fill in)
 Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other
 Sample Tube Type: D A-Teflon C-PVC X-Other:
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC) (ft/msl) | Depth to Water (DTW) (from TOC) 2184 (ft) | Groundwater Elevation (site datum, from TOC) (ft/msl)
 Total Well Depth (from TOC) (ft) | Stick Up (from ground elevation) (ft) | Casing ID (in) | Casing Material
Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by State/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

Sample Time (2400 Hr Clock)	Rate/Unit (gals/min)	pH (std)	Conductance (SC/EC) (umhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
11:55	350	5.916	12316	11.65		0.17	-141.0	
12:00	1	5.914	12611	11.63		0.18	-121.0	
12:03	1	5.914	12611	11.61		0.25	-121.0	
12:06	1	5.915	1261	11.62		0.22	-130.0	
12:09	1	5.915	12612	11.62		0.20	-119.0	
12:12	1	5.916	12612	11.62		0.20	-112.0	2137.0
12:15	1	5.916	12613	11.56	1.51	0.20	-113.7	

Suggested range for 3 consec. readings or note Permit/State requirements: pH +/- 0.2, Conductance +/- 3%, Temp. -, Turbidity --, D.O. +/- 10%, eH/ORP +/- 25 mV, Stabilize

FIELD DATA
 SAMPLE DATE (MM DD YY): 083116
 pH (std): 5.10
 CONDUCTANCE (umhos/cm @ 25°C): 263
 TEMP. (°C): 11.56
 TURBIDITY (ntu): 1.51
 DO (mg/L - ppm): 0.20
 eH/ORP (mV): -137.0
 Other: Time
 Units: 1215
Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: Clear Odor: Color: Other:
 Weather Conditions (required daily, or as conditions change): Direction/Speed: Outlook: Precipitation: or N

FIELD COMMENTS
 Specific Comments (including purge/well volume calculations if required):
Dup 1 taken at 1230

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
8/31/16 Sam Graber [Signature] 505
 Date Name Signature Company

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM



Site Name: OVSL

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

Site No.: _____
 Sample Point: MW-34C
 Sample ID

PURGE INFO

<u>083116</u>	<u>1310</u>				
PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs:min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)	WELL VOLS PURGED

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment... Dedicated: Y or N

Filter Device: Y or N 0.45 μ or _____ μ (circle or fill in)

Purging Device: C A-Submersible Pump D-Bailer
 Sampling Device: C B-Peristaltic Pump E-Piston Pump
 X-Other: _____ C-QED Bladder Pump F-Dipper/Bottle

Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other: _____

Sample Tube Type: D A-Teflon C-PVC X-Other: _____
 B-Stainless Steel D-Polypropylene

WELL DATA

		<u>4224</u>		
Well Elevation (at TOC)	(ft/msl)	Depth to Water (DTW) (from TOC)	(ft)	Groundwater Elevation (site datum, from TOC)
				(ft/msl)
Total Well Depth (from TOC)	(ft)	Stick Up (from ground elevation)	(ft)	Casing ID
				(in)
				Casing Material

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit (L/M ²)	pH (std)	Conductance (SC/EC) (μmhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
<u>1310</u>	<u>350</u>	<u>6.14</u>	<u>230</u>	<u>13.38</u>		<u>3.22</u>	<u>-25.0</u>	
<u>1315</u>		<u>6.20</u>	<u>230</u>	<u>13.45</u>		<u>2.51</u>	<u>-23.0</u>	
<u>1318</u>		<u>6.31</u>	<u>229</u>	<u>13.50</u>		<u>1.23</u>	<u>-22.0</u>	
<u>1321</u>		<u>6.37</u>	<u>228</u>	<u>13.52</u>		<u>0.56</u>	<u>-21.0</u>	
<u>1324</u>		<u>6.39</u>	<u>229</u>	<u>13.51</u>	<u>279.0</u>	<u>0.46</u>	<u>-28.0</u>	
<u>1334</u>		<u>6.41</u>	<u>227</u>	<u>13.63</u>	<u>311.0</u>	<u>0.39</u>	<u>-34.0</u>	<u>42.28</u>
<u>1337</u>	<u>↓</u>	<u>6.41</u>	<u>228</u>	<u>13.60</u>	<u>285.0</u>	<u>0.38</u>	<u>-35.0</u>	
<u>1340</u>		<u>6.41</u>	<u>227</u>	<u>13.61</u>	<u>372.0</u>	<u>0.38</u>	<u>-31.0</u>	

Suggested range for 3 consec. readings or note Permit/State requirements:
 pH: +/- 0.2 Conductance: +/- 3% Temp: - Turbidity: - D.O.: +/- 10% eH/ORP: +/- 25 mV DTW: Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. **If more fields above are needed, use separate sheet or form.**

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (umhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: <u>Time</u>
<u>083116</u>	<u>6.41</u>	<u>227</u>	<u>13.61</u>	<u>372.0</u>	<u>0.38</u>	<u>-31.0</u>	Units: <u>1340</u>

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: _____ Odor: _____ Color: _____ Other: _____
 Weather Conditions (required daily, or as conditions change): _____ Direction/Speed: _____ Outlook: _____ Precipitation: Y or N
 Specific Comments (including purge/well volume calculations if required): _____

FIELD COMMENTS

Water came out as cloudy yellow/orange color. Performed extended purge to clear turbidity

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

8/31/16 Sam Graber [Signature] SCS

Date Name Signature Company

FIELD INFORMATION FORM



Site Name: 055L
 Site No.:
 Sample Point: MW-34A
Sample ID

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO
 PURGE DATE (MM DD YY): 083116
 PURGE TIME (2400 Hr Clock): 1410
 ELAPSED HRS (hrs:min): 20
 WATER VOL IN CASING (Gallons):
 ACTUAL VOL PURGED (Gallons):
 WELL VOLs PURGED:

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: **Y** or **N**
 Purging Device: C A-Submersible Pump D-Bailer
 Sampling Device: C B-Peristaltic Pump E-Piston Pump
 X-Other: C-QED Bladder Pump F-Dipper/Bottle
 Filter Device: A or **N** 0.45 μ or μ (circle or fill in)
 Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other
 Sample Tube Type: D A-Teflon C-PVC X-Other:
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC): (ft/msl)
 Depth to Water (DTW) (from TOC): 4043 (ft)
 Groundwater Elevation (site datum, from TOC): (ft/msl)
 Total Well Depth (from TOC): (ft)
 Stick Up (from ground elevation): (ft)
 Casing ID: (in)
 Casing Material:

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by State/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (μ mhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
14:10	350	5.73	1132	12.93		3.29	1050	
14:15		5.77	1125	12.96		3.39	1200	
14:18		5.74	1125	12.87		3.60	1290	
14:21		5.74	1125	12.82		3.67	1350	
14:24		5.74	1127	12.90		3.52	1400	
14:27		5.73	1127	12.90		3.57	1430	
14:30		5.73	1127	12.88	1.82	3.52	1450	404.6

Suggested range for 3 consec. readings or note Permit/State requirements: pH +/- 0.2, Conductance +/- 3%, Temp. -, Turbidity -, DO +/- 10%, eH/ORP +/- 25 mV, Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA
 SAMPLE DATE (MM DD YY): 083116
 pH (std): 5.73
 CONDUCTANCE (umhos/cm @ 25°C): 127
 TEMP. (°C): 12.88
 TURBIDITY (ntu): 1.82
 DO (mg/L - ppm): 3.52
 eH/ORP (mV): 1450
 Other: 1430

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: clear Odor: Color: Other:
 Weather Conditions (required daily, or as conditions change): Direction/Speed: Outlook: Precipitation: Y or **N**

FIELD COMMENTS
 Specific Comments (including purge/well volume calculations if required):
Dup 2 taken @ 1445

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
8/31/16 Sam Graber [Signature] SCS
 Date Name Signature Company

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM



Site Name: OSL
 Site No.: 09
 Sample Point: 4W-4
 Sample ID: 09

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID: _____

PURGE INFO
 PURGE DATE (MM DD YY): 09 01 16
 PURGE TIME (2400 Hr Clock): 3:05
 ELAPSED HRS (hrs:min): 20
 WATER VOL IN CASING (Gallons): _____
 ACTUAL VOL PURGED (Gallons): _____
 WELL VOLs PURGED: _____

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment ... Dedicated: Y or N
 Purging Device: C A-Submersible Pump D-Bailer
 Sampling Device: C B-Peristaltic Pump E-Piston Pump
 X-Other: _____ C-QED Bladder Pump F-Dipper/Bottle
 Filter Device: Y or N | 0.45 μ or _____ μ (circle or fill in)
 Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other _____
 Sample Tube Type: D A-Teflon C-PVC X-Other: _____
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC): _____ (ft/mst)
 Depth to Water (DTW) (from TOC): 1561 (ft)
 Groundwater Elevation (site datum, from TOC): _____ (ft/mst)
 Total Well Depth (from TOC): _____ (ft)
 Stick Up (from ground elevation): _____ (ft)
 Casing ID: _____ (in)
 Casing Material: _____

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

Sample Time (2400 Hr Clock)	Rate/Unit (ml/min)	pH (std)	Conductance (SC/EC) (μmhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
8:05	390	5.52	140	10.21		1.23	174.0	
8:10		5.96	138	10.00		0.29	138.0	
8:13		6.02	138	9.94		0.24	127.0	
8:16		6.07	137	9.94	10.78	0.20	121.0	
8:19		6.09	137	9.94		0.19	116.0	
8:22		6.11	137	9.94		0.17	114.0	156.5
8:25	↓	6.11	137	9.94	10.56	0.16	111.0	

Suggested range for 3 consec. readings or note Permit/State requirements: pH +/- 0.2, Conductance +/- 3%, Temp. -, Turbidity -, D.O. +/- 10%, eH/ORP +/- 25 mV, DTW Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA
 SAMPLE DATE (MM DD YY): 09 01 16
 pH (std): 6.11
 CONDUCTANCE (umhos/cm @ 25°C): 137
 TEMP. (°C): 9.94
 TURBIDITY (ntu): 0.86
 DO (mg/L-ppm): 0.16
 eH/ORP (mV): 111.0
 Other: time
 Units: 825

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: clear Odor: _____ Color: _____ Other: time
 Weather Conditions (required daily, or as conditions change): _____ Direction/Speed: _____ Outlook: _____ Precipitation: Y or N
 Specific Comments (including purge/well volume calculations if required): _____

FIELD COMMENTS

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
9/1/16 Sam Graber [Signature] SCS
 Date Name Signature Company

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM



Site Name: 025L
 Site No.: Sample Point: MW-32
Sample ID

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID: _____

PURGE INFO
 PURGE DATE (MM DD YY): 090116 PURGE TIME (2400 Hr Clock): 910 ELAPSED HRS (hrs:min): 20
 WATER VOL IN CASING (Gallons): ACTUAL VOL PURGED (Gallons): WELL VOLS PURGED:
Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

Purging and Sampling Equipment... Dedicated: or Filter Device: or 0.45 μ or μ (circle or fill in)
 Purging Device: C A-Submersible Pump D-Bailer Filter Type: A A-In-line Disposable C-Vacuum
 Sampling Device: C B-Peristaltic Pump E-Piston Pump B-Pressure X-Other
 X-Other: _____ Sample Tube Type: D A-Teflon C-PVC X-Other: _____
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC) (ft/msl): Depth to Water (DTW) (from TOC) (ft): 216 Groundwater Elevation (site datum, from TOC) (ft/msl):
 Total Well Depth (from TOC) (ft): Stick Up (from ground elevation) (ft): Casing ID (in): Casing Material:
Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

Sample Time (2400 Hr Clock)	Rate/Unit (ml/min)	pH (std)	Conductance (SC/EC) (μ mhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
09:10	380	6.111	243	12.62		2.44	7.0	
09:15	1	6.318	250	12.49		0.410	-43.0	
09:18		6.411	251	12.48		0.318	-15.10	
09:21		6.414	251	12.47		0.318	-15.50	
09:24		6.45	252	12.50		0.37	-15.810	12.16
09:27		6.46	250	12.49		0.317	-16.00	
09:30	V	6.46	250	12.49	0.90	0.316	-16.10	

Suggested range for 3 consec. readings or note Permit/State requirements: pH +/- 0.2 Conductance +/- 3% Temp. - D.O. +/- 10% eH/ORP +/- 25 mV Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA
 SAMPLE DATE (MM DD YY): 090116 pH (std): 6.46 CONDUCTANCE (umhos/cm @ 25°C): 250 TEMP. (°C): 12.49 TURBIDITY (ntu): 0.90 DO (mg/L - ppm): 0.36 eH/ORP (mV): -61.0 Other: Time
 Units: _____ Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: clear Odor: - Color: - Other: _____
 Weather Conditions (required daily, or as conditions change): _____ Direction/Speed: _____ Outlook: _____ Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required):
Needs clearing !!

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
9/1/16 Sam Graber SCS
 Date Name Signature Company

FIELD INFORMATION FORM



Site Name: 02SL

Site No.: Sample Point: MW-33C
Sample ID

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID: _____

PURGE INFO 090116 1048 20 _____ _____ _____

PURGE DATE (MM DD YY) PURGE TIME (2400 Hr Clock) ELAPSED HRS (hrs:min) WATER VOL IN CASING (Gallons) ACTUAL VOL PURGED (Gallons) WELL VOLS PURGED

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment ... Dedicated: **Y** or **N** Filter Device: **Y** or **N** 0.45 μ or _____ μ (circle or fill in)

Purging Device: **C** A-Submersible Pump D-Bailer Filter Type: **A** A-In-line Disposable C-Vacuum

Sampling Device: **C** B-Peristaltic Pump E-Piston Pump B-Pressure X-Other _____

X-Other: _____ C-QED Bladder Pump F-Dipper/Bottle A-Teflon C-PVC X-Other: _____

Sample Tube Type: **D** B-Stainless Steel D-Polypropylene

WELL DATA

Well Elevation (at TOC) _____ (ft/msl) Depth to Water (DTW) (from TOC) 342 (ft) Groundwater Elevation (site datum, from TOC) _____ (ft/msl)

Total Well Depth (from TOC) _____ (ft) Stick Up (from ground elevation) _____ (ft) Casing ID _____ (in) Casing Material _____

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by State/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (μ mhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
<u>10:48</u>	<u>150</u>	<u>7.016</u>	<u>1162</u>	<u>12.52</u>		<u>4.94</u>	<u>163.0</u>	
<u>10:53</u>		<u>6.913</u>	<u>1162</u>	<u>11.42</u>		<u>1.85</u>	<u>114.0</u>	
<u>10:56</u>		<u>6.913</u>	<u>1161</u>	<u>11.18</u>	<u>1.02</u>	<u>0.75</u>	<u>-42.0</u>	
<u>10:59</u>		<u>6.817</u>	<u>1162</u>	<u>11.07</u>		<u>0.54</u>	<u>-167.0</u>	
<u>11:02</u>		<u>7.03</u>	<u>1161</u>	<u>10.98</u>		<u>0.38</u>	<u>-193.0</u>	
<u>11:05</u>		<u>7.17</u>	<u>1161</u>	<u>11.03</u>		<u>0.32</u>	<u>-112.0</u>	
<u>11:08</u>		<u>7.313</u>	<u>1160</u>	<u>11.07</u>	<u>12.49</u>	<u>0.30</u>	<u>-122.0</u>	

Suggested range for 3 consec. readings or note Permit/State requirements: pH: +/- 0.2 Conductance: +/- 3% Temp: - Turbidity: - D.O.: +/- 10% eH/ORP: +/- 25 mV DTW: Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/State. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. **If more fields above are needed, use separate sheet or form.**

FIELD DATA

SAMPLE DATE (MM DD YY) pH (std) CONDUCTANCE (μ mhos/cm @ 25°C) TEMP. (°C) TURBIDITY (ntu) DO (mg/L - ppm) eH/ORP (mV) Other: Time

090116 7.33 1160 11.07 2.49 0.30 122.0 Units: 1108

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/State).

Sample Appearance: clear Odor: _____ Color: _____ Other: _____

Weather Conditions (required daily, or as conditions change): _____ Direction/Speed: _____ Outlook: _____ Precipitation: **Y** or **N**

Specific Comments (including purge/well volume calculations if required):

FIELD COMMENTS

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

9/1/16 Sam Grabar [Signature] SCS

Date Name Signature Company

Well	Date	Time	DTW	Measured by (initials)	Comments	Last Quarter DTW
MW-1	-	-	-	-	Not Measured, Hazard/No Access	
MW-10			5.32			NM
MW-11			-		lost	4.25
MW-12			48.03		Needs clearing * Request to remove	NM
MW-13			29.47			28.94
MW-13A			46.63			46.34
MW-13B			59.91			60.30
MW-14	-	-	-	-	Not Measured, Damaged Well	
MW-15R			19.33			18.72
MW-16			58.07			57.65
MW-17			33.57			NM
MW-18			63.97		Needs clearing * Request to remove	NM
MW-19A			33.28			32.58
MW-19B			33.33			32.62
MW-19C			34.46			33.80
MW-19D			33.38			32.73
MW-20			36.57			35.91
MW-21			6.50			5.35
MW-23A			12.38			NM
MW-23B			12.88		Need Clearing	12.41
MW-23C			13.08			12.92
MW-24			32.59			Request to remove from list
MW-26			11.60	TD = 27.75 "	↑	NM
MW-27			22.17	TD = 34.5 "	bottom felt soft, but no sediment on bottom of	21.74
MW-28			5.63	TD = 7.80 "	↓ "	NM
MW-29A			15.00			13.35
MW-29B			18.55			17.12
MW-29C			13.34			11.73

MW-12 + MW-18 not worth effort for two wells. plus clearing

diameter of MW-26, 27 & 28

SCS ENGINEERS						
			OVSL		Page 2 of 2	
	Date	Time	DTW	Measured by (initials)	Comments	Last Quarter DTW
MW-2A1			8.42		Need [↑] clearing	9.12
MW-2B1			7.27			6.72
MW-30A			25.40			24.00
MW-30B			25.22 ← 25.22			23.88
MW-31			4.59		Needs clearing End	NM
MW-32			2.16		Needs clearing End	1.50
MW-33A			6.28			5.62
MW-33B			3.50			2.13
MW-33C			3.42			2.17
MW-34A			40.43			39.5
MW-34B			40.11			39.41
MW-34C			42.24			41.21
MW-35			72.44		Needs clearing	72.07
MW-36			31.98			31.14
MW-36A			31.86			31.00
MW-37			5.98			NM
MW-38			5.90			3.67
MW-39			21.84			21.34
MW-4			15.61		Needs clearing	14.95
MW-40A			16.25		Need [↑] clearing	15.51
MW-40B			16.34			15.44
MW-40C			16.58			15.84
MW-41A			25.12			24.18
MW-41B			25.43			24.64
MW-41C			26.84			26.16
MW-42			28.78			27.85
MW-43			25.93			25.16
MW-5			3.24		Needs clearing	2.57
MW-9			3.78		Needs clearing	NM

GROUNDWATER SAMPLING INSTRUMENT CALIBRATION DOCUMENTATION FORM

	Conductivity	pH4	pH 7	DO	Turbidity	Comments/Exceptions
Date	3/29/16					
Time	3:10					
Weather (sky or precip, temp)	Sunny					
Type of Calibration	Standard	Standard	Standard	Standard	Standard	
Standard Value	1413	4.01	7.00	100% or ~8.5	1000, 10, 0.2 800, 100, 20, <0.1	
Pre-Cal Reading	1415	4.03	7.06			
Post Cal Reading	1413	4.01	7.00	7.79	797, 102, 21.3, 0.97	
Discrepancy	No					
Calib. Successful?	yes					
Calibration by	SEB					
Instrument Type, ID	MP20 / YSI 556			MicoTPW / HACH2000		
Calibration Location	OHSU					

* If Direct Reading is Unavailable, Assume pressure = 760 mm - 2.5 (altitude in ft/100)

GROUNDWATER SAMPLING INSTRUMENT CALIBRATION DOCUMENTATION FORM

	Conductivity	pH4	pH 7	DO	Turbidity	Comments/Exceptions
Date	9/30/16					
Time	1115					
Weather (sky or precip, temp)	overcast					
Type of Calibration	Standard	Standard	Standard	Standard	Standard	
Standard Value	1413	4.01	7.00	100% or ~8.5	1000, 10, 0.2 800, 100, 20, <0.1	
Pre-Cal Reading	1406	3.96	6.96			
Post Cal Reading	1413	4.01	7.00	8.06	789, 99.8, 20.8, 0.84	
Discrepancy	No					
Calib. Successful?	yes					
Calibration by	SEB					
Instrument Type, ID	MP20 / YSI 556			MicoTPW / HACH2000		
Calibration Location	OJSL					

* If Direct Reading is Unavailable, Assume pressure = 760 mm - 2.5 (altitude in ft/100)

GROUNDWATER SAMPLING INSTRUMENT CALIBRATION DOCUMENTATION FORM

	Conductivity	pH4	pH 7	DO	Turbidity	Comments/Exceptions
Date	8/21/16					
Time	715					
Weather (sky or precip, temp)	overcast					
Type of Calibration	Standard	Standard	Standard	Standard	Standard	
Standard Value	1413	4.01	7.00	100% or ~8.5	1000, 10, 0.2 800, 100, 20, <0.1	
Pre-Cal Reading	1419	4.06	6.98			
Post Cal Reading	1413	4.01	7.00		788, 99.8, 20.3, 0.17	
Discrepancy						
Calib. Successful?						
Calibration by	SEB					
Instrument Type, ID	MP20 / YSI 556			MicoTPW / HACH2000		
Calibration Location	OVS L					

* If Direct Reading is Unavailable, Assume pressure = 760 mm - 2.5 (altitude in ft/100)

GROUNDWATER SAMPLING INSTRUMENT CALIBRATION DOCUMENTATION FORM

	Conductivity	pH4	pH 7	DO	Turbidity	Comments/Exceptions
Date	9/1/16					
Time	730					
Weather (sky or precip, temp)	overcast					
Type of Calibration	Standard	Standard	Standard	Standard	Standard	
Standard Value	1413	4.01	7.00	100% or ~8.5	1000, 10, 0.2 800, 100, 20, <0.1	
Pre-Cal Reading	1411	4.08	7.02			
Post Cal Reading	1413	4.01	7.00	8.21	766, 98.3, 20.4, 1.12	
Discrepancy	10					
Calib. Successful?	yes					
Calibration by	SEG					
Instrument Type, ID	(MP20) / YSI 556			MicoTPW / (HACH2000)		
Calibration Location	OV5L					

* If Direct Reading is Unavailable, Assume pressure = 760 mm - 2.5 (altitude in ft/100)

APPENDIX B

FOURTH QUARTER 2016 DATA VALIDATION
AND
ANALYTICAL DATA REPORTS

(ANALYTICAL DATA REPORTS AVAILABLE ON CD)

**DATA VALIDATION REPORT – OLYMPIC VIEW SANITARY LANDFILL
FOURTH QUARTER 2016**

Project Details

Project No.	04204027.19	Site Name	Olympic View Sanitary Landfill
Data Validator	Sam Graber	Data Level	Level II
Date	1/10/2017	DV Tier	Tier I
QA Document	Olympic View Sanitary Landfill Sampling Analysis Plan, April 30, 2013		

Sample Login Summary

Sample Group	Sample Login Comments	Analytical Lab (Primary)
280-90968-1	No comments.	TestAmerica, Denver CO
280-91030-1	One of six VOAs for sample L-INF contained bubble larger than 6 mm. The lab used vials without headspace to perform analysis.	TestAmerica, Denver CO
280-91049-1	No comments.	TestAmerica, Denver CO
280-91129-1	No comments.	TestAmerica, Denver CO
280-91197-1	One of two coolers arrived three days late due to Fedex delay. Nitrite analysis performed outside of holding time for DUP1 and MW-24. TDS sample for MW-24 was reanalyzed outside of holding time. See narrative.	TestAmerica, Denver CO
280-91425-1	48-hr holding time for BOD expired prior to sample receipt. TDS analyzed 1 day passed holding time.	TestAmerica, Denver CO
280-91493-1	No comments.	TestAmerica, Denver CO
280-91758-1	No comments.	Analytical Resources Inc.

Analytical Summary

Sample Group	Analyses						
	Qtrly General Chemistry¹	Qtrly Metals	Qtrly VOCs	As²	TSS	BOD/COD	App III Analytes³
280-90968-1	X	X	X	--	X	--	--
280-91030-1	X	X	X	--	--	--	--
280-91049-1	X	X	X	--	X	--	--
280-91129-1	X	X	X	--	X	--	--
280-91197-1	X	X	X	--	X	--	--
280-91425-1	X*	X**	--	--	--	X	--
280-91493-1	--	--	--	--	--	X	--
280-91758-1	--	--	--	X	--	--	--

¹ General Chemistry (NO₃, Cl, SO₄, NH₄, Alkalinity, TDS, TOC)

² Arsenic only (total)

³ WAC 173-351-990 App. III - VOCs, Metals, Pesticides/PCBs, OP Pesticides, Herbicides, SVOCs, Sulfide, Cyanide

* General Chemistry (Cl, SO₄, NH₄, Alkalinity, TDS, TOC)

** Total Metals (Ca, Fe, Mg, Mn, K, Na)

Laboratory Quality Assurance Samples

Lab QA Samples	Notes	Comments
Surrogates/Organics	See case narrative.	<p>The analytes Acrolein, Acrylonitrile and 2-Chloroethyl Vinyl cannot be reliably quantitated in acid preserved samples, therefore, the reporting limits for the analytes is not reliable or defensible. No corrective action was taken as all samples are non-detect for the associated parameters.</p> <p>(280-91030-1) The sample L-INF was analyzed at a dilution for Method 8260C and 8260C SIM due to foaming at the time of purging during the analysis. Elevated reporting limits are provided.</p> <p>(280-91030-1) The VOA vials for sample L-INF exhibited pH values greater than 2. Because this sample is a leachate sample, a buffering effect was suspected.</p> <p>(280-91197-1) Several 8260B surrogate recoveries were above upper control limits for sample DUP1. Because the data are considered biased high and all target analytes were non-detect above the reporting limits, no corrective action necessary.</p>
MB	See case narrative.	<p>Vinyl Chloride SIM (280-90968-1, 280-91030-1, 280-91049-1, 280-91129-1, 280-91197-1) was detected in the MB above the method detection limit (MDL), but below the established reporting limit (RL). No corrective action was taken.</p> <p>Sulfate (280-91129-1) was detected in the MB above the project established reporting limit. Because the associated sample (MW-23A) exhibited detection of Sulfate below the TA Denver RL, reanalysis not performed.</p>
DUP	See case narrative.	(280-90968-1, 280-91030-1) The RPD results for TDS on samples MW-4, DUP2, and OBWL-TD were outside control limits. Because all other QC and calibration criteria were met no corrective action was needed.
LCS/LCSD	See case narrative.	<p>(280-91129-1) The Method 8260C LCS exhibited recoveries below lower control limits. Laboratory's SOP allowed for three analytes to recover outside criteria, therefore reanalysis deemed unnecessary.</p> <p>Ammonia (280-91425-1) exhibited RPD outside control limits. Both LCS and LCSD recovered in control limits, therefore no corrective action deemed necessary.</p>
MS/MSD	Possible matrix interference. See case narratives.	<p>Dissolved Sodium (280-91049-1), in a non-OVSL sample processed in the same batch as OVSL samples exhibited percent recoveries outside control limits. No corrective action was taken because the sample concentration was greater than 4 times the spike amount and the corresponding LCS and MB samples were within control limits.</p> <p>Dissolved Barium (280-91030-1) was recovered outside control limits on an OVSL sample (L-INF). No corrective action was taken because the sample concentration was greater than 4 times the spike amount and the corresponding LCS and MB samples were within control limits.</p> <p>Dissolved Manganese (280-91030-1) was recovered outside control limits on an OVSL sample (L-INF). No corrective action was taken because the sample concentration was greater than 4 times the spike amount and the corresponding LCS and MB samples were within control limits.</p> <p>Dissolved Manganese (280-90968-1), exhibited percent recoveries outside control limits on the MS/MSD performed on sample L-INF. No corrective action was taken because the sample concentration was greater than 4 times the spike amount and the corresponding LCS and MB samples were within control limits.</p> <p>Chloride (280-91030-1), in a non-OVSL sample processed in the same batch as OVSL samples exhibited percent recoveries outside control limits. No corrective action was taken because the corresponding LCS and MB samples were within control limits.</p> <p>Bromomethane (280-91049-1), in a non-OVSL sample processed in the same batch as OVSL samples exhibited percent recoveries outside control limits. No corrective action was taken because the corresponding LCS and MB samples were within control limits. In addition, the RPD result was outside the RPD limit</p>

Lab QA Samples	Notes	Comments
		<p>for Bromomethane. No corrective action taken.</p> <p>Chloroethane (280-91049-1), in a non-OVSL sample processed in the same batch as OVSL samples exhibited percent recoveries outside control limits. No corrective action was taken because the corresponding LCS and MB samples were within control limits.</p> <p>2-Butanone (MEK) (280-91049-1), in a non-OVSL sample processed in the same batch as OVSL samples exhibited percent recoveries outside control limits. No corrective action was taken because the corresponding LCS and MB samples were within control limits.</p> <p>Acetone (280-91049-1), in a non-OVSL sample processed in the same batch as OVSL samples exhibited percent recoveries outside control limits. No corrective action was taken because the corresponding LCS and MB samples were within control limits.</p> <p>8260B compounds (280-91197-1) in a non-OVSL sample processed in the same batch as OVSL samples exhibited percent recoveries outside control limits. No corrective action was taken because the corresponding LCS and MB samples were within control limits.</p> <p>Vinyl Chloride by 8260C (280-91129-1) in a non-OVSL sample processed in the same batch as OVSL samples exhibited percent recoveries outside control limits. No corrective action was taken because the corresponding LCS and MB samples were within control limits.</p> <p>Methyl acetate by 8260C (280-91129-1) in a non-OVSL sample processed in the same batch as OVSL samples exhibited percent recoveries outside control limits. No corrective action was taken because the corresponding LCS and MB samples were within control limits.</p> <p>Dissolved Manganese (280-91129-1, 280-91197-1) in a non-OVSL sample processed in the same batch as OVSL samples exhibited percent recoveries outside control limits. No corrective action was taken because the sample concentration was greater than 4 times the spike amount and the corresponding LCS and MB samples were within control limits.</p> <p>Total Barium (280-91129-1) was recovered outside control limits on an OVSL sample (MW-42). No corrective action was taken because the corresponding LCS and MB samples were within control limits.</p> <p>Total Manganese (280-91129-1) was recovered outside control limits on an OVSL sample (MW-42). No corrective action was taken because the sample concentration was greater than 4 times the spike amount and the corresponding LCS and MB samples were within control limits.</p> <p>Total Manganese (280-91197-1) was recovered outside control limits on an OVSL sample (MW-33A). No corrective action was taken because the corresponding LCS and MB samples were within control limits.</p> <p>TOC (280-91425-1) on a sample from another client exhibited recoveries outside control limits. Both LCS and MB were within control limits, therefore, no corrective action taken.</p>
General Chemistry	No comment.	
Metals	See case narrative.	(280-91030-1) The Method 6010B CCV samples surrounding the methods blank were above control limits for Dissolved Sodium. Corrective action deemed unnecessary.

Field Quality Assurance Samples

Field QA Samples	Sample Group	Analytes	Notes
Trip Blank	280-90968-1	No detections above the method detection limit.	
Trip Blank	280-91030-1	No detections above the method detection limit.	

Trip Blank	280-91049-1	No detections above the method detection limit.	
Trip Blank	280-91129-1	No detections above the method detection limit.	
Trip Blank	280-91197-1	No detections above the method detection limit.	

Detailed Field Replicate Evaluation

Analyte	Units	MW-33C (1116-23)	DUP1 (1116-24)	RPD %	MW-20 (1116-08)	DUP2 (1116-09)	RPD%
Alkalinity, Bicarbonate (As CaCO ₃)	mg/L	68	69	1.5	75	75	0.0
Alkalinity, Total (As CaCO ₃)	mg/L	68	69	1.5	75	75	0.0
Ammonia (as N)	mg/L	0.03 U	0.047	44.2*	ND	ND	NA
Barium, Total	mg/L	0.0048	0.0034	34.1	0.016	0.016	0.0
Calcium, Dissolved	mg/L	17	17	0.0	19	19	0.0
Chloride	mg/L	2.8	2.8	0.0	8.3	8.4	1.2
Iron, Total	mg/L	0.06 U	0.06	0.0*	0.18	0.15	18.2
Iron, Dissolved	mg/L	0.081	0.06 U	29.8*	ND	ND	NA
Magnesium, Dissolved	mg/L	7.4	7.4	0.0	11	11	0.0
Manganese, Dissolved	mg/L	0.15	0.14	6.9	ND	ND	NA
Manganese, Total	mg/L	0.15	0.14	6.9	0.45	0.44	2.2
Nickel, Total	mg/L	ND	ND	NA	0.0048	0.0058	18.9
Nitrate as N	mg/L	ND	ND	NA	6	5.9	1.7
Potassium, Dissolved	mg/L	1.3	1.3	0.0	3.1	3.1	0.0
Sodium, Dissolved	mg/L	4.2	4.2	0.0	9.3	9.3	0.0
Sulfate	mg/L	7.4	7.4	0.0	4.2	4.3	2.4
Total Dissolved Solids (TDS)	mg/L	95	97	2.1	160	150	6.5
Total Suspended Solids	mg/L	4	4 U	0.0*	4	5.6	33.3
Vanadium, Total	mg/L	ND	ND	NA	0.0020 U	0.0022	9.52*

* RPD based on result as compared to the Reporting Limit (RL) for a non-detection in the compared sample

U = Result was not detected at or above a concentration greater than the RL. Value provided is the RL for the given sample.

NA = Not applicable. Compared samples were below the RL for a given parameter.

Lab Qualifier Definitions

Lab Qualifiers	Description	Lab Group
E	Result exceeded calibration range.	280-91049-1, 280-91129-1
F1	MS and/or MSD Recovery is outside acceptance limits.	280-90968-1, 280-91030-1, 280-91049-1, 280-91129-1, 280-91197-1, 280-91425-1
F2	MS/MSD exceeds control limits.	280-91049-1
F3	Duplicate RPD exceeds control limit	280-90968-1, 280-91030-1
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.	280-90968-1, 280-91030-1, 280-91049-1, 280-91129-1, 280-91197-1
B	Compound was found in the blank and sample.	280-90968-1, 280-91030-1, 280-91049-1, 280-91129-1

Lab Qualifiers	Description	Lab Group
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.	280-90968-1, 280-91030-1, 280-91049-1, 280-91129-1, 280-91197-1
X	Surrogate is outside control limits.	280-91197-1
H	Sample was prepped or analyzed beyond specific holding time.	280-91197-1, 280-91425-1
*	LCS or LCSD is outside acceptance limits.	280-91129-1, 280-91425-1
^	ICV, CCV, ICB, CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: instrument related QC is outside control limits.	280-91030-1

Additional Qualifier Definitions

Qualifiers	Description	Lab Group
------------	-------------	-----------

Additional Items of Note

The analytes Acrolein, Acrylonitrile, and 2-Chloroethyl Vinyl Ether cannot be reliably quantitated in acid preserved samples, therefore, the reporting limits for the analytes is not reliable or defensible.

Qualified Data and Usability

Lab qualifiers are noted. All data, as qualified, are acceptable for use.

ANALYTICAL REPORT

Job Number: 280-91049-1

Job Description: WA02|Olympic View Sanitary LF

For:

Waste Management
Sun Valley Hauling
9081 Tujunga Avenue
Sun Valley, CA 91352

Attention: Mr. Phil Perley



Approved for release.
Betsy A Sara
Project Manager II
12/7/2016 5:10 PM

Betsy A Sara, Project Manager II
4955 Yarrow Street, Arvada, CO, 80002
(303)736-0189
betsy.sara@testamericainc.com
12/07/2016

cc: Mr. Dan Venchiarutti

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.

TestAmerica Laboratories, Inc.

TestAmerica Denver 4955 Yarrow Street, Arvada, CO 80002
Tel (303) 736-0100 Fax (303) 431-7171 www.testamericainc.com



Table of Contents

Cover Title Page	1
Report Narrative	3
Executive Summary	5
Method Summary	11
Method / Analyst Summary	12
Sample Summary	13
Sample Results	14
Sample Datasheets	15
Data Qualifiers	74
QC Results	75
Qc Association Summary	76
Surrogate Recovery Report	84
Qc Reports	86
Laboratory Chronicle	134
Client Chain of Custody	145
Sample Receipt Checklist	154

CASE NARRATIVE

Client: Waste Management

Project: WA02|Olympic View Sanitary LF

Report Number: 280-91049-1

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

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

Sample Receiving

The samples were received on 11/16/2016; the samples arrived in good condition, properly preserved and on ice. The temperatures of the coolers at receipt were 1.6° C and 2.2° C.

Holding Times

All holding times were within established control limits.

Method Blanks

Vinyl chloride Method 8260C SIM was detected in the Method Blanks below the project established reporting limits. No corrective action is taken for any values in Method Blanks that are below the requested reporting limits.

All other Method Blank recoveries 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)

The Matrix Spikes and Matrix Spike Duplicates performed on samples from other clients exhibited recoveries outside control limits for Bromomethane, Chloroethane, 2-Butanone (MEK) and Acetone Method 8260C. In addition, the RPD result was outside the RPD limit for Bromomethane. Because the corresponding Laboratory Control Samples and the Method Blank samples were within control limits, these anomalies may be due to matrix interference and no corrective action was taken.

The percent recoveries and/or relative percent difference of the MS/MSD performed on a sample from another client were outside control limits for Dissolved Sodium Method 6010B because the sample concentration was greater than four times the spike amount. Because the corresponding Laboratory Control Sample and the Method Blank sample were within control limits, no corrective action was taken.

The percent recoveries and/or relative percent difference of the MS/MSD performed on sample L-INF (91030) were outside control limits for Dissolved Manganese Method 6020 because the sample concentration was greater than four times the spike amount. Because the corresponding Laboratory Control Sample and the Method Blank sample were within control limits, no corrective action was taken.

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

Organics

The analytes Acrolein, Acrylonitrile and 2-chloroethyl vinyl ether cannot be reliably quantitated in acid preserved samples, therefore, the reporting limits for the analytes Acrolein, Acrylonitrile and 2-chloroethyl vinyl ether is not reliable or defensible.

General Comments

The analyses for Volatile Organics by Method 8260C and Volatile Organics by Method 8260C SIM were performed by TestAmerica Buffalo. Their address and phone number are:
TestAmerica Buffalo

10 Hazelwood Drive, Suite 106
Amherst, NY 14228
716-691-2600

EXECUTIVE SUMMARY - Detections

Client: Waste Management

Job Number: 280-91049-1

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-91049-1	MW-35					
Depth to water		71.17			ft	Field Sampling
Specific Conductivity		158			umhos/cm	Field Sampling
Dissolved Oxygen		6.61			mg/L	Field Sampling
eH		95.0			millivolts	Field Sampling
Turbidity		0.78			NTU	Field Sampling
Temperature		10.41			Degrees C	Field Sampling
pH		6.61			SU	Field Sampling
Chloride		1.8		1.0	mg/L	300.0
Sulfate		2.2		1.0	mg/L	300.0
Nitrate as N		0.47		0.050	mg/L	353.2
Alkalinity, Total (As CaCO3)		91		5.0	mg/L	SM 2320B
Alkalinity, Bicarbonate (As CaCO3)		91		5.0	mg/L	SM 2320B
Total Dissolved Solids (TDS)		120		5.0	mg/L	SM 2540C
<i>Dissolved</i>						
Calcium, Dissolved		14		0.040	mg/L	6010B
Magnesium, Dissolved		10		0.050	mg/L	6010B
Sodium, Dissolved		6.3		1.0	mg/L	6010B
<i>Total Recoverable</i>						
Barium, Total		0.0027		0.0010	mg/L	6020
Vanadium, Total		0.0043		0.0020	mg/L	6020

EXECUTIVE SUMMARY - Detections

Client: Waste Management

Job Number: 280-91049-1

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-91049-2	MW-34C					
Vinyl chloride		0.078	B	0.020	ug/L	8260C SIM
Depth to water		40.73			ft	Field Sampling
Specific Conductivity		231			umhos/cm	Field Sampling
Dissolved Oxygen		0.58			mg/L	Field Sampling
eH		41.6			millivolts	Field Sampling
Turbidity		77.9			NTU	Field Sampling
Temperature		12.60			Degrees C	Field Sampling
pH		7.45			SU	Field Sampling
Chloride		4.4		1.0	mg/L	300.0
Sulfate		4.6		1.0	mg/L	300.0
Ammonia (as N)		0.030		0.030	mg/L	350.1
Alkalinity, Total (As CaCO3)		110		5.0	mg/L	SM 2320B
Alkalinity, Bicarbonate (As CaCO3)		110		5.0	mg/L	SM 2320B
Total Dissolved Solids (TDS)		160		5.0	mg/L	SM 2540C
Total Suspended Solids		19		4.0	mg/L	SM 2540D
<i>Dissolved</i>						
Calcium, Dissolved		24		0.20	mg/L	6010B
Iron, Dissolved		0.62		0.30	mg/L	6010B
Magnesium, Dissolved		11		0.050	mg/L	6010B
Sodium, Dissolved		12		5.0	mg/L	6010B
Manganese, Dissolved		0.54		0.0010	mg/L	6020
<i>Total Recoverable</i>						
Iron, Total		8.4		0.060	mg/L	6010B
Barium, Total		0.037		0.0010	mg/L	6020
Manganese, Total		0.60		0.0010	mg/L	6020

EXECUTIVE SUMMARY - Detections

Client: Waste Management

Job Number: 280-91049-1

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-91049-3	MW-34A					
Depth to water		38.91			ft	Field Sampling
Specific Conductivity		177			umhos/cm	Field Sampling
Dissolved Oxygen		0.51			mg/L	Field Sampling
eH		119.6			millivolts	Field Sampling
Turbidity		1.25			NTU	Field Sampling
Temperature		12.47			Degrees C	Field Sampling
pH		6.79			SU	Field Sampling
Chloride		3.2		1.0	mg/L	300.0
Sulfate		3.0		1.0	mg/L	300.0
Alkalinity, Total (As CaCO3)		80		5.0	mg/L	SM 2320B
Alkalinity, Bicarbonate (As CaCO3)		80		5.0	mg/L	SM 2320B
Total Dissolved Solids (TDS)		120		5.0	mg/L	SM 2540C
<i>Dissolved</i>						
Calcium, Dissolved		15		0.040	mg/L	6010B
Magnesium, Dissolved		8.5		0.050	mg/L	6010B
Sodium, Dissolved		9.7		1.0	mg/L	6010B
Manganese, Dissolved		0.0017		0.0010	mg/L	6020
<i>Total Recoverable</i>						
Iron, Total		0.060		0.060	mg/L	6010B
Barium, Total		0.0045		0.0010	mg/L	6020
Manganese, Total		0.0027		0.0010	mg/L	6020
Vanadium, Total		0.0039		0.0020	mg/L	6020

EXECUTIVE SUMMARY - Detections

Client: Waste Management

Job Number: 280-91049-1

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-91049-4	MW-36A					
Depth to water		30.43			ft	Field Sampling
Specific Conductivity		128			umhos/cm	Field Sampling
Dissolved Oxygen		2.90			mg/L	Field Sampling
eH		133.3			millivolts	Field Sampling
Turbidity		1.75			NTU	Field Sampling
Temperature		9.71			Degrees C	Field Sampling
pH		6.81			SU	Field Sampling
Chloride		1.7		1.0	mg/L	300.0
Sulfate		2.5		1.0	mg/L	300.0
Nitrate as N		0.49		0.050	mg/L	353.2
Alkalinity, Total (As CaCO3)		60		5.0	mg/L	SM 2320B
Alkalinity, Bicarbonate (As CaCO3)		60		5.0	mg/L	SM 2320B
Total Dissolved Solids (TDS)		96		5.0	mg/L	SM 2540C
<i>Dissolved</i>						
Calcium, Dissolved		10		0.040	mg/L	6010B
Magnesium, Dissolved		8.0		0.050	mg/L	6010B
Sodium, Dissolved		7.3		1.0	mg/L	6010B
<i>Total Recoverable</i>						
Iron, Total		0.078		0.060	mg/L	6010B
Barium, Total		0.0025		0.0010	mg/L	6020
Chromium, Total		0.0085		0.0030	mg/L	6020
Manganese, Total		0.0013		0.0010	mg/L	6020
Vanadium, Total		0.0031		0.0020	mg/L	6020

EXECUTIVE SUMMARY - Detections

Client: Waste Management

Job Number: 280-91049-1

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-91049-5	MW-15R					
Depth to water		18.30			ft	Field Sampling
Specific Conductivity		155			umhos/cm	Field Sampling
Dissolved Oxygen		0.85			mg/L	Field Sampling
eH		109.0			millivolts	Field Sampling
Turbidity		1.21			NTU	Field Sampling
Temperature		10.45			Degrees C	Field Sampling
pH		7.37			SU	Field Sampling
Chloride		2.3		1.0	mg/L	300.0
Sulfate		4.8		1.0	mg/L	300.0
Nitrate as N		0.20		0.050	mg/L	353.2
Alkalinity, Total (As CaCO3)		71		5.0	mg/L	SM 2320B
Alkalinity, Bicarbonate (As CaCO3)		71		5.0	mg/L	SM 2320B
Total Dissolved Solids (TDS)		91		5.0	mg/L	SM 2540C
<i>Dissolved</i>						
Calcium, Dissolved		13		0.040	mg/L	6010B
Magnesium, Dissolved		9.4		0.050	mg/L	6010B
Sodium, Dissolved		6.3		1.0	mg/L	6010B
Manganese, Dissolved		0.0013		0.0010	mg/L	6020
<i>Total Recoverable</i>						
Barium, Total		0.0044		0.0010	mg/L	6020
Manganese, Total		0.0037		0.0010	mg/L	6020
Vanadium, Total		0.0037		0.0020	mg/L	6020

EXECUTIVE SUMMARY - Detections

Client: Waste Management

Job Number: 280-91049-1

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-91049-6	MW-2B1					
Vinyl chloride		0.0087	J B	0.020	ug/L	8260C SIM
Depth to water		6.20			ft	Field Sampling
Specific Conductivity		241			umhos/cm	Field Sampling
Dissolved Oxygen		0.17			mg/L	Field Sampling
eH		80.2			millivolts	Field Sampling
Turbidity		7.21			NTU	Field Sampling
Temperature		13.35			Degrees C	Field Sampling
pH		7.29			SU	Field Sampling
Chloride		14		1.0	mg/L	300.0
Sulfate		6.0		1.0	mg/L	300.0
Ammonia (as N)		2.1		0.030	mg/L	350.1
Nitrate as N		1.8		0.050	mg/L	353.2
Alkalinity, Total (As CaCO3)		82		5.0	mg/L	SM 2320B
Alkalinity, Bicarbonate (As CaCO3)		82		5.0	mg/L	SM 2320B
Total Dissolved Solids (TDS)		140		5.0	mg/L	SM 2540C
<i>Dissolved</i>						
Calcium, Dissolved		18		0.040	mg/L	6010B
Iron, Dissolved		0.31		0.060	mg/L	6010B
Magnesium, Dissolved		5.6		0.050	mg/L	6010B
Potassium, Dissolved		2.8		1.0	mg/L	6010B
Sodium, Dissolved		11		1.0	mg/L	6010B
Manganese, Dissolved		2.5		0.0010	mg/L	6020
<i>Total Recoverable</i>						
Iron, Total		1.1		0.060	mg/L	6010B
Barium, Total		0.013		0.0010	mg/L	6020
Manganese, Total		2.7		0.0010	mg/L	6020

METHOD SUMMARY

Client: Waste Management

Job Number: 280-91049-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Metals (ICP)	TAL DEN	SW846 6010B	
Preparation, Total Recoverable or Dissolved Metals	TAL DEN		SW846 3005A
Metals (ICP)	TAL DEN	SW846 6010B	
Preparation, Total Recoverable or Dissolved Metals	TAL DEN		SW846 3005A
Sample Filtration, Field			FIELD_FLTRD
Metals (ICP/MS)	TAL DEN	SW846 6020	
Preparation, Total Recoverable or Dissolved Metals	TAL DEN		SW846 3005A
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	
Nitrogen, Ammonia	TAL DEN	MCAWW 350.1	
Nitrate	TAL DEN	EPA 353.2	
Alkalinity	TAL DEN	SM SM 2320B	
Solids, Total Dissolved (TDS)	TAL DEN	SM SM 2540C	
Solids, Total Suspended (TSS)	TAL DEN	SM SM 2540D	
Organic Carbon, Total (TOC)	TAL DEN	SM SM 5310B	
Field Sampling	TAL DEN	EPA Field Sampling	
Volatile Organic Compounds by GC/MS	TAL BUF	SW846 8260C	
Purge and Trap	TAL BUF		SW846 5030C
Volatile Organic Compounds (GC/MS)	TAL BUF	SW846 8260C SIM	
Purge and Trap	TAL BUF		SW846 5030C

Lab References:

TAL BUF = TestAmerica Buffalo

TAL DEN = TestAmerica Denver

Method References:

EPA = US Environmental Protection Agency

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: Waste Management

Job Number: 280-91049-1

Method	Analyst	Analyst ID
SW846 8260C	Archer, Nicholas E	NEA
SW846 8260C	Dias, Nicole M	NMD1
SW846 8260C SIM	Dias, Nicole M	NMD1
SW846 6010B	Broander, Laura L	LLB
SW846 6010B	Lackey, Cara M	CML
SW846 6010B	Rhoades, Chris R	CRR
SW846 6020	Mooney, Joseph C	JM
SW846 6020	Trudell, Lynn-Anne M	LMT
EPA Field Sampling	Krisorn, Chamaiporn 1	C1K
MCAWW 300.0	Benson, Alex F	AFB
MCAWW 350.1	Spedale, Morgan A	MAS
EPA 353.2	Allen, Andrew J	AJA
SM SM 2320B	Carter, Melynda M	MMC
SM SM 2540C	Cherry, Scott V	SVC
SM SM 2540D	Cherry, Scott V	SVC
SM SM 5310B	Jewell, Connie C	CCJ

SAMPLE SUMMARY

Client: Waste Management

Job Number: 280-91049-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-91049-1	MW-35	Water	11/15/2016 0950	11/16/2016 1000
280-91049-2	MW-34C	Water	11/15/2016 1115	11/16/2016 1000
280-91049-3	MW-34A	Water	11/15/2016 1200	11/16/2016 1000
280-91049-4	MW-36A	Water	11/15/2016 1251	11/16/2016 1000
280-91049-5	MW-15R	Water	11/15/2016 1350	11/16/2016 1000
280-91049-6	MW-2B1	Water	11/15/2016 1453	11/16/2016 1000
280-91049-7TB	TRIP BLANK	Water	11/15/2016 0000	11/16/2016 1000

SAMPLE RESULTS

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Client Sample ID: MW-35

Lab Sample ID: 280-91049-1

Date Sampled: 11/15/2016 0950

Client Matrix: Water

Date Received: 11/16/2016 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333378	Instrument ID: HP5973P
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: P20521.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 2306		Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 2306		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	ND		0.35	1.0
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,1-Dichloropropene	ND		0.72	1.0
1,2,3-Trichlorobenzene	ND		0.41	1.0
1,2,3-Trichloropropane	ND		0.89	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2,4-Trimethylbenzene	ND		0.75	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane (EDB)	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloroethene, Total	ND		0.81	2.0
1,2-Dichloropropane	ND		0.72	1.0
1,3,5-Trichlorobenzene	ND		0.23	1.0
1,3,5-Trimethylbenzene	ND		0.77	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,3-Dichloropropane	ND		0.75	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
1,4-Dioxane	ND		9.3	40
2,2-Dichloropropane	ND		0.40	1.0
2-Butanone (MEK)	ND		1.3	10
2-Chloroethyl vinyl ether	ND		0.96	5.0
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Acetonitrile	ND		4.9	15
Acrolein	ND		0.91	20
Acrylonitrile	ND		0.83	5.0
Benzene	ND		0.41	1.0
Bromobenzene	ND		0.80	1.0
Bromochloromethane	ND		0.87	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Butyl alcohol, n-	ND		8.9	40
Butyl alcohol, tert-	ND		3.3	10
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Chlorodifluoromethane	ND		0.26	1.0
Chloroethane	ND		0.32	1.0

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Client Sample ID: MW-35

Lab Sample ID: 280-91049-1

Date Sampled: 11/15/2016 0950

Client Matrix: Water

Date Received: 11/16/2016 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333378	Instrument ID: HP5973P
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: P20521.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 2306		Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 2306		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dibromochloromethane	ND		0.32	1.0
Dibromomethane	ND		0.41	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Dichlorofluoromethane	ND		0.34	1.0
Ethyl acetate	ND		0.66	1.0
Ethyl ether	ND		0.72	1.0
Ethyl tert-butyl ether	ND		0.29	1.0
Ethylbenzene	ND		0.74	1.0
Hexachlorobutadiene	ND		0.28	1.0
Hexane	ND		0.40	10
Iodomethane	ND		0.30	1.0
Isobutanol	ND		4.8	25
Isopropyl ether	ND		0.59	1.0
Isopropylbenzene	ND		0.79	1.0
Methacrylonitrile	ND		0.69	5.0
Methyl acetate	ND		1.3	2.5
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
Naphthalene	ND		0.43	1.0
n-Butylbenzene	ND		0.64	1.0
N-Propylbenzene	ND		0.69	1.0
o-Chlorotoluene	ND		0.86	1.0
o-Xylene	ND		0.76	1.0
p-Chlorotoluene	ND		0.84	1.0
p-Cymene	ND		0.31	1.0
sec-Butylbenzene	ND		0.75	1.0
Styrene	ND		0.73	1.0
Tert-amyl methyl ether	ND		0.27	1.0
tert-Butylbenzene	ND		0.81	1.0
Tetrachloroethene	ND		0.36	1.0
Tetrahydrofuran	ND		1.3	5.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
trans-1,4-Dichloro-2-butene	ND		0.22	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0
Vinyl acetate	ND		0.85	5.0
Vinyl chloride	ND		0.90	1.0

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Client Sample ID: MW-35

Lab Sample ID: 280-91049-1

Date Sampled: 11/15/2016 0950

Client Matrix: Water

Date Received: 11/16/2016 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333378	Instrument ID: HP5973P
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: P20521.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 2306		Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 2306		

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	108		77 - 120
4-Bromofluorobenzene (Surr)	98		73 - 120
Toluene-d8 (Surr)	100		80 - 120

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Client Sample ID: MW-35

Lab Sample ID: 280-91049-1

Date Sampled: 11/15/2016 0950

Client Matrix: Water

Date Received: 11/16/2016 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analysis Batch: 480-333378

Instrument ID: HP5973P

Prep Method: 5030C

Prep Batch: N/A

Lab File ID: P20521.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Analysis Date: 11/23/2016 2306

Final Weight/Volume: 5 mL

Prep Date: 11/23/2016 2306

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
67-72-1	Hexachloroethane TIC	ND	

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Client Sample ID: MW-34C

Lab Sample ID: 280-91049-2

Date Sampled: 11/15/2016 1115

Client Matrix: Water

Date Received: 11/16/2016 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C Analysis Batch: 480-333552 Instrument ID: HP5973P
Prep Method: 5030C Prep Batch: N/A Lab File ID: P20626.D
Dilution: 1.0 Initial Weight/Volume: 5 mL
Analysis Date: 11/26/2016 1159 Final Weight/Volume: 5 mL
Prep Date: 11/26/2016 1159

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	ND		0.35	1.0
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,1-Dichloropropene	ND		0.72	1.0
1,2,3-Trichlorobenzene	ND		0.41	1.0
1,2,3-Trichloropropane	ND		0.89	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2,4-Trimethylbenzene	ND		0.75	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane (EDB)	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloroethene, Total	ND		0.81	2.0
1,2-Dichloropropane	ND		0.72	1.0
1,3,5-Trichlorobenzene	ND		0.23	1.0
1,3,5-Trimethylbenzene	ND		0.77	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,3-Dichloropropane	ND		0.75	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
1,4-Dioxane	ND		9.3	40
2,2-Dichloropropane	ND		0.40	1.0
2-Butanone (MEK)	ND		1.3	10
2-Chloroethyl vinyl ether	ND		0.96	5.0
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Acetonitrile	ND		4.9	15
Acrolein	ND		0.91	20
Acrylonitrile	ND		0.83	5.0
Benzene	ND		0.41	1.0
Bromobenzene	ND		0.80	1.0
Bromochloromethane	ND		0.87	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Butyl alcohol, n-	ND		8.9	40
Butyl alcohol, tert-	ND		3.3	10
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Chlorodifluoromethane	ND		0.26	1.0
Chloroethane	ND		0.32	1.0

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Client Sample ID: MW-34C

Lab Sample ID: 280-91049-2

Date Sampled: 11/15/2016 1115

Client Matrix: Water

Date Received: 11/16/2016 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333552	Instrument ID: HP5973P
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: P20626.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/26/2016 1159		Final Weight/Volume: 5 mL
Prep Date: 11/26/2016 1159		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dibromochloromethane	ND		0.32	1.0
Dibromomethane	ND		0.41	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Dichlorofluoromethane	ND		0.34	1.0
Ethyl acetate	ND		0.66	1.0
Ethyl ether	ND		0.72	1.0
Ethyl tert-butyl ether	ND		0.29	1.0
Ethylbenzene	ND		0.74	1.0
Hexachlorobutadiene	ND		0.28	1.0
Hexane	ND		0.40	10
Iodomethane	ND		0.30	1.0
Isobutanol	ND		4.8	25
Isopropyl ether	ND		0.59	1.0
Isopropylbenzene	ND		0.79	1.0
Methacrylonitrile	ND		0.69	5.0
Methyl acetate	ND		1.3	2.5
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
Naphthalene	ND		0.43	1.0
n-Butylbenzene	ND		0.64	1.0
N-Propylbenzene	ND		0.69	1.0
o-Chlorotoluene	ND		0.86	1.0
o-Xylene	ND		0.76	1.0
p-Chlorotoluene	ND		0.84	1.0
p-Cymene	ND		0.31	1.0
sec-Butylbenzene	ND		0.75	1.0
Styrene	ND		0.73	1.0
Tert-amyl methyl ether	ND		0.27	1.0
tert-Butylbenzene	ND		0.81	1.0
Tetrachloroethene	ND		0.36	1.0
Tetrahydrofuran	ND		1.3	5.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
trans-1,4-Dichloro-2-butene	ND		0.22	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0
Vinyl acetate	ND		0.85	5.0
Vinyl chloride	ND		0.90	1.0

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Client Sample ID: MW-34C

Lab Sample ID: 280-91049-2

Date Sampled: 11/15/2016 1115

Client Matrix: Water

Date Received: 11/16/2016 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333552	Instrument ID: HP5973P
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: P20626.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/26/2016 1159		Final Weight/Volume: 5 mL
Prep Date: 11/26/2016 1159		

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	106		77 - 120
4-Bromofluorobenzene (Surr)	95		73 - 120
Toluene-d8 (Surr)	100		80 - 120

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Client Sample ID: MW-34C

Lab Sample ID: 280-91049-2

Date Sampled: 11/15/2016 1115

Client Matrix: Water

Date Received: 11/16/2016 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analysis Batch: 480-333552

Instrument ID: HP5973P

Prep Method: 5030C

Prep Batch: N/A

Lab File ID: P20626.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Analysis Date: 11/26/2016 1159

Final Weight/Volume: 5 mL

Prep Date: 11/26/2016 1159

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
67-72-1	Hexachloroethane TIC	ND	

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Client Sample ID: MW-34A

Lab Sample ID: 280-91049-3

Date Sampled: 11/15/2016 1200

Client Matrix: Water

Date Received: 11/16/2016 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C Analysis Batch: 480-333552 Instrument ID: HP5973P
Prep Method: 5030C Prep Batch: N/A Lab File ID: P20627.D
Dilution: 1.0 Initial Weight/Volume: 5 mL
Analysis Date: 11/26/2016 1226 Final Weight/Volume: 5 mL
Prep Date: 11/26/2016 1226

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	ND		0.35	1.0
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,1-Dichloropropene	ND		0.72	1.0
1,2,3-Trichlorobenzene	ND		0.41	1.0
1,2,3-Trichloropropane	ND		0.89	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2,4-Trimethylbenzene	ND		0.75	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane (EDB)	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloroethene, Total	ND		0.81	2.0
1,2-Dichloropropane	ND		0.72	1.0
1,3,5-Trichlorobenzene	ND		0.23	1.0
1,3,5-Trimethylbenzene	ND		0.77	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,3-Dichloropropane	ND		0.75	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
1,4-Dioxane	ND		9.3	40
2,2-Dichloropropane	ND		0.40	1.0
2-Butanone (MEK)	ND		1.3	10
2-Chloroethyl vinyl ether	ND		0.96	5.0
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Acetonitrile	ND		4.9	15
Acrolein	ND		0.91	20
Acrylonitrile	ND		0.83	5.0
Benzene	ND		0.41	1.0
Bromobenzene	ND		0.80	1.0
Bromochloromethane	ND		0.87	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Butyl alcohol, n-	ND		8.9	40
Butyl alcohol, tert-	ND		3.3	10
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Chlorodifluoromethane	ND		0.26	1.0
Chloroethane	ND		0.32	1.0

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Client Sample ID: MW-34A

Lab Sample ID: 280-91049-3

Date Sampled: 11/15/2016 1200

Client Matrix: Water

Date Received: 11/16/2016 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-333552	Instrument ID:	HP5973P
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	P20627.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	11/26/2016 1226			Final Weight/Volume:	5 mL
Prep Date:	11/26/2016 1226				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dibromochloromethane	ND		0.32	1.0
Dibromomethane	ND		0.41	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Dichlorofluoromethane	ND		0.34	1.0
Ethyl acetate	ND		0.66	1.0
Ethyl ether	ND		0.72	1.0
Ethyl tert-butyl ether	ND		0.29	1.0
Ethylbenzene	ND		0.74	1.0
Hexachlorobutadiene	ND		0.28	1.0
Hexane	ND		0.40	10
Iodomethane	ND		0.30	1.0
Isobutanol	ND		4.8	25
Isopropyl ether	ND		0.59	1.0
Isopropylbenzene	ND		0.79	1.0
Methacrylonitrile	ND		0.69	5.0
Methyl acetate	ND		1.3	2.5
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
Naphthalene	ND		0.43	1.0
n-Butylbenzene	ND		0.64	1.0
N-Propylbenzene	ND		0.69	1.0
o-Chlorotoluene	ND		0.86	1.0
o-Xylene	ND		0.76	1.0
p-Chlorotoluene	ND		0.84	1.0
p-Cymene	ND		0.31	1.0
sec-Butylbenzene	ND		0.75	1.0
Styrene	ND		0.73	1.0
Tert-amyl methyl ether	ND		0.27	1.0
tert-Butylbenzene	ND		0.81	1.0
Tetrachloroethene	ND		0.36	1.0
Tetrahydrofuran	ND		1.3	5.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
trans-1,4-Dichloro-2-butene	ND		0.22	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0
Vinyl acetate	ND		0.85	5.0
Vinyl chloride	ND		0.90	1.0

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Client Sample ID: MW-34A

Lab Sample ID: 280-91049-3

Date Sampled: 11/15/2016 1200

Client Matrix: Water

Date Received: 11/16/2016 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333552	Instrument ID: HP5973P
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: P20627.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/26/2016 1226		Final Weight/Volume: 5 mL
Prep Date: 11/26/2016 1226		

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	108		77 - 120
4-Bromofluorobenzene (Surr)	96		73 - 120
Toluene-d8 (Surr)	100		80 - 120

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Client Sample ID: MW-34A

Lab Sample ID: 280-91049-3

Date Sampled: 11/15/2016 1200

Client Matrix: Water

Date Received: 11/16/2016 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analysis Batch: 480-333552

Instrument ID: HP5973P

Prep Method: 5030C

Prep Batch: N/A

Lab File ID: P20627.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Analysis Date: 11/26/2016 1226

Final Weight/Volume: 5 mL

Prep Date: 11/26/2016 1226

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
67-72-1	Hexachloroethane TIC	ND	

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Client Sample ID: MW-36A

Lab Sample ID: 280-91049-4

Date Sampled: 11/15/2016 1251

Client Matrix: Water

Date Received: 11/16/2016 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333552	Instrument ID: HP5973P
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: P20628.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/26/2016 1253		Final Weight/Volume: 5 mL
Prep Date: 11/26/2016 1253		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	ND		0.35	1.0
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,1-Dichloropropene	ND		0.72	1.0
1,2,3-Trichlorobenzene	ND		0.41	1.0
1,2,3-Trichloropropane	ND		0.89	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2,4-Trimethylbenzene	ND		0.75	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane (EDB)	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloroethene, Total	ND		0.81	2.0
1,2-Dichloropropane	ND		0.72	1.0
1,3,5-Trichlorobenzene	ND		0.23	1.0
1,3,5-Trimethylbenzene	ND		0.77	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,3-Dichloropropane	ND		0.75	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
1,4-Dioxane	ND		9.3	40
2,2-Dichloropropane	ND		0.40	1.0
2-Butanone (MEK)	ND		1.3	10
2-Chloroethyl vinyl ether	ND		0.96	5.0
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Acetonitrile	ND		4.9	15
Acrolein	ND		0.91	20
Acrylonitrile	ND		0.83	5.0
Benzene	ND		0.41	1.0
Bromobenzene	ND		0.80	1.0
Bromochloromethane	ND		0.87	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Butyl alcohol, n-	ND		8.9	40
Butyl alcohol, tert-	ND		3.3	10
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Chlorodifluoromethane	ND		0.26	1.0
Chloroethane	ND		0.32	1.0

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Client Sample ID: MW-36A

Lab Sample ID: 280-91049-4

Date Sampled: 11/15/2016 1251

Client Matrix: Water

Date Received: 11/16/2016 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C Analysis Batch: 480-333552 Instrument ID: HP5973P
Prep Method: 5030C Prep Batch: N/A Lab File ID: P20628.D
Dilution: 1.0 Initial Weight/Volume: 5 mL
Analysis Date: 11/26/2016 1253 Final Weight/Volume: 5 mL
Prep Date: 11/26/2016 1253

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dibromochloromethane	ND		0.32	1.0
Dibromomethane	ND		0.41	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Dichlorofluoromethane	ND		0.34	1.0
Ethyl acetate	ND		0.66	1.0
Ethyl ether	ND		0.72	1.0
Ethyl tert-butyl ether	ND		0.29	1.0
Ethylbenzene	ND		0.74	1.0
Hexachlorobutadiene	ND		0.28	1.0
Hexane	ND		0.40	10
Iodomethane	ND		0.30	1.0
Isobutanol	ND		4.8	25
Isopropyl ether	ND		0.59	1.0
Isopropylbenzene	ND		0.79	1.0
Methacrylonitrile	ND		0.69	5.0
Methyl acetate	ND		1.3	2.5
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
Naphthalene	ND		0.43	1.0
n-Butylbenzene	ND		0.64	1.0
N-Propylbenzene	ND		0.69	1.0
o-Chlorotoluene	ND		0.86	1.0
o-Xylene	ND		0.76	1.0
p-Chlorotoluene	ND		0.84	1.0
p-Cymene	ND		0.31	1.0
sec-Butylbenzene	ND		0.75	1.0
Styrene	ND		0.73	1.0
Tert-amyl methyl ether	ND		0.27	1.0
tert-Butylbenzene	ND		0.81	1.0
Tetrachloroethene	ND		0.36	1.0
Tetrahydrofuran	ND		1.3	5.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
trans-1,4-Dichloro-2-butene	ND		0.22	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0
Vinyl acetate	ND		0.85	5.0
Vinyl chloride	ND		0.90	1.0

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Client Sample ID: MW-36A

Lab Sample ID: 280-91049-4

Date Sampled: 11/15/2016 1251

Client Matrix: Water

Date Received: 11/16/2016 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333552	Instrument ID: HP5973P
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: P20628.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/26/2016 1253		Final Weight/Volume: 5 mL
Prep Date: 11/26/2016 1253		

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	106		77 - 120
4-Bromofluorobenzene (Surr)	94		73 - 120
Toluene-d8 (Surr)	98		80 - 120

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Client Sample ID: MW-36A

Lab Sample ID: 280-91049-4

Date Sampled: 11/15/2016 1251

Client Matrix: Water

Date Received: 11/16/2016 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analysis Batch: 480-333552

Instrument ID: HP5973P

Prep Method: 5030C

Prep Batch: N/A

Lab File ID: P20628.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Analysis Date: 11/26/2016 1253

Final Weight/Volume: 5 mL

Prep Date: 11/26/2016 1253

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
67-72-1	Hexachloroethane TIC	ND	

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Client Sample ID: MW-15R

Lab Sample ID: 280-91049-5

Date Sampled: 11/15/2016 1350

Client Matrix: Water

Date Received: 11/16/2016 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333552	Instrument ID: HP5973P
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: P20629.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/26/2016 1321		Final Weight/Volume: 5 mL
Prep Date: 11/26/2016 1321		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	ND		0.35	1.0
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,1-Dichloropropene	ND		0.72	1.0
1,2,3-Trichlorobenzene	ND		0.41	1.0
1,2,3-Trichloropropane	ND		0.89	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2,4-Trimethylbenzene	ND		0.75	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane (EDB)	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloroethene, Total	ND		0.81	2.0
1,2-Dichloropropane	ND		0.72	1.0
1,3,5-Trichlorobenzene	ND		0.23	1.0
1,3,5-Trimethylbenzene	ND		0.77	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,3-Dichloropropane	ND		0.75	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
1,4-Dioxane	ND		9.3	40
2,2-Dichloropropane	ND		0.40	1.0
2-Butanone (MEK)	ND		1.3	10
2-Chloroethyl vinyl ether	ND		0.96	5.0
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Acetonitrile	ND		4.9	15
Acrolein	ND		0.91	20
Acrylonitrile	ND		0.83	5.0
Benzene	ND		0.41	1.0
Bromobenzene	ND		0.80	1.0
Bromochloromethane	ND		0.87	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Butyl alcohol, n-	ND		8.9	40
Butyl alcohol, tert-	ND		3.3	10
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Chlorodifluoromethane	ND		0.26	1.0
Chloroethane	ND		0.32	1.0

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Client Sample ID: MW-15R

Lab Sample ID: 280-91049-5

Date Sampled: 11/15/2016 1350

Client Matrix: Water

Date Received: 11/16/2016 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-333552	Instrument ID:	HP5973P
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	P20629.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	11/26/2016 1321			Final Weight/Volume:	5 mL
Prep Date:	11/26/2016 1321				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dibromochloromethane	ND		0.32	1.0
Dibromomethane	ND		0.41	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Dichlorofluoromethane	ND		0.34	1.0
Ethyl acetate	ND		0.66	1.0
Ethyl ether	ND		0.72	1.0
Ethyl tert-butyl ether	ND		0.29	1.0
Ethylbenzene	ND		0.74	1.0
Hexachlorobutadiene	ND		0.28	1.0
Hexane	ND		0.40	10
Iodomethane	ND		0.30	1.0
Isobutanol	ND		4.8	25
Isopropyl ether	ND		0.59	1.0
Isopropylbenzene	ND		0.79	1.0
Methacrylonitrile	ND		0.69	5.0
Methyl acetate	ND		1.3	2.5
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
Naphthalene	ND		0.43	1.0
n-Butylbenzene	ND		0.64	1.0
N-Propylbenzene	ND		0.69	1.0
o-Chlorotoluene	ND		0.86	1.0
o-Xylene	ND		0.76	1.0
p-Chlorotoluene	ND		0.84	1.0
p-Cymene	ND		0.31	1.0
sec-Butylbenzene	ND		0.75	1.0
Styrene	ND		0.73	1.0
Tert-amyl methyl ether	ND		0.27	1.0
tert-Butylbenzene	ND		0.81	1.0
Tetrachloroethene	ND		0.36	1.0
Tetrahydrofuran	ND		1.3	5.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
trans-1,4-Dichloro-2-butene	ND		0.22	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0
Vinyl acetate	ND		0.85	5.0
Vinyl chloride	ND		0.90	1.0

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Client Sample ID: MW-15R

Lab Sample ID: 280-91049-5

Date Sampled: 11/15/2016 1350

Client Matrix: Water

Date Received: 11/16/2016 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333552	Instrument ID: HP5973P
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: P20629.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/26/2016 1321		Final Weight/Volume: 5 mL
Prep Date: 11/26/2016 1321		

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	105		77 - 120
4-Bromofluorobenzene (Surr)	94		73 - 120
Toluene-d8 (Surr)	99		80 - 120

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Client Sample ID: MW-15R

Lab Sample ID: 280-91049-5

Date Sampled: 11/15/2016 1350

Client Matrix: Water

Date Received: 11/16/2016 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analysis Batch: 480-333552

Instrument ID: HP5973P

Prep Method: 5030C

Prep Batch: N/A

Lab File ID: P20629.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Analysis Date: 11/26/2016 1321

Final Weight/Volume: 5 mL

Prep Date: 11/26/2016 1321

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
67-72-1	Hexachloroethane TIC	ND	

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Client Sample ID: MW-2B1

Lab Sample ID: 280-91049-6

Date Sampled: 11/15/2016 1453

Client Matrix: Water

Date Received: 11/16/2016 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333552	Instrument ID: HP5973P
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: P20630.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/26/2016 1348		Final Weight/Volume: 5 mL
Prep Date: 11/26/2016 1348		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	ND		0.35	1.0
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,1-Dichloropropene	ND		0.72	1.0
1,2,3-Trichlorobenzene	ND		0.41	1.0
1,2,3-Trichloropropane	ND		0.89	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2,4-Trimethylbenzene	ND		0.75	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane (EDB)	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloroethene, Total	ND		0.81	2.0
1,2-Dichloropropane	ND		0.72	1.0
1,3,5-Trichlorobenzene	ND		0.23	1.0
1,3,5-Trimethylbenzene	ND		0.77	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,3-Dichloropropane	ND		0.75	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
1,4-Dioxane	ND		9.3	40
2,2-Dichloropropane	ND		0.40	1.0
2-Butanone (MEK)	ND		1.3	10
2-Chloroethyl vinyl ether	ND		0.96	5.0
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Acetonitrile	ND		4.9	15
Acrolein	ND		0.91	20
Acrylonitrile	ND		0.83	5.0
Benzene	ND		0.41	1.0
Bromobenzene	ND		0.80	1.0
Bromochloromethane	ND		0.87	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Butyl alcohol, n-	ND		8.9	40
Butyl alcohol, tert-	ND		3.3	10
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Chlorodifluoromethane	ND		0.26	1.0
Chloroethane	ND		0.32	1.0

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Client Sample ID: MW-2B1

Lab Sample ID: 280-91049-6

Date Sampled: 11/15/2016 1453

Client Matrix: Water

Date Received: 11/16/2016 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C Analysis Batch: 480-333552 Instrument ID: HP5973P
Prep Method: 5030C Prep Batch: N/A Lab File ID: P20630.D
Dilution: 1.0 Initial Weight/Volume: 5 mL
Analysis Date: 11/26/2016 1348 Final Weight/Volume: 5 mL
Prep Date: 11/26/2016 1348

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dibromochloromethane	ND		0.32	1.0
Dibromomethane	ND		0.41	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Dichlorofluoromethane	ND		0.34	1.0
Ethyl acetate	ND		0.66	1.0
Ethyl ether	ND		0.72	1.0
Ethyl tert-butyl ether	ND		0.29	1.0
Ethylbenzene	ND		0.74	1.0
Hexachlorobutadiene	ND		0.28	1.0
Hexane	ND		0.40	10
Iodomethane	ND		0.30	1.0
Isobutanol	ND		4.8	25
Isopropyl ether	ND		0.59	1.0
Isopropylbenzene	ND		0.79	1.0
Methacrylonitrile	ND		0.69	5.0
Methyl acetate	ND		1.3	2.5
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
Naphthalene	ND		0.43	1.0
n-Butylbenzene	ND		0.64	1.0
N-Propylbenzene	ND		0.69	1.0
o-Chlorotoluene	ND		0.86	1.0
o-Xylene	ND		0.76	1.0
p-Chlorotoluene	ND		0.84	1.0
p-Cymene	ND		0.31	1.0
sec-Butylbenzene	ND		0.75	1.0
Styrene	ND		0.73	1.0
Tert-amyl methyl ether	ND		0.27	1.0
tert-Butylbenzene	ND		0.81	1.0
Tetrachloroethene	ND		0.36	1.0
Tetrahydrofuran	ND		1.3	5.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
trans-1,4-Dichloro-2-butene	ND		0.22	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0
Vinyl acetate	ND		0.85	5.0
Vinyl chloride	ND		0.90	1.0

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Client Sample ID: MW-2B1

Lab Sample ID: 280-91049-6

Date Sampled: 11/15/2016 1453

Client Matrix: Water

Date Received: 11/16/2016 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333552	Instrument ID: HP5973P
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: P20630.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/26/2016 1348		Final Weight/Volume: 5 mL
Prep Date: 11/26/2016 1348		

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	108		77 - 120
4-Bromofluorobenzene (Surr)	95		73 - 120
Toluene-d8 (Surr)	98		80 - 120

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Client Sample ID: MW-2B1

Lab Sample ID: 280-91049-6

Date Sampled: 11/15/2016 1453

Client Matrix: Water

Date Received: 11/16/2016 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analysis Batch: 480-333552

Instrument ID: HP5973P

Prep Method: 5030C

Prep Batch: N/A

Lab File ID: P20630.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Analysis Date: 11/26/2016 1348

Final Weight/Volume: 5 mL

Prep Date: 11/26/2016 1348

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
67-72-1	Hexachloroethane TIC	ND	

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 280-91049-7TB

Date Sampled: 11/15/2016 0000

Client Matrix: Water

Date Received: 11/16/2016 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-333552	Instrument ID:	HP5973P
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	P20631.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	11/26/2016 1415			Final Weight/Volume:	5 mL
Prep Date:	11/26/2016 1415				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	ND		0.35	1.0
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,1-Dichloropropene	ND		0.72	1.0
1,2,3-Trichlorobenzene	ND		0.41	1.0
1,2,3-Trichloropropane	ND		0.89	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2,4-Trimethylbenzene	ND		0.75	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane (EDB)	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloroethene, Total	ND		0.81	2.0
1,2-Dichloropropane	ND		0.72	1.0
1,3,5-Trichlorobenzene	ND		0.23	1.0
1,3,5-Trimethylbenzene	ND		0.77	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,3-Dichloropropane	ND		0.75	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
1,4-Dioxane	ND		9.3	40
2,2-Dichloropropane	ND		0.40	1.0
2-Butanone (MEK)	ND		1.3	10
2-Chloroethyl vinyl ether	ND		0.96	5.0
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Acetonitrile	ND		4.9	15
Acrolein	ND		0.91	20
Acrylonitrile	ND		0.83	5.0
Benzene	ND		0.41	1.0
Bromobenzene	ND		0.80	1.0
Bromochloromethane	ND		0.87	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Butyl alcohol, n-	ND		8.9	40
Butyl alcohol, tert-	ND		3.3	10
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Chlorodifluoromethane	ND		0.26	1.0
Chloroethane	ND		0.32	1.0

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 280-91049-7TB

Date Sampled: 11/15/2016 0000

Client Matrix: Water

Date Received: 11/16/2016 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-333552	Instrument ID:	HP5973P
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	P20631.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	11/26/2016 1415			Final Weight/Volume:	5 mL
Prep Date:	11/26/2016 1415				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dibromochloromethane	ND		0.32	1.0
Dibromomethane	ND		0.41	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Dichlorofluoromethane	ND		0.34	1.0
Ethyl acetate	ND		0.66	1.0
Ethyl ether	ND		0.72	1.0
Ethyl tert-butyl ether	ND		0.29	1.0
Ethylbenzene	ND		0.74	1.0
Hexachlorobutadiene	ND		0.28	1.0
Hexane	ND		0.40	10
Iodomethane	ND		0.30	1.0
Isobutanol	ND		4.8	25
Isopropyl ether	ND		0.59	1.0
Isopropylbenzene	ND		0.79	1.0
Methacrylonitrile	ND		0.69	5.0
Methyl acetate	ND		1.3	2.5
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
Naphthalene	ND		0.43	1.0
n-Butylbenzene	ND		0.64	1.0
N-Propylbenzene	ND		0.69	1.0
o-Chlorotoluene	ND		0.86	1.0
o-Xylene	ND		0.76	1.0
p-Chlorotoluene	ND		0.84	1.0
p-Cymene	ND		0.31	1.0
sec-Butylbenzene	ND		0.75	1.0
Styrene	ND		0.73	1.0
Tert-amyl methyl ether	ND		0.27	1.0
tert-Butylbenzene	ND		0.81	1.0
Tetrachloroethene	ND		0.36	1.0
Tetrahydrofuran	ND		1.3	5.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
trans-1,4-Dichloro-2-butene	ND		0.22	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0
Vinyl acetate	ND		0.85	5.0
Vinyl chloride	ND		0.90	1.0

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 280-91049-7TB

Date Sampled: 11/15/2016 0000

Client Matrix: Water

Date Received: 11/16/2016 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333552	Instrument ID: HP5973P
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: P20631.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/26/2016 1415		Final Weight/Volume: 5 mL
Prep Date: 11/26/2016 1415		

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	107		77 - 120
4-Bromofluorobenzene (Surr)	95		73 - 120
Toluene-d8 (Surr)	100		80 - 120

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 280-91049-7TB

Date Sampled: 11/15/2016 0000

Client Matrix: Water

Date Received: 11/16/2016 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analysis Batch: 480-333552

Instrument ID: HP5973P

Prep Method: 5030C

Prep Batch: N/A

Lab File ID: P20631.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Analysis Date: 11/26/2016 1415

Final Weight/Volume: 5 mL

Prep Date: 11/26/2016 1415

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
67-72-1	Hexachloroethane TIC	ND	

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Client Sample ID: MW-35

Lab Sample ID: 280-91049-1

Date Sampled: 11/15/2016 0950

Client Matrix: Water

Date Received: 11/16/2016 1000

8260C SIM Volatile Organic Compounds (GC/MS)

Analysis Method:	8260C SIM	Analysis Batch:	480-332322	Instrument ID:	HP5973J
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	J1469.D
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	11/18/2016 0036			Final Weight/Volume:	25 mL
Prep Date:	11/18/2016 0036				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		0.0040	0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	99		50 - 150
TBA-d9 (Surr)	120		50 - 150

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Client Sample ID: MW-34C

Lab Sample ID: 280-91049-2

Date Sampled: 11/15/2016 1115

Client Matrix: Water

Date Received: 11/16/2016 1000

8260C SIM Volatile Organic Compounds (GC/MS)

Analysis Method: 8260C SIM	Analysis Batch: 480-332322	Instrument ID: HP5973J
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: J1470.D
Dilution: 1.0		Initial Weight/Volume: 25 mL
Analysis Date: 11/18/2016 0100		Final Weight/Volume: 25 mL
Prep Date: 11/18/2016 0100		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	0.078	B	0.0040	0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	97		50 - 150
TBA-d9 (Surr)	132		50 - 150

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Client Sample ID: MW-34A

Lab Sample ID: 280-91049-3

Date Sampled: 11/15/2016 1200

Client Matrix: Water

Date Received: 11/16/2016 1000

8260C SIM Volatile Organic Compounds (GC/MS)

Analysis Method:	8260C SIM	Analysis Batch:	480-332322	Instrument ID:	HP5973J
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	J1471.D
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	11/18/2016 0124			Final Weight/Volume:	25 mL
Prep Date:	11/18/2016 0124				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		0.0040	0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	99		50 - 150
TBA-d9 (Surr)	131		50 - 150

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Client Sample ID: MW-36A

Lab Sample ID: 280-91049-4

Date Sampled: 11/15/2016 1251

Client Matrix: Water

Date Received: 11/16/2016 1000

8260C SIM Volatile Organic Compounds (GC/MS)

Analysis Method: 8260C SIM	Analysis Batch: 480-332322	Instrument ID: HP5973J
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: J1472.D
Dilution: 1.0		Initial Weight/Volume: 25 mL
Analysis Date: 11/18/2016 0149		Final Weight/Volume: 25 mL
Prep Date: 11/18/2016 0149		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		0.0040	0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	101		50 - 150
TBA-d9 (Surr)	124		50 - 150

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Client Sample ID: MW-15R

Lab Sample ID: 280-91049-5

Date Sampled: 11/15/2016 1350

Client Matrix: Water

Date Received: 11/16/2016 1000

8260C SIM Volatile Organic Compounds (GC/MS)

Analysis Method: 8260C SIM	Analysis Batch: 480-332322	Instrument ID: HP5973J
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: J1473.D
Dilution: 1.0		Initial Weight/Volume: 25 mL
Analysis Date: 11/18/2016 0213		Final Weight/Volume: 25 mL
Prep Date: 11/18/2016 0213		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		0.0040	0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	102		50 - 150
TBA-d9 (Surr)	129		50 - 150

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Client Sample ID: MW-2B1

Lab Sample ID: 280-91049-6

Date Sampled: 11/15/2016 1453

Client Matrix: Water

Date Received: 11/16/2016 1000

8260C SIM Volatile Organic Compounds (GC/MS)

Analysis Method:	8260C SIM	Analysis Batch:	480-332322	Instrument ID:	HP5973J
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	J1474.D
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	11/18/2016 0238			Final Weight/Volume:	25 mL
Prep Date:	11/18/2016 0238				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	0.0087	J B	0.0040	0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	100		50 - 150
TBA-d9 (Surr)	121		50 - 150

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 280-91049-7TB

Date Sampled: 11/15/2016 0000

Client Matrix: Water

Date Received: 11/16/2016 1000

8260C SIM Volatile Organic Compounds (GC/MS)

Analysis Method: 8260C SIM	Analysis Batch: 480-332322	Instrument ID: HP5973J
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: J1475.D
Dilution: 1.0		Initial Weight/Volume: 25 mL
Analysis Date: 11/18/2016 0302		Final Weight/Volume: 25 mL
Prep Date: 11/18/2016 0302		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		0.0040	0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	97		50 - 150
TBA-d9 (Surr)	137		50 - 150

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Client Sample ID: MW-35

Lab Sample ID: 280-91049-1

Date Sampled: 11/15/2016 0950

Client Matrix: Water

Date Received: 11/16/2016 1000

6010B Metals (ICP)-Total Recoverable

Analysis Method: 6010B Analysis Batch: 280-354204 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-352775 Lab File ID: 25B120416.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 12/04/2016 1946 Final Weight/Volume: 50 mL
Prep Date: 11/28/2016 1441

Analyte	Result (mg/L)	Qualifier	RL	RL
Cobalt, Total	ND		0.0030	0.0030
Iron, Total	ND		0.060	0.060

6010B Metals (ICP)-Dissolved

Analysis Method: 6010B Analysis Batch: 280-354165 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-352772 Lab File ID: 25A11316.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 12/03/2016 2323 Final Weight/Volume: 50 mL
Prep Date: 11/29/2016 0726

Analyte	Result (mg/L)	Qualifier	RL	RL
Magnesium, Dissolved	10		0.050	0.050

Analysis Method: 6010B Analysis Batch: 280-354385 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-352772 Lab File ID: 25A120516.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 12/05/2016 2315 Final Weight/Volume: 50 mL
Prep Date: 11/29/2016 0726

Analyte	Result (mg/L)	Qualifier	RL	RL
Calcium, Dissolved	14		0.040	0.040
Iron, Dissolved	ND		0.060	0.060
Potassium, Dissolved	ND		1.0	1.0
Sodium, Dissolved	6.3		1.0	1.0

6020 Metals (ICP/MS)-Total Recoverable

Analysis Method: 6020 Analysis Batch: 280-353513 Instrument ID: MT_078
Prep Method: 3005A Prep Batch: 280-352777 Lab File ID: 262SMPL.d
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 11/29/2016 0702 Final Weight/Volume: 50 mL
Prep Date: 11/28/2016 1441

Analyte	Result (mg/L)	Qualifier	RL	RL
Antimony, Total	ND		0.0010	0.0010
Barium, Total	0.0027		0.0010	0.0010
Beryllium, Total	ND		0.0010	0.0010
Cadmium, Total	ND		0.00020	0.00020
Chromium, Total	ND		0.0030	0.0030
Copper, Total	ND		0.0020	0.0020
Lead, Total	ND		0.0010	0.0010

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Client Sample ID: MW-35

Lab Sample ID: 280-91049-1

Date Sampled: 11/15/2016 0950

Client Matrix: Water

Date Received: 11/16/2016 1000

6020 Metals (ICP/MS)-Total Recoverable

Analyte	Result (mg/L)	Qualifier	RL	RL
Manganese, Total	ND		0.0010	0.0010
Nickel, Total	ND		0.0040	0.0040
Silver, Total	ND		0.0020	0.0020
Thallium, Total	ND		0.0010	0.0010
Vanadium, Total	0.0043		0.0020	0.0020
Zinc, Total	ND		0.0050	0.0050

Analysis Method: 6020	Analysis Batch: 280-353693	Instrument ID: MT_078
Prep Method: 3005A	Prep Batch: 280-352777	Lab File ID: 047SMPL.d
Dilution: 1.0		Initial Weight/Volume: 50 mL
Analysis Date: 11/29/2016 1744		Final Weight/Volume: 50 mL
Prep Date: 11/28/2016 1441		

Analyte	Result (mg/L)	Qualifier	RL	RL
Selenium, Total	ND		0.0010	0.0010

6020 Metals (ICP/MS)-Dissolved

Analysis Method: 6020	Analysis Batch: 280-353028	Instrument ID: MT_077
Prep Method: 3005A	Prep Batch: 280-352489	Lab File ID: 199SMPL.d
Dilution: 1.0		Initial Weight/Volume: 50 mL
Analysis Date: 11/24/2016 0046		Final Weight/Volume: 50 mL
Prep Date: 11/23/2016 1445		

Analyte	Result (mg/L)	Qualifier	RL	RL
Manganese, Dissolved	ND		0.0010	0.0010

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Client Sample ID: MW-34C

Lab Sample ID: 280-91049-2

Date Sampled: 11/15/2016 1115

Client Matrix: Water

Date Received: 11/16/2016 1000

6010B Metals (ICP)-Total Recoverable

Analysis Method: 6010B Analysis Batch: 280-354204 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-352775 Lab File ID: 25B120416.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 12/04/2016 1949 Final Weight/Volume: 50 mL
Prep Date: 11/28/2016 1441

Analyte	Result (mg/L)	Qualifier	RL	RL
Cobalt, Total	ND		0.0030	0.0030
Iron, Total	8.4		0.060	0.060

6010B Metals (ICP)-Dissolved

Analysis Method: 6010B Analysis Batch: 280-354165 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-352772 Lab File ID: 25A11316.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 12/03/2016 2326 Final Weight/Volume: 50 mL
Prep Date: 11/29/2016 0726

Analyte	Result (mg/L)	Qualifier	RL	RL
Magnesium, Dissolved	11		0.050	0.050

Analysis Method: 6010B Analysis Batch: 280-354577 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-352772 Lab File ID: 25B120616.asc
Dilution: 5.0 Initial Weight/Volume: 50 mL
Analysis Date: 12/06/2016 1706 Final Weight/Volume: 50 mL
Prep Date: 11/29/2016 0726

Analyte	Result (mg/L)	Qualifier	RL	RL
Calcium, Dissolved	24		0.20	0.20
Iron, Dissolved	0.62		0.30	0.30
Potassium, Dissolved	ND		5.0	5.0
Sodium, Dissolved	12		5.0	5.0

6020 Metals (ICP/MS)-Total Recoverable

Analysis Method: 6020 Analysis Batch: 280-353513 Instrument ID: MT_078
Prep Method: 3005A Prep Batch: 280-352777 Lab File ID: 267SMPL.d
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 11/29/2016 0721 Final Weight/Volume: 50 mL
Prep Date: 11/28/2016 1441

Analyte	Result (mg/L)	Qualifier	RL	RL
Antimony, Total	ND		0.0010	0.0010
Barium, Total	0.037		0.0010	0.0010
Beryllium, Total	ND		0.0010	0.0010
Cadmium, Total	ND		0.00020	0.00020
Chromium, Total	ND		0.0030	0.0030
Copper, Total	ND		0.0020	0.0020
Lead, Total	ND		0.0010	0.0010

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Client Sample ID: MW-34C

Lab Sample ID: 280-91049-2

Date Sampled: 11/15/2016 1115

Client Matrix: Water

Date Received: 11/16/2016 1000

6020 Metals (ICP/MS)-Total Recoverable

Analyte	Result (mg/L)	Qualifier	RL	RL
Manganese, Total	0.60		0.0010	0.0010
Nickel, Total	ND		0.0040	0.0040
Silver, Total	ND		0.0020	0.0020
Thallium, Total	ND		0.0010	0.0010
Vanadium, Total	ND		0.0020	0.0020
Zinc, Total	ND		0.0050	0.0050

Analysis Method: 6020 Analysis Batch: 280-353693 Instrument ID: MT_078
Prep Method: 3005A Prep Batch: 280-352777 Lab File ID: 052SMPL.d
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 11/29/2016 1803 Final Weight/Volume: 50 mL
Prep Date: 11/28/2016 1441

Analyte	Result (mg/L)	Qualifier	RL	RL
Selenium, Total	ND		0.0010	0.0010

6020 Metals (ICP/MS)-Dissolved

Analysis Method: 6020 Analysis Batch: 280-353028 Instrument ID: MT_077
Prep Method: 3005A Prep Batch: 280-352489 Lab File ID: 200SMPL.d
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 11/24/2016 0050 Final Weight/Volume: 50 mL
Prep Date: 11/23/2016 1445

Analyte	Result (mg/L)	Qualifier	RL	RL
Manganese, Dissolved	0.54		0.0010	0.0010

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Client Sample ID: MW-34A

Lab Sample ID: 280-91049-3

Date Sampled: 11/15/2016 1200

Client Matrix: Water

Date Received: 11/16/2016 1000

6010B Metals (ICP)-Total Recoverable

Analysis Method: 6010B Analysis Batch: 280-354204 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-352775 Lab File ID: 25B120416.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 12/04/2016 1951 Final Weight/Volume: 50 mL
Prep Date: 11/28/2016 1441

Analyte	Result (mg/L)	Qualifier	RL	RL
Cobalt, Total	ND		0.0030	0.0030
Iron, Total	0.060		0.060	0.060

6010B Metals (ICP)-Dissolved

Analysis Method: 6010B Analysis Batch: 280-354165 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-352772 Lab File ID: 25A11316.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 12/03/2016 2328 Final Weight/Volume: 50 mL
Prep Date: 11/29/2016 0726

Analyte	Result (mg/L)	Qualifier	RL	RL
Magnesium, Dissolved	8.5		0.050	0.050

Analysis Method: 6010B Analysis Batch: 280-354385 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-352772 Lab File ID: 25A120516.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 12/05/2016 2320 Final Weight/Volume: 50 mL
Prep Date: 11/29/2016 0726

Analyte	Result (mg/L)	Qualifier	RL	RL
Calcium, Dissolved	15		0.040	0.040
Iron, Dissolved	ND		0.060	0.060
Potassium, Dissolved	ND		1.0	1.0
Sodium, Dissolved	9.7		1.0	1.0

6020 Metals (ICP/MS)-Total Recoverable

Analysis Method: 6020 Analysis Batch: 280-353513 Instrument ID: MT_078
Prep Method: 3005A Prep Batch: 280-352777 Lab File ID: 268SMPL.d
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 11/29/2016 0725 Final Weight/Volume: 50 mL
Prep Date: 11/28/2016 1441

Analyte	Result (mg/L)	Qualifier	RL	RL
Antimony, Total	ND		0.0010	0.0010
Barium, Total	0.0045		0.0010	0.0010
Beryllium, Total	ND		0.0010	0.0010
Cadmium, Total	ND		0.00020	0.00020
Chromium, Total	ND		0.0030	0.0030
Copper, Total	ND		0.0020	0.0020
Lead, Total	ND		0.0010	0.0010

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Client Sample ID: MW-34A

Lab Sample ID: 280-91049-3

Date Sampled: 11/15/2016 1200

Client Matrix: Water

Date Received: 11/16/2016 1000

6020 Metals (ICP/MS)-Total Recoverable

Analyte	Result (mg/L)	Qualifier	RL	RL
Manganese, Total	0.0027		0.0010	0.0010
Nickel, Total	ND		0.0040	0.0040
Silver, Total	ND		0.0020	0.0020
Thallium, Total	ND		0.0010	0.0010
Vanadium, Total	0.0039		0.0020	0.0020
Zinc, Total	ND		0.0050	0.0050

Analysis Method: 6020

Analysis Batch: 280-353693

Instrument ID: MT_078

Prep Method: 3005A

Prep Batch: 280-352777

Lab File ID: 053SMPL.d

Dilution: 1.0

Initial Weight/Volume: 50 mL

Analysis Date: 11/29/2016 1807

Final Weight/Volume: 50 mL

Prep Date: 11/28/2016 1441

Analyte	Result (mg/L)	Qualifier	RL	RL
Selenium, Total	ND		0.0010	0.0010

6020 Metals (ICP/MS)-Dissolved

Analysis Method: 6020

Analysis Batch: 280-353028

Instrument ID: MT_077

Prep Method: 3005A

Prep Batch: 280-352489

Lab File ID: 201SMPL.d

Dilution: 1.0

Initial Weight/Volume: 50 mL

Analysis Date: 11/24/2016 0054

Final Weight/Volume: 50 mL

Prep Date: 11/23/2016 1445

Analyte	Result (mg/L)	Qualifier	RL	RL
Manganese, Dissolved	0.0017		0.0010	0.0010

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Client Sample ID: MW-36A

Lab Sample ID: 280-91049-4

Date Sampled: 11/15/2016 1251

Client Matrix: Water

Date Received: 11/16/2016 1000

6010B Metals (ICP)-Total Recoverable

Analysis Method: 6010B Analysis Batch: 280-354204 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-352775 Lab File ID: 25B120416.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 12/04/2016 1954 Final Weight/Volume: 50 mL
Prep Date: 11/28/2016 1441

Analyte	Result (mg/L)	Qualifier	RL	RL
Cobalt, Total	ND		0.0030	0.0030
Iron, Total	0.078		0.060	0.060

6010B Metals (ICP)-Dissolved

Analysis Method: 6010B Analysis Batch: 280-354165 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-352772 Lab File ID: 25A11316.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 12/03/2016 2331 Final Weight/Volume: 50 mL
Prep Date: 11/29/2016 0726

Analyte	Result (mg/L)	Qualifier	RL	RL
Magnesium, Dissolved	8.0		0.050	0.050

Analysis Method: 6010B Analysis Batch: 280-354385 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-352772 Lab File ID: 25A120516.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 12/05/2016 2323 Final Weight/Volume: 50 mL
Prep Date: 11/29/2016 0726

Analyte	Result (mg/L)	Qualifier	RL	RL
Calcium, Dissolved	10		0.040	0.040
Iron, Dissolved	ND		0.060	0.060
Sodium, Dissolved	7.3		1.0	1.0

Analysis Method: 6010B Analysis Batch: 280-354577 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-352772 Lab File ID: 25B120616.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 12/06/2016 1709 Final Weight/Volume: 50 mL
Prep Date: 11/29/2016 0726

Analyte	Result (mg/L)	Qualifier	RL	RL
Potassium, Dissolved	ND		1.0	1.0

6020 Metals (ICP/MS)-Total Recoverable

Analysis Method: 6020 Analysis Batch: 280-353513 Instrument ID: MT_078
Prep Method: 3005A Prep Batch: 280-352777 Lab File ID: 269SMPL.d
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 11/29/2016 0729 Final Weight/Volume: 50 mL
Prep Date: 11/28/2016 1441

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Client Sample ID: MW-36A

Lab Sample ID: 280-91049-4

Date Sampled: 11/15/2016 1251

Client Matrix: Water

Date Received: 11/16/2016 1000

6020 Metals (ICP/MS)-Total Recoverable

Analyte	Result (mg/L)	Qualifier	RL	RL
Antimony, Total	ND		0.0010	0.0010
Barium, Total	0.0025		0.0010	0.0010
Beryllium, Total	ND		0.0010	0.0010
Cadmium, Total	ND		0.00020	0.00020
Chromium, Total	0.0085		0.0030	0.0030
Copper, Total	ND		0.0020	0.0020
Lead, Total	ND		0.0010	0.0010
Manganese, Total	0.0013		0.0010	0.0010
Nickel, Total	ND		0.0040	0.0040
Silver, Total	ND		0.0020	0.0020
Thallium, Total	ND		0.0010	0.0010
Vanadium, Total	0.0031		0.0020	0.0020
Zinc, Total	ND		0.0050	0.0050

Analysis Method: 6020
 Prep Method: 3005A
 Dilution: 1.0
 Analysis Date: 11/29/2016 1811
 Prep Date: 11/28/2016 1441

Analysis Batch: 280-353693
 Prep Batch: 280-352777

Instrument ID: MT_078
 Lab File ID: 054SMPL.d
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	Result (mg/L)	Qualifier	RL	RL
Selenium, Total	ND		0.0010	0.0010

6020 Metals (ICP/MS)-Dissolved

Analysis Method: 6020
 Prep Method: 3005A
 Dilution: 1.0
 Analysis Date: 11/24/2016 0058
 Prep Date: 11/23/2016 1445

Analysis Batch: 280-353028
 Prep Batch: 280-352489

Instrument ID: MT_077
 Lab File ID: 202SMPL.d
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	Result (mg/L)	Qualifier	RL	RL
Manganese, Dissolved	ND		0.0010	0.0010

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Client Sample ID: MW-15R

Lab Sample ID: 280-91049-5

Date Sampled: 11/15/2016 1350

Client Matrix: Water

Date Received: 11/16/2016 1000

6010B Metals (ICP)-Total Recoverable

Analysis Method: 6010B Analysis Batch: 280-354204 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-352775 Lab File ID: 25B120416.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 12/04/2016 1956 Final Weight/Volume: 50 mL
Prep Date: 11/28/2016 1441

Analyte	Result (mg/L)	Qualifier	RL	RL
Cobalt, Total	ND		0.0030	0.0030
Iron, Total	ND		0.060	0.060

6010B Metals (ICP)-Dissolved

Analysis Method: 6010B Analysis Batch: 280-354165 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-352772 Lab File ID: 25A11316.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 12/03/2016 2334 Final Weight/Volume: 50 mL
Prep Date: 11/29/2016 0726

Analyte	Result (mg/L)	Qualifier	RL	RL
Magnesium, Dissolved	9.4		0.050	0.050

Analysis Method: 6010B Analysis Batch: 280-354385 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-352772 Lab File ID: 25A120516.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 12/05/2016 2325 Final Weight/Volume: 50 mL
Prep Date: 11/29/2016 0726

Analyte	Result (mg/L)	Qualifier	RL	RL
Calcium, Dissolved	13		0.040	0.040
Iron, Dissolved	ND		0.060	0.060
Potassium, Dissolved	ND		1.0	1.0
Sodium, Dissolved	6.3		1.0	1.0

6020 Metals (ICP/MS)-Total Recoverable

Analysis Method: 6020 Analysis Batch: 280-353513 Instrument ID: MT_078
Prep Method: 3005A Prep Batch: 280-352777 Lab File ID: 270SMPL.d
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 11/29/2016 0733 Final Weight/Volume: 50 mL
Prep Date: 11/28/2016 1441

Analyte	Result (mg/L)	Qualifier	RL	RL
Antimony, Total	ND		0.0010	0.0010
Barium, Total	0.0044		0.0010	0.0010
Beryllium, Total	ND		0.0010	0.0010
Cadmium, Total	ND		0.00020	0.00020
Chromium, Total	ND		0.0030	0.0030
Copper, Total	ND		0.0020	0.0020
Lead, Total	ND		0.0010	0.0010

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Client Sample ID: MW-15R

Lab Sample ID: 280-91049-5

Date Sampled: 11/15/2016 1350

Client Matrix: Water

Date Received: 11/16/2016 1000

6020 Metals (ICP/MS)-Total Recoverable

Analyte	Result (mg/L)	Qualifier	RL	RL
Manganese, Total	0.0037		0.0010	0.0010
Nickel, Total	ND		0.0040	0.0040
Silver, Total	ND		0.0020	0.0020
Thallium, Total	ND		0.0010	0.0010
Vanadium, Total	0.0037		0.0020	0.0020
Zinc, Total	ND		0.0050	0.0050

Analysis Method: 6020

Analysis Batch: 280-353693

Instrument ID: MT_078

Prep Method: 3005A

Prep Batch: 280-352777

Lab File ID: 055SMPL.d

Dilution: 1.0

Initial Weight/Volume: 50 mL

Analysis Date: 11/29/2016 1815

Final Weight/Volume: 50 mL

Prep Date: 11/28/2016 1441

Analyte	Result (mg/L)	Qualifier	RL	RL
Selenium, Total	ND		0.0010	0.0010

6020 Metals (ICP/MS)-Dissolved

Analysis Method: 6020

Analysis Batch: 280-353028

Instrument ID: MT_077

Prep Method: 3005A

Prep Batch: 280-352489

Lab File ID: 203SMPL.d

Dilution: 1.0

Initial Weight/Volume: 50 mL

Analysis Date: 11/24/2016 0101

Final Weight/Volume: 50 mL

Prep Date: 11/23/2016 1445

Analyte	Result (mg/L)	Qualifier	RL	RL
Manganese, Dissolved	0.0013		0.0010	0.0010

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Client Sample ID: MW-2B1

Lab Sample ID: 280-91049-6

Date Sampled: 11/15/2016 1453

Client Matrix: Water

Date Received: 11/16/2016 1000

6010B Metals (ICP)-Total Recoverable

Analysis Method: 6010B Analysis Batch: 280-354204 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-352775 Lab File ID: 25B120416.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 12/04/2016 1959 Final Weight/Volume: 50 mL
Prep Date: 11/28/2016 1441

Analyte	Result (mg/L)	Qualifier	RL	RL
Cobalt, Total	ND		0.0030	0.0030
Iron, Total	1.1		0.060	0.060

6010B Metals (ICP)-Dissolved

Analysis Method: 6010B Analysis Batch: 280-354385 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-352772 Lab File ID: 25A120516.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 12/05/2016 2338 Final Weight/Volume: 50 mL
Prep Date: 11/29/2016 0726

Analyte	Result (mg/L)	Qualifier	RL	RL
Calcium, Dissolved	18		0.040	0.040
Iron, Dissolved	0.31		0.060	0.060
Magnesium, Dissolved	5.6		0.050	0.050
Potassium, Dissolved	2.8		1.0	1.0
Sodium, Dissolved	11		1.0	1.0

6020 Metals (ICP/MS)-Total Recoverable

Analysis Method: 6020 Analysis Batch: 280-353513 Instrument ID: MT_078
Prep Method: 3005A Prep Batch: 280-352777 Lab File ID: 271SMPL.d
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 11/29/2016 0737 Final Weight/Volume: 50 mL
Prep Date: 11/28/2016 1441

Analyte	Result (mg/L)	Qualifier	RL	RL
Antimony, Total	ND		0.0010	0.0010
Barium, Total	0.013		0.0010	0.0010
Beryllium, Total	ND		0.0010	0.0010
Cadmium, Total	ND		0.00020	0.00020
Chromium, Total	ND		0.0030	0.0030
Copper, Total	ND		0.0020	0.0020
Lead, Total	ND		0.0010	0.0010
Manganese, Total	2.7		0.0010	0.0010
Nickel, Total	ND		0.0040	0.0040
Silver, Total	ND		0.0020	0.0020
Thallium, Total	ND		0.0010	0.0010
Vanadium, Total	ND		0.0020	0.0020
Zinc, Total	ND		0.0050	0.0050

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Client Sample ID: MW-2B1

Lab Sample ID: 280-91049-6

Date Sampled: 11/15/2016 1453

Client Matrix: Water

Date Received: 11/16/2016 1000

6020 Metals (ICP/MS)-Total Recoverable

Analysis Method: 6020 Analysis Batch: 280-353693 Instrument ID: MT_078
Prep Method: 3005A Prep Batch: 280-352777 Lab File ID: 056SMPL.d
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 11/29/2016 1819 Final Weight/Volume: 50 mL
Prep Date: 11/28/2016 1441

Analyte	Result (mg/L)	Qualifier	RL	RL
Selenium, Total	ND		0.0010	0.0010

6020 Metals (ICP/MS)-Dissolved

Analysis Method: 6020 Analysis Batch: 280-353028 Instrument ID: MT_077
Prep Method: 3005A Prep Batch: 280-352489 Lab File ID: 204SMPL.d
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 11/24/2016 0105 Final Weight/Volume: 50 mL
Prep Date: 11/23/2016 1445

Analyte	Result (mg/L)	Qualifier	RL	RL
Manganese, Dissolved	2.5		0.0010	0.0010

Client: Waste Management

Job Number: 280-91049-1

General Chemistry

Client Sample ID: MW-35

Lab Sample ID: 280-91049-1

Date Sampled: 11/15/2016 0950

Client Matrix: Water

Date Received: 11/16/2016 1000

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Chloride	1.8		mg/L	1.0	1.0	1.0	300.0
	Analysis Batch: 280-354220		Analysis Date: 12/05/2016 2218				
Sulfate	2.2		mg/L	1.0	1.0	1.0	300.0
	Analysis Batch: 280-354220		Analysis Date: 12/05/2016 2218				
Ammonia (as N)	ND		mg/L	0.030	0.030	1.0	350.1
	Analysis Batch: 280-352943		Analysis Date: 11/23/2016 1644				
Nitrate as N	0.47		mg/L	0.050	0.050	1.0	353.2
	Analysis Batch: 280-354397		Analysis Date: 12/06/2016 0931				
Alkalinity, Total (As CaCO3)	91		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-352384		Analysis Date: 11/20/2016 1618				
Alkalinity, Bicarbonate (As CaCO3)	91		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-352384		Analysis Date: 11/20/2016 1618				
Total Dissolved Solids (TDS)	120		mg/L	5.0	5.0	1.0	SM 2540C
	Analysis Batch: 280-352501		Analysis Date: 11/21/2016 1702				
Total Suspended Solids	ND		mg/L	4.0	4.0	1.0	SM 2540D
	Analysis Batch: 280-352718		Analysis Date: 11/22/2016 1639				
Total Organic Carbon - Average	ND		mg/L	1.0	1.0	1.0	SM 5310B
	Analysis Batch: 280-353712		Analysis Date: 11/29/2016 2239				

Client: Waste Management

Job Number: 280-91049-1

General Chemistry

Client Sample ID: MW-34C

Lab Sample ID: 280-91049-2

Date Sampled: 11/15/2016 1115

Client Matrix: Water

Date Received: 11/16/2016 1000

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Chloride	4.4		mg/L	1.0	1.0	1.0	300.0
	Analysis Batch: 280-354220		Analysis Date: 12/05/2016 2320				
Sulfate	4.6		mg/L	1.0	1.0	1.0	300.0
	Analysis Batch: 280-354220		Analysis Date: 12/05/2016 2320				
Ammonia (as N)	0.030		mg/L	0.030	0.030	1.0	350.1
	Analysis Batch: 280-352943		Analysis Date: 11/23/2016 1646				
Nitrate as N	ND		mg/L	0.050	0.050	1.0	353.2
	Analysis Batch: 280-354397		Analysis Date: 12/06/2016 0931				
Alkalinity, Total (As CaCO3)	110		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-352384		Analysis Date: 11/20/2016 1623				
Alkalinity, Bicarbonate (As CaCO3)	110		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-352384		Analysis Date: 11/20/2016 1623				
Total Dissolved Solids (TDS)	160		mg/L	5.0	5.0	1.0	SM 2540C
	Analysis Batch: 280-352501		Analysis Date: 11/21/2016 1702				
Total Suspended Solids	19		mg/L	4.0	4.0	1.0	SM 2540D
	Analysis Batch: 280-352718		Analysis Date: 11/22/2016 1639				
Total Organic Carbon - Average	ND		mg/L	1.0	1.0	1.0	SM 5310B
	Analysis Batch: 280-353712		Analysis Date: 11/29/2016 2256				

Client: Waste Management

Job Number: 280-91049-1

General Chemistry

Client Sample ID: MW-34A

Lab Sample ID: 280-91049-3

Date Sampled: 11/15/2016 1200

Client Matrix: Water

Date Received: 11/16/2016 1000

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Chloride	3.2		mg/L	1.0	1.0	1.0	300.0
	Analysis Batch: 280-354220		Analysis Date: 12/05/2016 2336				
Sulfate	3.0		mg/L	1.0	1.0	1.0	300.0
	Analysis Batch: 280-354220		Analysis Date: 12/05/2016 2336				
Ammonia (as N)	ND		mg/L	0.030	0.030	1.0	350.1
	Analysis Batch: 280-352943		Analysis Date: 11/23/2016 1648				
Nitrate as N	ND		mg/L	0.050	0.050	1.0	353.2
	Analysis Batch: 280-354397		Analysis Date: 12/06/2016 0931				
Alkalinity, Total (As CaCO3)	80		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-352384		Analysis Date: 11/20/2016 1628				
Alkalinity, Bicarbonate (As CaCO3)	80		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-352384		Analysis Date: 11/20/2016 1628				
Total Dissolved Solids (TDS)	120		mg/L	5.0	5.0	1.0	SM 2540C
	Analysis Batch: 280-352501		Analysis Date: 11/21/2016 1702				
Total Suspended Solids	ND		mg/L	4.0	4.0	1.0	SM 2540D
	Analysis Batch: 280-352718		Analysis Date: 11/22/2016 1639				
Total Organic Carbon - Average	ND		mg/L	1.0	1.0	1.0	SM 5310B
	Analysis Batch: 280-354209		Analysis Date: 12/02/2016 1544				

Client: Waste Management

Job Number: 280-91049-1

General Chemistry

Client Sample ID: MW-36A

Lab Sample ID: 280-91049-4

Date Sampled: 11/15/2016 1251

Client Matrix: Water

Date Received: 11/16/2016 1000

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Chloride	1.7		mg/L	1.0	1.0	1.0	300.0
	Analysis Batch: 280-354220		Analysis Date: 12/05/2016 2351				
Sulfate	2.5		mg/L	1.0	1.0	1.0	300.0
	Analysis Batch: 280-354220		Analysis Date: 12/05/2016 2351				
Ammonia (as N)	ND		mg/L	0.030	0.030	1.0	350.1
	Analysis Batch: 280-352943		Analysis Date: 11/23/2016 1650				
Nitrate as N	0.49		mg/L	0.050	0.050	1.0	353.2
	Analysis Batch: 280-354397		Analysis Date: 12/06/2016 0931				
Alkalinity, Total (As CaCO3)	60		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-352384		Analysis Date: 11/20/2016 1633				
Alkalinity, Bicarbonate (As CaCO3)	60		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-352384		Analysis Date: 11/20/2016 1633				
Total Dissolved Solids (TDS)	96		mg/L	5.0	5.0	1.0	SM 2540C
	Analysis Batch: 280-352501		Analysis Date: 11/21/2016 1702				
Total Suspended Solids	ND		mg/L	4.0	4.0	1.0	SM 2540D
	Analysis Batch: 280-352718		Analysis Date: 11/22/2016 1639				
Total Organic Carbon - Average	ND		mg/L	1.0	1.0	1.0	SM 5310B
	Analysis Batch: 280-354209		Analysis Date: 12/02/2016 1628				

Client: Waste Management

Job Number: 280-91049-1

General Chemistry

Client Sample ID: MW-15R

Lab Sample ID: 280-91049-5

Date Sampled: 11/15/2016 1350

Client Matrix: Water

Date Received: 11/16/2016 1000

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Chloride	2.3		mg/L	1.0	1.0	1.0	300.0
	Analysis Batch: 280-354220		Analysis Date: 12/06/2016 0007				
Sulfate	4.8		mg/L	1.0	1.0	1.0	300.0
	Analysis Batch: 280-354220		Analysis Date: 12/06/2016 0007				
Ammonia (as N)	ND		mg/L	0.030	0.030	1.0	350.1
	Analysis Batch: 280-352943		Analysis Date: 11/23/2016 1706				
Nitrate as N	0.20		mg/L	0.050	0.050	1.0	353.2
	Analysis Batch: 280-354397		Analysis Date: 12/06/2016 0931				
Alkalinity, Total (As CaCO3)	71		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-352384		Analysis Date: 11/20/2016 1638				
Alkalinity, Bicarbonate (As CaCO3)	71		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-352384		Analysis Date: 11/20/2016 1638				
Total Dissolved Solids (TDS)	91		mg/L	5.0	5.0	1.0	SM 2540C
	Analysis Batch: 280-352501		Analysis Date: 11/21/2016 1702				
Total Suspended Solids	ND		mg/L	4.0	4.0	1.0	SM 2540D
	Analysis Batch: 280-352718		Analysis Date: 11/22/2016 1639				
Total Organic Carbon - Average	ND		mg/L	1.0	1.0	1.0	SM 5310B
	Analysis Batch: 280-354209		Analysis Date: 12/02/2016 1642				

Client: Waste Management

Job Number: 280-91049-1

General Chemistry

Client Sample ID: MW-2B1

Lab Sample ID: 280-91049-6

Date Sampled: 11/15/2016 1453

Client Matrix: Water

Date Received: 11/16/2016 1000

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Chloride	14		mg/L	1.0	1.0	1.0	300.0
	Analysis Batch: 280-354220		Analysis Date: 12/06/2016 0022				
Sulfate	6.0		mg/L	1.0	1.0	1.0	300.0
	Analysis Batch: 280-354220		Analysis Date: 12/06/2016 0022				
Ammonia (as N)	2.1		mg/L	0.030	0.030	1.0	350.1
	Analysis Batch: 280-352943		Analysis Date: 11/23/2016 1712				
Nitrate as N	1.8		mg/L	0.050	0.050	1.0	353.2
	Analysis Batch: 280-354397		Analysis Date: 12/06/2016 0931				
Alkalinity, Total (As CaCO3)	82		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-352384		Analysis Date: 11/20/2016 1643				
Alkalinity, Bicarbonate (As CaCO3)	82		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-352384		Analysis Date: 11/20/2016 1643				
Total Dissolved Solids (TDS)	140		mg/L	5.0	5.0	1.0	SM 2540C
	Analysis Batch: 280-352501		Analysis Date: 11/21/2016 1702				
Total Suspended Solids	ND		mg/L	4.0	4.0	1.0	SM 2540D
	Analysis Batch: 280-352718		Analysis Date: 11/22/2016 1639				
Total Organic Carbon - Average	ND		mg/L	1.0	1.0	1.0	SM 5310B
	Analysis Batch: 280-354209		Analysis Date: 12/02/2016 1657				

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Field Service / Mobile Lab

Client Sample ID: MW-35

Lab Sample ID: 280-91049-1

Client Matrix: Water

Date Sampled: 11/15/2016 0950

Date Received: 11/16/2016 1000

Analyte	Result	Qual	Units	Dil	Method	Analysis Batch	Date Analyzed	Date Prepared
Depth to water	71.17		ft	1.0	Field Sampling	280-352756	11/15/2016	1050
Specific Conductivity	158		umhos/cm	1.0	Field Sampling	280-352756	11/15/2016	1050
Dissolved Oxygen	6.61		mg/L	1.0	Field Sampling	280-352756	11/15/2016	1050
eH	95.0		millivolts	1.0	Field Sampling	280-352756	11/15/2016	1050
Turbidity	0.78		NTU	1.0	Field Sampling	280-352756	11/15/2016	1050
Temperature	10.41		Degrees C	1.0	Field Sampling	280-352756	11/15/2016	1050
pH	6.61		SU	1.0	Field Sampling	280-352756	11/15/2016	1050

Client: Waste Management

Job Number: 280-91049-1

Field Service / Mobile Lab

Client Sample ID: MW-34C

Lab Sample ID: 280-91049-2

Client Matrix: Water

Date Sampled: 11/15/2016 1115

Date Received: 11/16/2016 1000

Analyte	Result	Qual	Units	Dil	Method	Analysis Batch	Date Analyzed	Date Prepared
Depth to water	40.73		ft	1.0	Field Sampling	280-352756	11/15/2016	1215
Specific Conductivity	231		umhos/cm	1.0	Field Sampling	280-352756	11/15/2016	1215
Dissolved Oxygen	0.58		mg/L	1.0	Field Sampling	280-352756	11/15/2016	1215
eH	41.6		millivolts	1.0	Field Sampling	280-352756	11/15/2016	1215
Turbidity	77.9		NTU	1.0	Field Sampling	280-352756	11/15/2016	1215
Temperature	12.60		Degrees C	1.0	Field Sampling	280-352756	11/15/2016	1215
pH	7.45		SU	1.0	Field Sampling	280-352756	11/15/2016	1215

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Field Service / Mobile Lab

Client Sample ID: MW-34A

Lab Sample ID: 280-91049-3

Client Matrix: Water

Date Sampled: 11/15/2016 1200

Date Received: 11/16/2016 1000

Analyte	Result	Qual	Units	Dil	Method	Analysis Batch	Date Analyzed	Date Prepared
Depth to water	38.91		ft	1.0	Field Sampling	280-352756	11/15/2016	1300
Specific Conductivity	177		umhos/cm	1.0	Field Sampling	280-352756	11/15/2016	1300
Dissolved Oxygen	0.51		mg/L	1.0	Field Sampling	280-352756	11/15/2016	1300
eH	119.6		millivolts	1.0	Field Sampling	280-352756	11/15/2016	1300
Turbidity	1.25		NTU	1.0	Field Sampling	280-352756	11/15/2016	1300
Temperature	12.47		Degrees C	1.0	Field Sampling	280-352756	11/15/2016	1300
pH	6.79		SU	1.0	Field Sampling	280-352756	11/15/2016	1300

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Field Service / Mobile Lab

Client Sample ID: MW-36A

Lab Sample ID: 280-91049-4

Client Matrix: Water

Date Sampled: 11/15/2016 1251

Date Received: 11/16/2016 1000

Analyte	Result	Qual	Units	Dil	Method	Analysis Batch	Date Analyzed	Date Prepared
Depth to water	30.43		ft	1.0	Field Sampling	280-352756	11/15/2016	1351
Specific Conductivity	128		umhos/cm	1.0	Field Sampling	280-352756	11/15/2016	1351
Dissolved Oxygen	2.90		mg/L	1.0	Field Sampling	280-352756	11/15/2016	1351
eH	133.3		millivolts	1.0	Field Sampling	280-352756	11/15/2016	1351
Turbidity	1.75		NTU	1.0	Field Sampling	280-352756	11/15/2016	1351
Temperature	9.71		Degrees C	1.0	Field Sampling	280-352756	11/15/2016	1351
pH	6.81		SU	1.0	Field Sampling	280-352756	11/15/2016	1351

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Field Service / Mobile Lab

Client Sample ID: MW-15R

Lab Sample ID: 280-91049-5

Client Matrix: Water

Date Sampled: 11/15/2016 1350

Date Received: 11/16/2016 1000

Analyte	Result	Qual	Units	Dil	Method	Analysis Batch	Date Analyzed	Date Prepared
Depth to water	18.30		ft	1.0	Field Sampling	280-352756	11/15/2016	1450
Specific Conductivity	155		umhos/cm	1.0	Field Sampling	280-352756	11/15/2016	1450
Dissolved Oxygen	0.85		mg/L	1.0	Field Sampling	280-352756	11/15/2016	1450
eH	109.0		millivolts	1.0	Field Sampling	280-352756	11/15/2016	1450
Turbidity	1.21		NTU	1.0	Field Sampling	280-352756	11/15/2016	1450
Temperature	10.45		Degrees C	1.0	Field Sampling	280-352756	11/15/2016	1450
pH	7.37		SU	1.0	Field Sampling	280-352756	11/15/2016	1450

Analytical Data

Client: Waste Management

Job Number: 280-91049-1

Field Service / Mobile Lab

Client Sample ID: MW-2B1

Lab Sample ID: 280-91049-6

Client Matrix: Water

Date Sampled: 11/15/2016 1453

Date Received: 11/16/2016 1000

Analyte	Result	Qual	Units	Dil	Method	Analysis Batch	Date Analyzed	Date Prepared
Depth to water	6.20		ft	1.0	Field Sampling	280-352756	11/15/2016	1553
Specific Conductivity	241		umhos/cm	1.0	Field Sampling	280-352756	11/15/2016	1553
Dissolved Oxygen	0.17		mg/L	1.0	Field Sampling	280-352756	11/15/2016	1553
eH	80.2		millivolts	1.0	Field Sampling	280-352756	11/15/2016	1553
Turbidity	7.21		NTU	1.0	Field Sampling	280-352756	11/15/2016	1553
Temperature	13.35		Degrees C	1.0	Field Sampling	280-352756	11/15/2016	1553
pH	7.29		SU	1.0	Field Sampling	280-352756	11/15/2016	1553

DATA REPORTING QUALIFIERS

Client: Waste Management

Job Number: 280-91049-1

Lab Section	Qualifier	Description
GC/MS VOA	B	Compound was found in the blank and sample.
	F1	MS and/or MSD Recovery is outside acceptance limits.
	F2	MS/MSD RPD exceeds control limits
	E	Result exceeded calibration range.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
Metals	4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

QUALITY CONTROL RESULTS

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:480-332322					
LCS 480-332322/4	Lab Control Sample	T	Water	8260C SIM	
LCSD 480-332322/5	Lab Control Sample Duplicate	T	Water	8260C SIM	
MB 480-332322/7	Method Blank	T	Water	8260C SIM	
280-91030-J-2 MS	Matrix Spike	T	Water	8260C SIM	
280-91030-J-2 MSD	Matrix Spike Duplicate	T	Water	8260C SIM	
280-91049-1	MW-35	T	Water	8260C SIM	
280-91049-2	MW-34C	T	Water	8260C SIM	
280-91049-3	MW-34A	T	Water	8260C SIM	
280-91049-4	MW-36A	T	Water	8260C SIM	
280-91049-5	MW-15R	T	Water	8260C SIM	
280-91049-6	MW-2B1	T	Water	8260C SIM	
280-91049-7TB	TRIP BLANK	T	Water	8260C SIM	
Analysis Batch:480-333378					
LCS 480-333378/4	Lab Control Sample	T	Water	8260C	
MB 480-333378/6	Method Blank	T	Water	8260C	
280-91049-1	MW-35	T	Water	8260C	
480-109672-R-1 MS	Matrix Spike	T	Water	8260C	
480-109672-R-1 MSD	Matrix Spike Duplicate	T	Water	8260C	
Analysis Batch:480-333552					
LCS 480-333552/4	Lab Control Sample	T	Water	8260C	
MB 480-333552/6	Method Blank	T	Water	8260C	
280-91049-2	MW-34C	T	Water	8260C	
280-91049-3	MW-34A	T	Water	8260C	
280-91049-4	MW-36A	T	Water	8260C	
280-91049-5	MW-15R	T	Water	8260C	
280-91049-6	MW-2B1	T	Water	8260C	
280-91049-7TB	TRIP BLANK	T	Water	8260C	
480-109670-K-2 MS	Matrix Spike	T	Water	8260C	
480-109670-K-2 MSD	Matrix Spike Duplicate	T	Water	8260C	

Report Basis

T = Total

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 280-352489					
LCS 280-352489/2-A	Lab Control Sample	R	Water	3005A	
MB 280-352489/1-A	Method Blank	R	Water	3005A	
280-91030-D-2-B MS	Matrix Spike	D	Water	3005A	
280-91030-D-2-C MSD	Matrix Spike Duplicate	D	Water	3005A	
280-91049-1	MW-35	D	Water	3005A	
280-91049-2	MW-34C	D	Water	3005A	
280-91049-3	MW-34A	D	Water	3005A	
280-91049-4	MW-36A	D	Water	3005A	
280-91049-5	MW-15R	D	Water	3005A	
280-91049-6	MW-2B1	D	Water	3005A	
Prep Batch: 280-352772					
LCS 280-352772/2-A	Lab Control Sample	R	Water	3005A	
MB 280-352772/1-A	Method Blank	R	Water	3005A	
280-91049-1	MW-35	D	Water	3005A	
280-91049-2	MW-34C	D	Water	3005A	
280-91049-3	MW-34A	D	Water	3005A	
280-91049-4	MW-36A	D	Water	3005A	
280-91049-5	MW-15R	D	Water	3005A	
280-91049-6	MW-2B1	D	Water	3005A	
280-91149-A-2-B MS	Matrix Spike	D	Water	3005A	
280-91149-A-2-C MSD	Matrix Spike Duplicate	D	Water	3005A	
Prep Batch: 280-352775					
LCS 280-352775/2-A	Lab Control Sample	R	Water	3005A	
MB 280-352775/1-A	Method Blank	R	Water	3005A	
280-91049-1	MW-35	R	Water	3005A	
280-91049-2	MW-34C	R	Water	3005A	
280-91049-3	MW-34A	R	Water	3005A	
280-91049-4	MW-36A	R	Water	3005A	
280-91049-5	MW-15R	R	Water	3005A	
280-91049-6	MW-2B1	R	Water	3005A	
280-91099-D-1-B MS	Matrix Spike	R	Water	3005A	
280-91099-D-1-C MSD	Matrix Spike Duplicate	R	Water	3005A	

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 280-352777					
LCS 280-352777/2-A	Lab Control Sample	R	Water	3005A	
MB 280-352777/1-A	Method Blank	R	Water	3005A	
280-91049-1	MW-35	R	Water	3005A	
280-91049-1MS	Matrix Spike	R	Water	3005A	
280-91049-1MSD	Matrix Spike Duplicate	R	Water	3005A	
280-91049-2	MW-34C	R	Water	3005A	
280-91049-3	MW-34A	R	Water	3005A	
280-91049-4	MW-36A	R	Water	3005A	
280-91049-5	MW-15R	R	Water	3005A	
280-91049-6	MW-2B1	R	Water	3005A	
Analysis Batch:280-353028					
LCS 280-352489/2-A	Lab Control Sample	R	Water	6020	280-352489
MB 280-352489/1-A	Method Blank	R	Water	6020	280-352489
280-91030-D-2-B MS	Matrix Spike	D	Water	6020	280-352489
280-91030-D-2-C MSD	Matrix Spike Duplicate	D	Water	6020	280-352489
280-91049-1	MW-35	D	Water	6020	280-352489
280-91049-2	MW-34C	D	Water	6020	280-352489
280-91049-3	MW-34A	D	Water	6020	280-352489
280-91049-4	MW-36A	D	Water	6020	280-352489
280-91049-5	MW-15R	D	Water	6020	280-352489
280-91049-6	MW-2B1	D	Water	6020	280-352489
Analysis Batch:280-353513					
LCS 280-352777/2-A	Lab Control Sample	R	Water	6020	280-352777
MB 280-352777/1-A	Method Blank	R	Water	6020	280-352777
280-91049-1	MW-35	R	Water	6020	280-352777
280-91049-1MS	Matrix Spike	R	Water	6020	280-352777
280-91049-1MSD	Matrix Spike Duplicate	R	Water	6020	280-352777
280-91049-2	MW-34C	R	Water	6020	280-352777
280-91049-3	MW-34A	R	Water	6020	280-352777
280-91049-4	MW-36A	R	Water	6020	280-352777
280-91049-5	MW-15R	R	Water	6020	280-352777
280-91049-6	MW-2B1	R	Water	6020	280-352777
Analysis Batch:280-353693					
280-91049-1	MW-35	R	Water	6020	280-352777
280-91049-1MS	Matrix Spike	R	Water	6020	280-352777
280-91049-1MSD	Matrix Spike Duplicate	R	Water	6020	280-352777
280-91049-2	MW-34C	R	Water	6020	280-352777
280-91049-3	MW-34A	R	Water	6020	280-352777
280-91049-4	MW-36A	R	Water	6020	280-352777
280-91049-5	MW-15R	R	Water	6020	280-352777
280-91049-6	MW-2B1	R	Water	6020	280-352777

TestAmerica Denver

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:280-354165					
LCS 280-352772/2-A	Lab Control Sample	R	Water	6010B	280-352772
MB 280-352772/1-A	Method Blank	R	Water	6010B	280-352772
280-91049-1	MW-35	D	Water	6010B	280-352772
280-91049-2	MW-34C	D	Water	6010B	280-352772
280-91049-3	MW-34A	D	Water	6010B	280-352772
280-91049-4	MW-36A	D	Water	6010B	280-352772
280-91049-5	MW-15R	D	Water	6010B	280-352772
280-91149-A-2-B MS	Matrix Spike	D	Water	6010B	280-352772
Analysis Batch:280-354204					
LCS 280-352775/2-A	Lab Control Sample	R	Water	6010B	280-352775
MB 280-352775/1-A	Method Blank	R	Water	6010B	280-352775
280-91049-1	MW-35	R	Water	6010B	280-352775
280-91049-2	MW-34C	R	Water	6010B	280-352775
280-91049-3	MW-34A	R	Water	6010B	280-352775
280-91049-4	MW-36A	R	Water	6010B	280-352775
280-91049-5	MW-15R	R	Water	6010B	280-352775
280-91049-6	MW-2B1	R	Water	6010B	280-352775
280-91099-D-1-B MS	Matrix Spike	R	Water	6010B	280-352775
280-91099-D-1-C MSD	Matrix Spike Duplicate	R	Water	6010B	280-352775
Analysis Batch:280-354385					
LCS 280-352772/2-A	Lab Control Sample	R	Water	6010B	280-352772
MB 280-352772/1-A	Method Blank	R	Water	6010B	280-352772
280-91049-1	MW-35	D	Water	6010B	280-352772
280-91049-3	MW-34A	D	Water	6010B	280-352772
280-91049-4	MW-36A	D	Water	6010B	280-352772
280-91049-5	MW-15R	D	Water	6010B	280-352772
280-91049-6	MW-2B1	D	Water	6010B	280-352772
280-91149-A-2-B MS	Matrix Spike	D	Water	6010B	280-352772
280-91149-A-2-C MSD	Matrix Spike Duplicate	D	Water	6010B	280-352772
Analysis Batch:280-354577					
280-91049-2	MW-34C	D	Water	6010B	280-352772
280-91049-4	MW-36A	D	Water	6010B	280-352772

Report Basis

D = Dissolved

R = Total Recoverable

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Field Service / Mobile Lab					
Analysis Batch:280-352756					
280-91049-1	MW-35	T	Water	Field Sampling	
280-91049-2	MW-34C	T	Water	Field Sampling	
280-91049-3	MW-34A	T	Water	Field Sampling	
280-91049-4	MW-36A	T	Water	Field Sampling	
280-91049-5	MW-15R	T	Water	Field Sampling	
280-91049-6	MW-2B1	T	Water	Field Sampling	

Report Basis

T = Total

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:280-352384					
LCS 280-352384/30	Lab Control Sample	T	Water	SM 2320B	
LCS 280-352384/4	Lab Control Sample	T	Water	SM 2320B	
MB 280-352384/31	Method Blank	T	Water	SM 2320B	
MB 280-352384/5	Method Blank	T	Water	SM 2320B	
280-91049-1	MW-35	T	Water	SM 2320B	
280-91049-2	MW-34C	T	Water	SM 2320B	
280-91049-3	MW-34A	T	Water	SM 2320B	
280-91049-4	MW-36A	T	Water	SM 2320B	
280-91049-5	MW-15R	T	Water	SM 2320B	
280-91049-6	MW-2B1	T	Water	SM 2320B	
280-91099-A-3 DU	Duplicate	T	Water	SM 2320B	
Analysis Batch:280-352501					
LCS 280-352501/2	Lab Control Sample	T	Water	SM 2540C	
MB 280-352501/1	Method Blank	T	Water	SM 2540C	
280-91049-1	MW-35	T	Water	SM 2540C	
280-91049-2	MW-34C	T	Water	SM 2540C	
280-91049-3	MW-34A	T	Water	SM 2540C	
280-91049-4	MW-36A	T	Water	SM 2540C	
280-91049-5	MW-15R	T	Water	SM 2540C	
280-91049-6	MW-2B1	T	Water	SM 2540C	
280-91049-6DU	Duplicate	T	Water	SM 2540C	
Analysis Batch:280-352718					
LCS 280-352718/1	Lab Control Sample	T	Water	SM 2540D	
MB 280-352718/2	Method Blank	T	Water	SM 2540D	
280-91049-1	MW-35	T	Water	SM 2540D	
280-91049-2	MW-34C	T	Water	SM 2540D	
280-91049-3	MW-34A	T	Water	SM 2540D	
280-91049-4	MW-36A	T	Water	SM 2540D	
280-91049-5	MW-15R	T	Water	SM 2540D	
280-91049-6	MW-2B1	T	Water	SM 2540D	
280-91074-A-2 DU	Duplicate	T	Water	SM 2540D	

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:280-352943					
LCS 280-352943/59	Lab Control Sample	T	Water	350.1	
LCSD 280-352943/60	Lab Control Sample Duplicate	T	Water	350.1	
MB 280-352943/61	Method Blank	T	Water	350.1	
280-91049-1	MW-35	T	Water	350.1	
280-91049-2	MW-34C	T	Water	350.1	
280-91049-3	MW-34A	T	Water	350.1	
280-91049-4	MW-36A	T	Water	350.1	
280-91049-5	MW-15R	T	Water	350.1	
280-91049-5MS	Matrix Spike	T	Water	350.1	
280-91049-5MSD	Matrix Spike Duplicate	T	Water	350.1	
280-91049-6	MW-2B1	T	Water	350.1	
Analysis Batch:280-353712					
LCS 280-353712/3	Lab Control Sample	T	Water	SM 5310B	
LCSD 280-353712/4	Lab Control Sample Duplicate	T	Water	SM 5310B	
MB 280-353712/5	Method Blank	T	Water	SM 5310B	
280-90915-B-2 MS	Matrix Spike	T	Water	SM 5310B	
280-90915-B-2 MSD	Matrix Spike Duplicate	T	Water	SM 5310B	
280-91049-1	MW-35	T	Water	SM 5310B	
280-91049-2	MW-34C	T	Water	SM 5310B	
Analysis Batch:280-354209					
LCS 280-354209/3	Lab Control Sample	T	Water	SM 5310B	
MB 280-354209/4	Method Blank	T	Water	SM 5310B	
280-91049-3	MW-34A	T	Water	SM 5310B	
280-91049-3MS	Matrix Spike	T	Water	SM 5310B	
280-91049-3MSD	Matrix Spike Duplicate	T	Water	SM 5310B	
280-91049-4	MW-36A	T	Water	SM 5310B	
280-91049-5	MW-15R	T	Water	SM 5310B	
280-91049-6	MW-2B1	T	Water	SM 5310B	

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:280-354220					
LCS 280-354220/4	Lab Control Sample	T	Water	300.0	
LCSD 280-354220/5	Lab Control Sample Duplicate	T	Water	300.0	
MB 280-354220/6	Method Blank	T	Water	300.0	
280-91049-1	MW-35	T	Water	300.0	
280-91049-1DU	Duplicate	T	Water	300.0	
280-91049-1MS	Matrix Spike	T	Water	300.0	
280-91049-1MSD	Matrix Spike Duplicate	T	Water	300.0	
280-91049-2	MW-34C	T	Water	300.0	
280-91049-3	MW-34A	T	Water	300.0	
280-91049-4	MW-36A	T	Water	300.0	
280-91049-5	MW-15R	T	Water	300.0	
280-91049-6	MW-2B1	T	Water	300.0	
280-91049-6DU	Duplicate	T	Water	300.0	
280-91049-6MS	Matrix Spike	T	Water	300.0	
280-91049-6MSD	Matrix Spike Duplicate	T	Water	300.0	
Analysis Batch:280-354397					
MB 280-354397/1	Method Blank	T	Water	353.2	
280-91049-1	MW-35	T	Water	353.2	
280-91049-2	MW-34C	T	Water	353.2	
280-91049-3	MW-34A	T	Water	353.2	
280-91049-4	MW-36A	T	Water	353.2	
280-91049-5	MW-15R	T	Water	353.2	
280-91049-6	MW-2B1	T	Water	353.2	

Report Basis

T = Total

Client: Waste Management

Job Number: 280-91049-1

Surrogate Recovery Report

8260C Volatile Organic Compounds by GC/MS

Client Matrix: Water

Lab Sample ID	Client Sample ID	DCA %Rec	BFB %Rec	TOL %Rec
280-91049-1	MW-35	108	98	100
280-91049-2	MW-34C	106	95	100
280-91049-3	MW-34A	108	96	100
280-91049-4	MW-36A	106	94	98
280-91049-5	MW-15R	105	94	99
280-91049-6	MW-2B1	108	95	98
280-91049-7	TRIP BLANK	107	95	100
MB 480-333378/6		105	101	100
MB 480-333552/6		108	98	99
LCS 480-333378/4		99	100	101
LCS 480-333552/4		107	99	102
480-109672-R-1 MS		105	96	100
480-109670-K-2 MS		108	99	100
480-109672-R-1 MSD		104	100	101
480-109670-K-2 MSD		107	98	101

Surrogate	Acceptance Limits
DCA = 1,2-Dichloroethane-d4 (Surr)	77-120
BFB = 4-Bromofluorobenzene (Surr)	73-120
TOL = Toluene-d8 (Surr)	80-120

Client: Waste Management

Job Number: 280-91049-1

Surrogate Recovery Report

8260C SIM Volatile Organic Compounds (GC/MS)

Client Matrix: Water

Lab Sample ID	Client Sample ID	DBFM %Rec	TBA %Rec
280-91049-1	MW-35	99	120
280-91049-2	MW-34C	97	132
280-91049-3	MW-34A	99	131
280-91049-4	MW-36A	101	124
280-91049-5	MW-15R	102	129
280-91049-6	MW-2B1	100	121
280-91049-7	TRIP BLANK	97	137
MB 480-332322/7		97	122
LCS 480-332322/4		99	104
LCSD 480-332322/5		104	117
280-91030-J-2 MS		104	142
280-91030-J-2 MSD		104	138

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

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

Method Blank - Batch: 480-333378

Method: 8260C
Preparation: 5030C

Lab Sample ID: MB 480-333378/6
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/23/2016 2223
 Prep Date: 11/23/2016 2223
 Leach Date: N/A

Analysis Batch: 480-333378
 Prep Batch: N/A
 Leach Batch: N/A
 Units: ug/L

Instrument ID: HP5973P
 Lab File ID: P20520.D
 Initial Weight/Volume: 5 mL
 Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
1,1,1,2-Tetrachloroethane	ND		0.35	1.0
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,1-Dichloropropene	ND		0.72	1.0
1,2,3-Trichlorobenzene	ND		0.41	1.0
1,2,3-Trichloropropane	ND		0.89	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2,4-Trimethylbenzene	ND		0.75	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane (EDB)	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloroethene, Total	ND		0.81	2.0
1,2-Dichloropropane	ND		0.72	1.0
1,3,5-Trichlorobenzene	ND		0.23	1.0
1,3,5-Trimethylbenzene	ND		0.77	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,3-Dichloropropane	ND		0.75	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
1,4-Dioxane	ND		9.3	40
2,2-Dichloropropane	ND		0.40	1.0
2-Butanone (MEK)	ND		1.3	10
2-Chloroethyl vinyl ether	ND		0.96	5.0
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Acetonitrile	ND		4.9	15
Acrolein	ND		0.91	20
Acrylonitrile	ND		0.83	5.0
Benzene	ND		0.41	1.0
Bromobenzene	ND		0.80	1.0
Bromochloromethane	ND		0.87	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Butyl alcohol, n-	ND		8.9	40
Butyl alcohol, tert-	ND		3.3	10
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Chlorodifluoromethane	ND		0.26	1.0

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

Method Blank - Batch: 480-333378

**Method: 8260C
Preparation: 5030C**

Lab Sample ID: MB 480-333378/6
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/23/2016 2223
 Prep Date: 11/23/2016 2223
 Leach Date: N/A

Analysis Batch: 480-333378
 Prep Batch: N/A
 Leach Batch: N/A
 Units: ug/L

Instrument ID: HP5973P
 Lab File ID: P20520.D
 Initial Weight/Volume: 5 mL
 Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
Chloroethane	ND		0.32	1.0
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dibromochloromethane	ND		0.32	1.0
Dibromomethane	ND		0.41	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Dichlorofluoromethane	ND		0.34	1.0
Ethyl acetate	ND		0.66	1.0
Ethyl ether	ND		0.72	1.0
Ethyl tert-butyl ether	ND		0.29	1.0
Ethylbenzene	ND		0.74	1.0
Hexachlorobutadiene	ND		0.28	1.0
Hexane	ND		0.40	10
Iodomethane	ND		0.30	1.0
Isobutanol	ND		4.8	25
Isopropyl ether	ND		0.59	1.0
Isopropylbenzene	ND		0.79	1.0
Methacrylonitrile	ND		0.69	5.0
Methyl acetate	ND		1.3	2.5
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
Naphthalene	ND		0.43	1.0
n-Butylbenzene	ND		0.64	1.0
N-Propylbenzene	ND		0.69	1.0
o-Chlorotoluene	ND		0.86	1.0
o-Xylene	ND		0.76	1.0
p-Chlorotoluene	ND		0.84	1.0
p-Cymene	ND		0.31	1.0
sec-Butylbenzene	ND		0.75	1.0
Styrene	ND		0.73	1.0
Tert-amyl methyl ether	ND		0.27	1.0
tert-Butylbenzene	ND		0.81	1.0
Tetrachloroethene	ND		0.36	1.0
Tetrahydrofuran	ND		1.3	5.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
trans-1,4-Dichloro-2-butene	ND		0.22	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

Method Blank - Batch: 480-333378

Method: 8260C
Preparation: 5030C

Lab Sample ID: MB 480-333378/6	Analysis Batch: 480-333378	Instrument ID: HP5973P
Client Matrix: Water	Prep Batch: N/A	Lab File ID: P20520.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 2223	Units: ug/L	Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 2223		
Leach Date: N/A		

Analyte	Result	Qual	MDL	RL
Vinyl acetate	ND		0.85	5.0
Vinyl chloride	ND		0.90	1.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	105	77 - 120
4-Bromofluorobenzene (Surr)	101	73 - 120
Toluene-d8 (Surr)	100	80 - 120

Method Blank TICs- Batch: 480-333378

Cas Number	Analyte	RT	Est. Result (ug)	Qual
67-72-1	Hexachloroethane TIC	0.00	ND	

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

Lab Control Sample - Batch: 480-333378

**Method: 8260C
Preparation: 5030C**

Lab Sample ID:	LCS 480-333378/4	Analysis Batch:	480-333378	Instrument ID:	HP5973P
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	P20518.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	11/23/2016 2128	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	11/23/2016 2128				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,1,1,2-Tetrachloroethane	25.0	25.5	102	80 - 120	
1,1,1-Trichloroethane	25.0	23.1	92	73 - 126	
1,1,2,2-Tetrachloroethane	25.0	23.7	95	76 - 120	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	22.2	89	61 - 148	
1,1,2-Trichloroethane	25.0	25.2	101	76 - 122	
1,1-Dichloroethane	25.0	24.3	97	77 - 120	
1,1-Dichloroethene	25.0	21.6	86	66 - 127	
1,1-Dichloropropene	25.0	23.4	94	72 - 122	
1,2,3-Trichlorobenzene	25.0	23.8	95	75 - 123	
1,2,3-Trichloropropane	25.0	24.2	97	68 - 122	
1,2,4-Trichlorobenzene	25.0	23.8	95	79 - 122	
1,2,4-Trimethylbenzene	25.0	24.0	96	76 - 121	
1,2-Dibromo-3-Chloropropane	25.0	22.3	89	56 - 134	
1,2-Dibromoethane (EDB)	25.0	25.2	101	77 - 120	
1,2-Dichlorobenzene	25.0	24.1	96	80 - 124	
1,2-Dichloroethane	25.0	24.5	98	75 - 120	
1,2-Dichloropropane	25.0	24.1	96	76 - 120	
1,3,5-Trimethylbenzene	25.0	23.7	95	77 - 121	
1,3-Dichlorobenzene	25.0	24.3	97	77 - 120	
1,3-Dichloropropane	25.0	25.1	101	75 - 120	
1,4-Dichlorobenzene	25.0	24.1	96	80 - 120	
1,4-Dioxane	500	499	100	50 - 150	
2,2-Dichloropropane	25.0	24.5	98	63 - 136	
2-Butanone (MEK)	125	125	100	57 - 140	
2-Chloroethyl vinyl ether	25.0	24.2	97	70 - 129	
2-Hexanone	125	127	102	65 - 127	
4-Methyl-2-pentanone (MIBK)	125	127	102	71 - 125	
Acetone	125	137	110	56 - 142	
Acrolein	125	129	103	52 - 143	
Acrylonitrile	250	236	95	63 - 125	
Benzene	25.0	23.7	95	71 - 124	
Bromobenzene	25.0	24.1	97	78 - 120	
Bromochloromethane	25.0	24.1	97	72 - 130	
Bromodichloromethane	25.0	24.4	98	80 - 122	
Bromoform	25.0	24.0	96	61 - 132	
Bromomethane	25.0	25.3	101	55 - 144	
Butyl alcohol, tert-	250	250	100	75 - 125	
Carbon disulfide	25.0	26.7	107	59 - 134	
Carbon tetrachloride	25.0	23.5	94	72 - 134	
Chlorobenzene	25.0	25.3	101	80 - 120	
Chloroethane	25.0	22.8	91	69 - 136	
Chloroform	25.0	24.0	96	73 - 127	
Chloromethane	25.0	22.5	90	68 - 124	
cis-1,2-Dichloroethene	25.0	24.3	97	74 - 124	
cis-1,3-Dichloropropene	25.0	24.4	98	74 - 124	
Cyclohexane	25.0	21.7	87	59 - 135	

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

Lab Control Sample - Batch: 480-333378

Method: 8260C
Preparation: 5030C

Lab Sample ID: LCS 480-333378/4	Analysis Batch: 480-333378	Instrument ID: HP5973P
Client Matrix: Water	Prep Batch: N/A	Lab File ID: P20518.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 2128	Units: ug/L	Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 2128		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Dibromochloromethane	25.0	25.4	102	75 - 125	
Dibromomethane	25.0	25.0	100	76 - 127	
Dichlorodifluoromethane	25.0	20.4	81	59 - 135	
Dichlorofluoromethane	25.0	23.4	94	76 - 127	
Ethyl ether	25.0	24.0	96	76 - 123	
Ethylbenzene	25.0	24.5	98	77 - 123	
Hexachlorobutadiene	25.0	23.9	95	68 - 131	
Hexane	25.0	22.2	89	54 - 146	
Iodomethane	25.0	24.7	99	78 - 123	
Isobutanol	625	624	100	51 - 150	
Isopropylbenzene	25.0	23.8	95	77 - 122	
Methyl acetate	125	121	97	74 - 133	
Methyl tert-butyl ether	25.0	24.4	98	77 - 120	
Methylcyclohexane	25.0	22.0	88	68 - 134	
Methylene Chloride	25.0	23.3	93	75 - 124	
m-Xylene & p-Xylene	25.0	24.4	98	76 - 122	
Naphthalene	25.0	23.8	95	66 - 125	
n-Butylbenzene	25.0	23.4	94	71 - 128	
N-Propylbenzene	25.0	23.7	95	75 - 127	
o-Chlorotoluene	25.0	24.6	99	76 - 121	
o-Xylene	25.0	24.2	97	76 - 122	
p-Chlorotoluene	25.0	24.1	96	77 - 121	
p-Cymene	25.0	23.8	95	73 - 120	
sec-Butylbenzene	25.0	23.5	94	74 - 127	
Styrene	25.0	25.3	101	80 - 120	
tert-Butylbenzene	25.0	23.0	92	75 - 123	
Tetrachloroethene	25.0	24.6	98	74 - 122	
Tetrahydrofuran	50.0	46.4	93	62 - 132	
Toluene	25.0	24.6	99	80 - 122	
trans-1,2-Dichloroethene	25.0	23.6	94	73 - 127	
trans-1,3-Dichloropropene	25.0	25.6	102	80 - 120	
trans-1,4-Dichloro-2-butene	25.0	17.5	70	41 - 131	
Trichloroethene	25.0	23.6	94	74 - 123	
Trichlorofluoromethane	25.0	22.5	90	62 - 150	
Vinyl acetate	50.0	50.3	101	50 - 144	
Vinyl chloride	25.0	22.6	90	65 - 133	

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	99	77 - 120
4-Bromofluorobenzene (Surr)	100	73 - 120
Toluene-d8 (Surr)	101	80 - 120

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 480-333378**

**Method: 8260C
Preparation: 5030C**

MS Lab Sample ID: 480-109672-R-1 MS	Analysis Batch: 480-333378	Instrument ID: HP5973P
Client Matrix: Water	Prep Batch: N/A	Lab File ID: P20537.D
Dilution: 40	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/24/2016 0622		Final Weight/Volume: 5 mL
Prep Date: 11/24/2016 0622		5 mL
Leach Date: N/A		

MSD Lab Sample ID: 480-109672-R-1 MSD	Analysis Batch: 480-333378	Instrument ID: HP5973P
Client Matrix: Water	Prep Batch: N/A	Lab File ID: P20538.D
Dilution: 40	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/24/2016 0649		Final Weight/Volume: 5 mL
Prep Date: 11/24/2016 0649		5 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
1,1,1-Trichloroethane	102	100	73 - 126	2	15		
1,1,2,2-Tetrachloroethane	100	99	76 - 120	1	15		
1,1,2-Trichloroethane	102	102	76 - 122	1	15		
1,1-Dichloroethane	104	100	77 - 120	4	20		
1,1-Dichloroethene	95	91	66 - 127	5	16		
1,2-Dichloroethane	105	102	75 - 120	3	20		
1,2-Dichloropropane	101	99	76 - 120	2	20		
2-Butanone (MEK)	106	106	57 - 140	0	20		
2-Hexanone	107	107	65 - 127	1	15		
4-Methyl-2-pentanone (MIBK)	110	108	71 - 125	2	35		
Acetone	118	113	56 - 142	4	15		
Benzene	102	97	71 - 124	5	13		
Bromodichloromethane	103	101	80 - 122	2	15		
Bromoform	92	94	61 - 132	3	15		
Bromomethane	148	155	55 - 144	4	15	F1	F1
Carbon disulfide	105	113	59 - 134	8	15		
Carbon tetrachloride	106	103	72 - 134	3	15		
Chlorobenzene	101	100	80 - 120	1	25		
Chloroethane	175	164	69 - 136	6	15	F1	F1
Chloroform	103	99	73 - 127	5	20		
Chloromethane	109	101	68 - 124	8	15		
cis-1,2-Dichloroethene	102	98	74 - 124	3	15		
cis-1,3-Dichloropropene	98	97	74 - 124	1	15		
Dibromochloromethane	101	103	75 - 125	2	15		
Ethylbenzene	102	100	77 - 123	2	15		
Methylene Chloride	98	93	75 - 124	5	15		
m-Xylene & p-Xylene	100	98	76 - 122	2	16		
o-Xylene	98	97	76 - 122	2	16		
Styrene	100	100	80 - 120	0	20		
Tetrachloroethene	99	101	74 - 122	2	20		
Toluene	102	100	80 - 122	2	15		
trans-1,2-Dichloroethene	101	96	73 - 127	5	20		
trans-1,3-Dichloropropene	101	101	80 - 120	1	15		

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 480-333378**

**Method: 8260C
Preparation: 5030C**

MS Lab Sample ID: 480-109672-R-1 MS	Analysis Batch: 480-333378	Instrument ID: HP5973P
Client Matrix: Water	Prep Batch: N/A	Lab File ID: P20537.D
Dilution: 40	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/24/2016 0622		Final Weight/Volume: 5 mL
Prep Date: 11/24/2016 0622		5 mL
Leach Date: N/A		

MSD Lab Sample ID: 480-109672-R-1 MSD	Analysis Batch: 480-333378	Instrument ID: HP5973P
Client Matrix: Water	Prep Batch: N/A	Lab File ID: P20538.D
Dilution: 40	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/24/2016 0649		Final Weight/Volume: 5 mL
Prep Date: 11/24/2016 0649		5 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
trans-1,4-Dichloro-2-butene	47	50	41 - 131	7	20		
Trichloroethene	101	97	74 - 123	4	16		
Vinyl chloride	103	99	65 - 133	4	15		
Surrogate		MS % Rec	MSD % Rec		Acceptance Limits		
1,2-Dichloroethane-d4 (Surr)		105	104		77 - 120		
4-Bromofluorobenzene (Surr)		96	100		73 - 120		
Toluene-d8 (Surr)		100	101		80 - 120		

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 480-333378**

**Method: 8260C
Preparation: 5030C**

MS Lab Sample ID: 480-109672-R-1 MS Units: ug/L
 Client Matrix: Water
 Dilution: 40
 Analysis Date: 11/24/2016 0622
 Prep Date: 11/24/2016 0622
 Leach Date: N/A

MSD Lab Sample ID: 480-109672-R-1 MSD
 Client Matrix: Water
 Dilution: 40
 Analysis Date: 11/24/2016 0649
 Prep Date: 11/24/2016 0649
 Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual	
1,1,1-Trichloroethane	ND	1000	1000	1020	1000	
1,1,2,2-Tetrachloroethane	ND	1000	1000	1000	992	
1,1,2-Trichloroethane	ND	1000	1000	1020	1020	
1,1-Dichloroethane	ND	1000	1000	1040	1000	
1,1-Dichloroethene	ND	1000	1000	950	908	
1,2-Dichloroethane	ND	1000	1000	1050	1020	
1,2-Dichloropropane	ND	1000	1000	1010	993	
2-Butanone (MEK)	410	5000	5000	5720	5720	
2-Hexanone	ND	5000	5000	5370	5340	
4-Methyl-2-pentanone (MIBK)	ND	5000	5000	5480	5380	
Acetone	460	5000	5000	6350	6100	
Benzene	ND	1000	1000	1020	969	
Bromodichloromethane	ND	1000	1000	1030	1010	
Bromoform	ND	1000	1000	915	939	
Bromomethane	ND	1000	1000	1480	F1 1550	F1
Carbon disulfide	ND	1000	1000	1050	1130	
Carbon tetrachloride	ND	1000	1000	1060	1030	
Chlorobenzene	ND	1000	1000	1010	998	
Chloroethane	ND	1000	1000	1750	F1 1640	F1
Chloroform	ND	1000	1000	1030	986	
Chloromethane	ND	1000	1000	1090	1010	
cis-1,2-Dichloroethene	ND	1000	1000	1020	983	
cis-1,3-Dichloropropene	ND	1000	1000	982	971	
Dibromochloromethane	ND	1000	1000	1010	1030	
Ethylbenzene	ND	1000	1000	1020	998	
Methylene Chloride	20	J 1000	1000	996	950	
m-Xylene & p-Xylene	ND	1000	1000	1000	983	
o-Xylene	ND	1000	1000	982	965	
Styrene	ND	1000	1000	1000	1000	
Tetrachloroethene	ND	1000	1000	990	1010	
Toluene	ND	1000	1000	1020	998	
trans-1,2-Dichloroethene	ND	1000	1000	1010	960	
trans-1,3-Dichloropropene	ND	1000	1000	1010	1010	
trans-1,4-Dichloro-2-butene	ND	1000	1000	466	501	
Trichloroethene	ND	1000	1000	1010	970	
Vinyl chloride	ND	1000	1000	1030	987	

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

Method Blank - Batch: 480-333552

**Method: 8260C
Preparation: 5030C**

Lab Sample ID: MB 480-333552/6
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/26/2016 1115
Prep Date: 11/26/2016 1115
Leach Date: N/A

Analysis Batch: 480-333552
Prep Batch: N/A
Leach Batch: N/A
Units: ug/L

Instrument ID: HP5973P
Lab File ID: P20625.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
1,1,1,2-Tetrachloroethane	ND		0.35	1.0
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,1-Dichloropropene	ND		0.72	1.0
1,2,3-Trichlorobenzene	ND		0.41	1.0
1,2,3-Trichloropropane	ND		0.89	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2,4-Trimethylbenzene	ND		0.75	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane (EDB)	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloroethene, Total	ND		0.81	2.0
1,2-Dichloropropane	ND		0.72	1.0
1,3,5-Trichlorobenzene	ND		0.23	1.0
1,3,5-Trimethylbenzene	ND		0.77	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,3-Dichloropropane	ND		0.75	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
1,4-Dioxane	ND		9.3	40
2,2-Dichloropropane	ND		0.40	1.0
2-Butanone (MEK)	ND		1.3	10
2-Chloroethyl vinyl ether	ND		0.96	5.0
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Acetonitrile	ND		4.9	15
Acrolein	ND		0.91	20
Acrylonitrile	ND		0.83	5.0
Benzene	ND		0.41	1.0
Bromobenzene	ND		0.80	1.0
Bromochloromethane	ND		0.87	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Butyl alcohol, n-	ND		8.9	40
Butyl alcohol, tert-	ND		3.3	10
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Chlorodifluoromethane	ND		0.26	1.0

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

Method Blank - Batch: 480-333552

**Method: 8260C
Preparation: 5030C**

Lab Sample ID: MB 480-333552/6
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/26/2016 1115
 Prep Date: 11/26/2016 1115
 Leach Date: N/A

Analysis Batch: 480-333552
 Prep Batch: N/A
 Leach Batch: N/A
 Units: ug/L

Instrument ID: HP5973P
 Lab File ID: P20625.D
 Initial Weight/Volume: 5 mL
 Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
Chloroethane	ND		0.32	1.0
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dibromochloromethane	ND		0.32	1.0
Dibromomethane	ND		0.41	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Dichlorofluoromethane	ND		0.34	1.0
Ethyl acetate	ND		0.66	1.0
Ethyl ether	ND		0.72	1.0
Ethyl tert-butyl ether	ND		0.29	1.0
Ethylbenzene	ND		0.74	1.0
Hexachlorobutadiene	ND		0.28	1.0
Hexane	ND		0.40	10
Iodomethane	ND		0.30	1.0
Isobutanol	ND		4.8	25
Isopropyl ether	ND		0.59	1.0
Isopropylbenzene	ND		0.79	1.0
Methacrylonitrile	ND		0.69	5.0
Methyl acetate	ND		1.3	2.5
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
Naphthalene	ND		0.43	1.0
n-Butylbenzene	ND		0.64	1.0
N-Propylbenzene	ND		0.69	1.0
o-Chlorotoluene	ND		0.86	1.0
o-Xylene	ND		0.76	1.0
p-Chlorotoluene	ND		0.84	1.0
p-Cymene	ND		0.31	1.0
sec-Butylbenzene	ND		0.75	1.0
Styrene	ND		0.73	1.0
Tert-amyl methyl ether	ND		0.27	1.0
tert-Butylbenzene	ND		0.81	1.0
Tetrachloroethene	ND		0.36	1.0
Tetrahydrofuran	ND		1.3	5.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
trans-1,4-Dichloro-2-butene	ND		0.22	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

Method Blank - Batch: 480-333552

Method: 8260C
Preparation: 5030C

Lab Sample ID: MB 480-333552/6	Analysis Batch: 480-333552	Instrument ID: HP5973P
Client Matrix: Water	Prep Batch: N/A	Lab File ID: P20625.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/26/2016 1115	Units: ug/L	Final Weight/Volume: 5 mL
Prep Date: 11/26/2016 1115		
Leach Date: N/A		

Analyte	Result	Qual	MDL	RL
Vinyl acetate	ND		0.85	5.0
Vinyl chloride	ND		0.90	1.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	108	77 - 120
4-Bromofluorobenzene (Surr)	98	73 - 120
Toluene-d8 (Surr)	99	80 - 120

Method Blank TICs- Batch: 480-333552

Cas Number	Analyte	RT	Est. Result (ug)	Qual
67-72-1	Hexachloroethane TIC	0.00	ND	

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

Lab Control Sample - Batch: 480-333552

**Method: 8260C
Preparation: 5030C**

Lab Sample ID: LCS 480-333552/4	Analysis Batch: 480-333552	Instrument ID: HP5973P
Client Matrix: Water	Prep Batch: N/A	Lab File ID: P20623.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/26/2016 1020	Units: ug/L	Final Weight/Volume: 5 mL
Prep Date: 11/26/2016 1020		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,1,1,2-Tetrachloroethane	25.0	24.6	98	80 - 120	
1,1,1-Trichloroethane	25.0	24.1	96	73 - 126	
1,1,2,2-Tetrachloroethane	25.0	22.8	91	76 - 120	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	23.8	95	61 - 148	
1,1,2-Trichloroethane	25.0	24.0	96	76 - 122	
1,1-Dichloroethane	25.0	24.3	97	77 - 120	
1,1-Dichloroethene	25.0	21.7	87	66 - 127	
1,1-Dichloropropene	25.0	23.9	95	72 - 122	
1,2,3-Trichlorobenzene	25.0	23.2	93	75 - 123	
1,2,3-Trichloropropane	25.0	23.5	94	68 - 122	
1,2,4-Trichlorobenzene	25.0	23.1	92	79 - 122	
1,2,4-Trimethylbenzene	25.0	23.0	92	76 - 121	
1,2-Dibromo-3-Chloropropane	25.0	21.7	87	56 - 134	
1,2-Dibromoethane (EDB)	25.0	24.4	98	77 - 120	
1,2-Dichlorobenzene	25.0	22.8	91	80 - 124	
1,2-Dichloroethane	25.0	25.0	100	75 - 120	
1,2-Dichloropropane	25.0	23.7	95	76 - 120	
1,3,5-Trimethylbenzene	25.0	23.1	92	77 - 121	
1,3-Dichlorobenzene	25.0	23.0	92	77 - 120	
1,3-Dichloropropane	25.0	24.4	98	75 - 120	
1,4-Dichlorobenzene	25.0	23.0	92	80 - 120	
1,4-Dioxane	500	446	89	50 - 150	
2,2-Dichloropropane	25.0	26.2	105	63 - 136	
2-Butanone (MEK)	125	123	99	57 - 140	
2-Chloroethyl vinyl ether	25.0	23.4	94	70 - 129	
2-Hexanone	125	126	101	65 - 127	
4-Methyl-2-pentanone (MIBK)	125	127	102	71 - 125	
Acetone	125	123	99	56 - 142	
Acrolein	125	130	104	52 - 143	
Acrylonitrile	250	241	96	63 - 125	
Benzene	25.0	23.6	94	71 - 124	
Bromobenzene	25.0	23.0	92	78 - 120	
Bromochloromethane	25.0	24.0	96	72 - 130	
Bromodichloromethane	25.0	24.3	97	80 - 122	
Bromoform	25.0	21.9	87	61 - 132	
Bromomethane	25.0	24.5	98	55 - 144	
Butyl alcohol, tert-	250	244	98	75 - 125	
Carbon disulfide	25.0	22.3	89	59 - 134	
Carbon tetrachloride	25.0	25.0	100	72 - 134	
Chlorobenzene	25.0	23.9	95	80 - 120	
Chloroethane	25.0	29.1	117	69 - 136	
Chloroform	25.0	24.3	97	73 - 127	
Chloromethane	25.0	23.2	93	68 - 124	
cis-1,2-Dichloroethene	25.0	24.1	96	74 - 124	
cis-1,3-Dichloropropene	25.0	24.1	97	74 - 124	
Cyclohexane	25.0	20.8	83	59 - 135	

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

Lab Control Sample - Batch: 480-333552

**Method: 8260C
Preparation: 5030C**

Lab Sample ID: LCS 480-333552/4	Analysis Batch: 480-333552	Instrument ID: HP5973P
Client Matrix: Water	Prep Batch: N/A	Lab File ID: P20623.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/26/2016 1020	Units: ug/L	Final Weight/Volume: 5 mL
Prep Date: 11/26/2016 1020		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Dibromochloromethane	25.0	24.3	97	75 - 125	
Dibromomethane	25.0	25.4	101	76 - 127	
Dichlorodifluoromethane	25.0	20.7	83	59 - 135	
Dichlorofluoromethane	25.0	27.0	108	76 - 127	
Ethyl ether	25.0	23.8	95	76 - 123	
Ethylbenzene	25.0	23.7	95	77 - 123	
Hexachlorobutadiene	25.0	22.5	90	68 - 131	
Hexane	25.0	22.5	90	54 - 146	
Iodomethane	25.0	24.2	97	78 - 123	
Isobutanol	625	579	93	51 - 150	
Isopropylbenzene	25.0	22.9	92	77 - 122	
Methyl acetate	125	124	99	74 - 133	
Methyl tert-butyl ether	25.0	24.6	99	77 - 120	
Methylcyclohexane	25.0	22.2	89	68 - 134	
Methylene Chloride	25.0	23.4	93	75 - 124	
m-Xylene & p-Xylene	25.0	23.2	93	76 - 122	
Naphthalene	25.0	22.8	91	66 - 125	
n-Butylbenzene	25.0	22.4	90	71 - 128	
N-Propylbenzene	25.0	23.1	92	75 - 127	
o-Chlorotoluene	25.0	23.7	95	76 - 121	
o-Xylene	25.0	22.9	92	76 - 122	
p-Chlorotoluene	25.0	23.2	93	77 - 121	
p-Cymene	25.0	22.8	91	73 - 120	
sec-Butylbenzene	25.0	22.6	90	74 - 127	
Styrene	25.0	23.5	94	80 - 120	
tert-Butylbenzene	25.0	22.3	89	75 - 123	
Tetrachloroethene	25.0	24.0	96	74 - 122	
Tetrahydrofuran	50.0	46.0	92	62 - 132	
Toluene	25.0	23.5	94	80 - 122	
trans-1,2-Dichloroethene	25.0	23.7	95	73 - 127	
trans-1,3-Dichloropropene	25.0	24.7	99	80 - 120	
trans-1,4-Dichloro-2-butene	25.0	14.4	58	41 - 131	
Trichloroethene	25.0	23.9	96	74 - 123	
Trichlorofluoromethane	25.0	24.9	100	62 - 150	
Vinyl acetate	50.0	52.8	106	50 - 144	
Vinyl chloride	25.0	23.1	92	65 - 133	
Surrogate		% Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		107		77 - 120	
4-Bromofluorobenzene (Surr)		99		73 - 120	
Toluene-d8 (Surr)		102		80 - 120	

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 480-333552**

**Method: 8260C
Preparation: 5030C**

MS Lab Sample ID: 480-109670-K-2 MS	Analysis Batch: 480-333552	Instrument ID: HP5973P
Client Matrix: Water	Prep Batch: N/A	Lab File ID: P20642.D
Dilution: 100	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/26/2016 1916		Final Weight/Volume: 5 mL
Prep Date: 11/26/2016 1916		5 mL
Leach Date: N/A		

MSD Lab Sample ID: 480-109670-K-2 MSD	Analysis Batch: 480-333552	Instrument ID: HP5973P
Client Matrix: Water	Prep Batch: N/A	Lab File ID: P20643.D
Dilution: 100	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/26/2016 1944		Final Weight/Volume: 5 mL
Prep Date: 11/26/2016 1944		5 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
1,1,1,2-Tetrachloroethane	100	101	80 - 120	0	20		
1,1,1-Trichloroethane	105	100	73 - 126	5	15		
1,1,2,2-Tetrachloroethane	95	94	76 - 120	1	15		
1,1,2-Trichloro-1,2,2-trifluoroethane	105	100	61 - 148	4	20		
1,1,2-Trichloroethane	99	100	76 - 122	1	15		
1,1-Dichloroethane	104	101	77 - 120	3	20		
1,1-Dichloroethene	96	92	66 - 127	4	16		
1,1-Dichloropropene	104	101	72 - 122	3	20		
1,2,3-Trichlorobenzene	93	95	75 - 123	2	20		
1,2,3-Trichloropropane	93	95	68 - 122	3	14		
1,2,4-Trichlorobenzene	92	93	79 - 122	2	20		
1,2,4-Trimethylbenzene	96	94	76 - 121	2	20		
1,2-Dibromo-3-Chloropropane	88	86	56 - 134	2	15		
1,2-Dibromoethane (EDB)	100	97	77 - 120	3	15		
1,2-Dichlorobenzene	94	93	80 - 124	1	20		
1,2-Dichloroethane	106	103	75 - 120	3	20		
1,2-Dichloropropane	101	99	76 - 120	2	20		
1,3,5-Trimethylbenzene	95	94	77 - 121	1	20		
1,3-Dichlorobenzene	93	94	77 - 120	1	20		
1,3-Dichloropropane	103	100	75 - 120	4	20		
1,4-Dichlorobenzene	93	93	78 - 124	1	20		
2,2-Dichloropropane	95	90	63 - 136	6	20		
2-Butanone (MEK)	204	180	57 - 140	4	20	E F1	E F1
2-Hexanone	104	99	65 - 127	4	15		
4-Methyl-2-pentanone (MIBK)	107	105	71 - 125	2	35		
Acetone	235	204	56 - 142	5	15	E F1	E F1
Benzene	102	98	71 - 124	4	13		
Bromobenzene	95	95	78 - 120	0	15		
Bromochloromethane	100	97	72 - 130	3	15		
Bromodichloromethane	102	100	80 - 122	2	15		
Bromoform	87	87	61 - 132	0	15		
Bromomethane	103	84	55 - 144	21	15		F2
Carbon tetrachloride	108	105	72 - 134	3	15		

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 480-333552**

**Method: 8260C
Preparation: 5030C**

MS Lab Sample ID: 480-109670-K-2 MS	Analysis Batch: 480-333552	Instrument ID: HP5973P
Client Matrix: Water	Prep Batch: N/A	Lab File ID: P20642.D
Dilution: 100	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/26/2016 1916		Final Weight/Volume: 5 mL
Prep Date: 11/26/2016 1916		5 mL
Leach Date: N/A		

MSD Lab Sample ID: 480-109670-K-2 MSD	Analysis Batch: 480-333552	Instrument ID: HP5973P
Client Matrix: Water	Prep Batch: N/A	Lab File ID: P20643.D
Dilution: 100	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/26/2016 1944		Final Weight/Volume: 5 mL
Prep Date: 11/26/2016 1944		5 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Chlorobenzene	98	96	80 - 120	3	25		
Chloroethane	111	106	69 - 136	5	15		
Chloroform	104	99	73 - 127	5	20		
Chloromethane	103	93	68 - 124	9	15		
cis-1,2-Dichloroethene	100	95	74 - 124	5	15		
cis-1,3-Dichloropropene	97	95	74 - 124	2	15		
Dibromochloromethane	97	96	75 - 125	1	15		
Dibromomethane	105	103	76 - 127	3	15		
Dichlorodifluoromethane	90	86	59 - 135	4	20		
Dichlorofluoromethane	124	105	76 - 127	17	20		
Ethyl ether	99	100	76 - 123	1	20		
Ethylbenzene	99	96	77 - 123	3	15		
Hexachlorobutadiene	91	94	68 - 131	3	20		
Isopropylbenzene	96	95	77 - 122	1	20		
Methyl tert-butyl ether	100	100	77 - 120	0	37		
Methylene Chloride	99	97	75 - 124	1	15		
m-Xylene & p-Xylene	96	95	76 - 122	1	16		
Naphthalene	93	94	66 - 125	1	20		
n-Butylbenzene	93	91	71 - 128	2	15		
N-Propylbenzene	97	95	75 - 127	2	15		
o-Chlorotoluene	99	99	76 - 121	0	20		
o-Xylene	95	93	76 - 122	2	16		
p-Chlorotoluene	95	95	77 - 121	0	15		
p-Cymene	94	94	73 - 120	1	20		
sec-Butylbenzene	96	94	74 - 127	2	15		
Styrene	96	94	80 - 120	2	20		
tert-Butylbenzene	93	92	75 - 123	1	15		
Tetrachloroethene	100	97	74 - 122	3	20		
Tetrahydrofuran	112	107	62 - 132	3	25		
Toluene	99	97	80 - 122	2	15		
trans-1,2-Dichloroethene	103	98	73 - 127	5	20		
trans-1,3-Dichloropropene	98	97	80 - 120	1	15		
Trichloroethene	100	97	74 - 123	3	16		

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 480-333552**

**Method: 8260C
Preparation: 5030C**

MS Lab Sample ID: 480-109670-K-2 MS	Analysis Batch: 480-333552	Instrument ID: HP5973P
Client Matrix: Water	Prep Batch: N/A	Lab File ID: P20642.D
Dilution: 100	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/26/2016 1916		Final Weight/Volume: 5 mL
Prep Date: 11/26/2016 1916		5 mL
Leach Date: N/A		

MSD Lab Sample ID: 480-109670-K-2 MSD	Analysis Batch: 480-333552	Instrument ID: HP5973P
Client Matrix: Water	Prep Batch: N/A	Lab File ID: P20643.D
Dilution: 100	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/26/2016 1944		Final Weight/Volume: 5 mL
Prep Date: 11/26/2016 1944		5 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Trichlorofluoromethane	108	99	62 - 150	9	20		
Vinyl chloride	95	92	65 - 133	3	15		
Surrogate		MS % Rec	MSD % Rec			Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		108	107			77 - 120	
4-Bromofluorobenzene (Surr)		99	98			73 - 120	
Toluene-d8 (Surr)		100	101			80 - 120	

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 480-333552**

**Method: 8260C
Preparation: 5030C**

MS Lab Sample ID: 480-109670-K-2 MS Units: ug/L
 Client Matrix: Water
 Dilution: 100
 Analysis Date: 11/26/2016 1916
 Prep Date: 11/26/2016 1916
 Leach Date: N/A

MSD Lab Sample ID: 480-109670-K-2 MSD
 Client Matrix: Water
 Dilution: 100
 Analysis Date: 11/26/2016 1944
 Prep Date: 11/26/2016 1944
 Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual	
1,1,1,2-Tetrachloroethane	ND	2500	2500	2510	2520	
1,1,1-Trichloroethane	ND	2500	2500	2630	2500	
1,1,2,2-Tetrachloroethane	ND	2500	2500	2370	2340	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	2500	2500	2630	2510	
1,1,2-Trichloroethane	ND	2500	2500	2480	2500	
1,1-Dichloroethane	ND	2500	2500	2600	2530	
1,1-Dichloroethene	ND	2500	2500	2390	2300	
1,1-Dichloropropene	ND	2500	2500	2600	2520	
1,2,3-Trichlorobenzene	ND	2500	2500	2320	2360	
1,2,3-Trichloropropane	ND	2500	2500	2310	2380	
1,2,4-Trichlorobenzene	ND	2500	2500	2290	2340	
1,2,4-Trimethylbenzene	ND	2500	2500	2400	2360	
1,2-Dibromo-3-Chloropropane	ND	2500	2500	2190	2150	
1,2-Dibromoethane (EDB)	ND	2500	2500	2500	2430	
1,2-Dichlorobenzene	ND	2500	2500	2350	2330	
1,2-Dichloroethane	ND	2500	2500	2640	2560	
1,2-Dichloropropane	ND	2500	2500	2530	2480	
1,3,5-Trimethylbenzene	ND	2500	2500	2380	2360	
1,3-Dichlorobenzene	ND	2500	2500	2320	2350	
1,3-Dichloropropane	ND	2500	2500	2590	2490	
1,4-Dichlorobenzene	ND	2500	2500	2340	2320	
2,2-Dichloropropane	ND	2500	2500	2390	2250	
2-Butanone (MEK)	49000	12500	12500	74700	71800	E F1
2-Hexanone	ND	12500	12500	13000	12400	
4-Methyl-2-pentanone (MIBK)	290	12500	12500	13700	13400	
Acetone	48000	12500	12500	77700	73900	E F1
Benzene	ND	2500	2500	2540	2440	
Bromobenzene	ND	2500	2500	2380	2380	
Bromochloromethane	ND	2500	2500	2490	2430	
Bromodichloromethane	ND	2500	2500	2550	2500	
Bromoform	ND	2500	2500	2180	2180	
Bromomethane	ND	2500	2500	2580	2090	F2
Carbon tetrachloride	ND	2500	2500	2710	2620	
Chlorobenzene	ND	2500	2500	2460	2400	
Chloroethane	ND	2500	2500	2770	2640	
Chloroform	ND	2500	2500	2610	2470	
Chloromethane	ND	2500	2500	2560	2330	
cis-1,2-Dichloroethene	ND	2500	2500	2490	2370	
cis-1,3-Dichloropropene	ND	2500	2500	2420	2380	
Dibromochloromethane	ND	2500	2500	2430	2400	
Dibromomethane	ND	2500	2500	2630	2570	
Dichlorodifluoromethane	ND	2500	2500	2240	2150	
Dichlorofluoromethane	ND	2500	2500	3100	2620	

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 480-333552**

**Method: 8260C
Preparation: 5030C**

MS Lab Sample ID: 480-109670-K-2 MS Units: ug/L
 Client Matrix: Water
 Dilution: 100
 Analysis Date: 11/26/2016 1916
 Prep Date: 11/26/2016 1916
 Leach Date: N/A

MSD Lab Sample ID: 480-109670-K-2 MSD
 Client Matrix: Water
 Dilution: 100
 Analysis Date: 11/26/2016 1944
 Prep Date: 11/26/2016 1944
 Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Ethyl ether	ND	2500	2500	2480	2500
Ethylbenzene	ND	2500	2500	2480	2400
Hexachlorobutadiene	ND	2500	2500	2270	2340
Isopropylbenzene	ND	2500	2500	2400	2370
Methyl tert-butyl ether	ND	2500	2500	2490	2500
Methylene Chloride	ND	2500	2500	2460	2440
m-Xylene & p-Xylene	ND	2500	2500	2410	2380
Naphthalene	ND	2500	2500	2320	2350
n-Butylbenzene	ND	2500	2500	2320	2270
N-Propylbenzene	ND	2500	2500	2420	2380
o-Chlorotoluene	ND	2500	2500	2470	2480
o-Xylene	ND	2500	2500	2370	2330
p-Chlorotoluene	ND	2500	2500	2370	2360
p-Cymene	ND	2500	2500	2350	2340
sec-Butylbenzene	ND	2500	2500	2400	2360
Styrene	ND	2500	2500	2400	2350
tert-Butylbenzene	ND	2500	2500	2320	2300
Tetrachloroethene	ND	2500	2500	2490	2420
Tetrahydrofuran	2600	5000	5000	8190	7940
Toluene	ND	2500	2500	2470	2420
trans-1,2-Dichloroethene	ND	2500	2500	2570	2440
trans-1,3-Dichloropropene	ND	2500	2500	2460	2420
Trichloroethene	ND	2500	2500	2510	2430
Trichlorofluoromethane	ND	2500	2500	2700	2460
Vinyl chloride	ND	2500	2500	2380	2310

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

Method Blank - Batch: 480-332322

**Method: 8260C SIM
Preparation: 5030C**

Lab Sample ID: MB 480-332322/7	Analysis Batch: 480-332322	Instrument ID: HP5973J
Client Matrix: Water	Prep Batch: N/A	Lab File ID: J1464.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 25 mL
Analysis Date: 11/17/2016 2154	Units: ug/L	Final Weight/Volume: 25 mL
Prep Date: 11/17/2016 2154		
Leach Date: N/A		

Analyte	Result	Qual	MDL	RL
Vinyl chloride	0.00534	J	0.0040	0.020

Surrogate	% Rec	Acceptance Limits
Dibromofluoromethane (Surr)	97	50 - 150
TBA-d9 (Surr)	122	50 - 150

Lab Control Sample/

**Method: 8260C SIM
Preparation: 5030C**

Lab Control Sample Duplicate Recovery Report - Batch: 480-332322

LCS Lab Sample ID: LCS 480-332322/4	Analysis Batch: 480-332322	Instrument ID: HP5973J
Client Matrix: Water	Prep Batch: N/A	Lab File ID: J1461.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 25 mL
Analysis Date: 11/17/2016 2041	Units: ug/L	Final Weight/Volume: 25 mL
Prep Date: 11/17/2016 2041		25 mL
Leach Date: N/A		

LCSD Lab Sample ID: LCSD 480-332322/5	Analysis Batch: 480-332322	Instrument ID: HP5973J
Client Matrix: Water	Prep Batch: N/A	Lab File ID: J1462.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 25 mL
Analysis Date: 11/17/2016 2105	Units: ug/L	Final Weight/Volume: 25 mL
Prep Date: 11/17/2016 2105		25 mL
Leach Date: N/A		

Analyte	<u>% Rec.</u>		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Vinyl chloride	115	123	50 - 150	7	20		
Surrogate	LCS % Rec		LCSD % Rec		Acceptance Limits		
Dibromofluoromethane (Surr)	99		104		50 - 150		
TBA-d9 (Surr)	104		117		50 - 150		

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

**Laboratory Control/
Laboratory Duplicate Data Report - Batch: 480-332322**

**Method: 8260C SIM
Preparation: 5030C**

LCS Lab Sample ID: LCS 480-332322/4 Units: ug/L
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/17/2016 2041
 Prep Date: 11/17/2016 2041
 Leach Date: N/A

LCSD Lab Sample ID: LCSD 480-332322/5
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/17/2016 2105
 Prep Date: 11/17/2016 2105
 Leach Date: N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Vinyl chloride	0.200	0.200	0.230	0.246

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 480-332322**

**Method: 8260C SIM
Preparation: 5030C**

MS Lab Sample ID: 280-91030-J-2 MS
 Client Matrix: Water
 Dilution: 4.0
 Analysis Date: 11/18/2016 0327
 Prep Date: 11/18/2016 0327
 Leach Date: N/A

Analysis Batch: 480-332322
 Prep Batch: N/A
 Leach Batch: N/A

Instrument ID: HP5973J
 Lab File ID: J1476.D
 Initial Weight/Volume: 25 mL
 Final Weight/Volume: 25 mL
 25 mL

MSD Lab Sample ID: 280-91030-J-2 MSD
 Client Matrix: Water
 Dilution: 4.0
 Analysis Date: 11/18/2016 0351
 Prep Date: 11/18/2016 0351
 Leach Date: N/A

Analysis Batch: 480-332322
 Prep Batch: N/A
 Leach Batch: N/A

Instrument ID: HP5973J
 Lab File ID: J1477.D
 Initial Weight/Volume: 25 mL
 Final Weight/Volume: 25 mL
 25 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Vinyl chloride	138	137	50 - 150	1	20		
Surrogate		MS % Rec	MSD % Rec			Acceptance Limits	
Dibromofluoromethane (Surr)		104	104			50 - 150	
TBA-d9 (Surr)		142	138			50 - 150	

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 480-332322**

**Method: 8260C SIM
Preparation: 5030C**

MS Lab Sample ID: 280-91030-J-2 MS Units: ug/L
Client Matrix: Water
Dilution: 4.0
Analysis Date: 11/18/2016 0327
Prep Date: 11/18/2016 0327
Leach Date: N/A

MSD Lab Sample ID: 280-91030-J-2 MSD
Client Matrix: Water
Dilution: 4.0
Analysis Date: 11/18/2016 0351
Prep Date: 11/18/2016 0351
Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Vinyl chloride	0.046 J	0.800	0.800	1.15	1.15

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

Method Blank - Batch: 280-352772

Lab Sample ID: MB 280-352772/1-A
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/03/2016 2244
 Prep Date: 11/29/2016 0726
 Leach Date: N/A

Analysis Batch: 280-354165
 Prep Batch: 280-352772
 Leach Batch: N/A
 Units: mg/L

**Method: 6010B
 Preparation: 3005A
 Total Recoverable**

Instrument ID: MT_025
 Lab File ID: 25A11316.asc
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL	RL
Magnesium, Dissolved	ND		0.050	0.050

Method Blank - Batch: 280-352772

Lab Sample ID: MB 280-352772/1-A
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/05/2016 2236
 Prep Date: 11/29/2016 0726
 Leach Date: N/A

Analysis Batch: 280-354385
 Prep Batch: 280-352772
 Leach Batch: N/A
 Units: mg/L

**Method: 6010B
 Preparation: 3005A
 Total Recoverable**

Instrument ID: MT_025
 Lab File ID: 25A120516.asc
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL	RL
Calcium, Dissolved	ND		0.040	0.040
Iron, Dissolved	ND		0.060	0.060
Potassium, Dissolved	ND		1.0	1.0
Sodium, Dissolved	ND		1.0	1.0

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

Lab Control Sample - Batch: 280-352772

Method: 6010B
Preparation: 3005A
Total Recoverable

Lab Sample ID: LCS 280-352772/2-A	Analysis Batch: 280-354165	Instrument ID: MT_025
Client Matrix: Water	Prep Batch: 280-352772	Lab File ID: 25A11316.asc
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 50 mL
Analysis Date: 12/03/2016 2247	Units: mg/L	Final Weight/Volume: 50 mL
Prep Date: 11/29/2016 0726		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Magnesium, Dissolved	50.0	50.7	101	90 - 113	

Lab Control Sample - Batch: 280-352772

Method: 6010B
Preparation: 3005A
Total Recoverable

Lab Sample ID: LCS 280-352772/2-A	Analysis Batch: 280-354385	Instrument ID: MT_025
Client Matrix: Water	Prep Batch: 280-352772	Lab File ID: 25A120516.asc
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 50 mL
Analysis Date: 12/05/2016 2238	Units: mg/L	Final Weight/Volume: 50 mL
Prep Date: 11/29/2016 0726		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Calcium, Dissolved	50.0	47.6	95	90 - 111	
Iron, Dissolved	1.00	0.930	93	89 - 115	
Potassium, Dissolved	50.0	48.1	96	89 - 114	
Sodium, Dissolved	50.0	49.4	99	90 - 115	

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-352772**

**Method: 6010B
Preparation: 3005A
Dissolved**

MS Lab Sample ID: 280-91149-A-2-B MS	Analysis Batch: 280-354385	Instrument ID: MT_025
Client Matrix: Water	Prep Batch: 280-352772	Lab File ID: 25A120516.asc
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 50 mL
Analysis Date: 12/05/2016 2246		Final Weight/Volume: 50 mL
Prep Date: 11/29/2016 0726		
Leach Date: N/A		

MSD Lab Sample ID: 280-91149-A-2-C MSD	Analysis Batch: 280-354385	Instrument ID: MT_025
Client Matrix: Water	Prep Batch: 280-352772	Lab File ID: 25A120516.asc
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 50 mL
Analysis Date: 12/05/2016 2249		Final Weight/Volume: 50 mL
Prep Date: 11/29/2016 0726		
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Calcium, Dissolved	97	101	48 - 153	1	20	4	4
Iron, Dissolved	91	91	52 - 155	0	20		
Potassium, Dissolved	106	108	76 - 132	1	20		
Sodium, Dissolved	186	228	70 - 203	1	20	4	4

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-352772**

**Method: 6010B
Preparation: 3005A
Dissolved**

MS Lab Sample ID: 280-91149-A-2-B MS	Units: mg/L
Client Matrix: Water	
Dilution: 1.0	
Analysis Date: 12/05/2016 2246	
Prep Date: 11/29/2016 0726	
Leach Date: N/A	

MSD Lab Sample ID: 280-91149-A-2-C MSD
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/05/2016 2249
Prep Date: 11/29/2016 0726
Leach Date: N/A

Analyte	Sample	MS Spike	MSD Spike	MS	MSD
	Result/Qual	Amount	Amount	Result/Qual	Result/Qual
Calcium, Dissolved	310	50.0	50.0	360 4	362 4
Iron, Dissolved	ND	1.00	1.00	0.909	0.909
Potassium, Dissolved	11	50.0	50.0	63.8	64.4
Sodium, Dissolved	2200	50.0	50.0	2270 4	2290 4

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

Method Blank - Batch: 280-352775

Lab Sample ID: MB 280-352775/1-A
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/04/2016 1904
 Prep Date: 11/28/2016 1441
 Leach Date: N/A

Analysis Batch: 280-354204
 Prep Batch: 280-352775
 Leach Batch: N/A
 Units: mg/L

**Method: 6010B
 Preparation: 3005A
 Total Recoverable**

Instrument ID: MT_025
 Lab File ID: 25B120416.asc
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL	RL
Cobalt, Total	ND		0.0030	0.0030
Iron, Total	ND		0.060	0.060

Lab Control Sample - Batch: 280-352775

Lab Sample ID: LCS 280-352775/2-A
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/04/2016 1906
 Prep Date: 11/28/2016 1441
 Leach Date: N/A

Analysis Batch: 280-354204
 Prep Batch: 280-352775
 Leach Batch: N/A
 Units: mg/L

**Method: 6010B
 Preparation: 3005A
 Total Recoverable**

Instrument ID: MT_025
 Lab File ID: 25B120416.asc
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Cobalt, Total	0.500	0.514	103	89 - 111	
Iron, Total	1.00	0.980	98	89 - 115	

**Matrix Spike/
 Matrix Spike Duplicate Recovery Report - Batch: 280-352775**

MS Lab Sample ID: 280-91099-D-1-B MS
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/04/2016 1914
 Prep Date: 11/28/2016 1441
 Leach Date: N/A

Analysis Batch: 280-354204
 Prep Batch: 280-352775
 Leach Batch: N/A

**Method: 6010B
 Preparation: 3005A
 Total Recoverable**

Instrument ID: MT_025
 Lab File ID: 25B120416.asc
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

MSD Lab Sample ID: 280-91099-D-1-C MSD
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/04/2016 1916
 Prep Date: 11/28/2016 1441
 Leach Date: N/A

Analysis Batch: 280-354204
 Prep Batch: 280-352775
 Leach Batch: N/A

Instrument ID: MT_025
 Lab File ID: 25B120416.asc
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Cobalt, Total	103	94	82 - 119	9	20		
Iron, Total	99	91	52 - 155	7	20		

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-352775**

**Method: 6010B
Preparation: 3005A
Total Recoverable**

MS Lab Sample ID: 280-91099-D-1-B MS Units: mg/L
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/04/2016 1914
 Prep Date: 11/28/2016 1441
 Leach Date: N/A

MSD Lab Sample ID: 280-91099-D-1-C MSD
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/04/2016 1916
 Prep Date: 11/28/2016 1441
 Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Cobalt, Total	ND	0.500	0.500	0.515	0.470
Iron, Total	0.27	1.00	1.00	1.27	1.18

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

Method Blank - Batch: 280-352489

Lab Sample ID: MB 280-352489/1-A
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/23/2016 2315
 Prep Date: 11/23/2016 1445
 Leach Date: N/A

Analysis Batch: 280-353028
 Prep Batch: 280-352489
 Leach Batch: N/A
 Units: mg/L

Method: 6020 Preparation: 3005A Total Recoverable

Instrument ID: MT_077
 Lab File ID: 175_BLK.d
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL	RL
Manganese, Dissolved	ND		0.0010	0.0010

Lab Control Sample - Batch: 280-352489

Lab Sample ID: LCS 280-352489/2-A
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/23/2016 2319
 Prep Date: 11/23/2016 1445
 Leach Date: N/A

Analysis Batch: 280-353028
 Prep Batch: 280-352489
 Leach Batch: N/A
 Units: mg/L

Method: 6020 Preparation: 3005A Total Recoverable

Instrument ID: MT_077
 Lab File ID: 176_LCS.d
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Manganese, Dissolved	0.0400	0.0402	101	85 - 117	

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 280-352489

MS Lab Sample ID: 280-91030-D-2-B MS
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/23/2016 2334
 Prep Date: 11/23/2016 1445
 Leach Date: N/A

Analysis Batch: 280-353028
 Prep Batch: 280-352489
 Leach Batch: N/A

Method: 6020 Preparation: 3005A Dissolved

Instrument ID: MT_077
 Lab File ID: 180SMPL.d
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

MSD Lab Sample ID: 280-91030-D-2-C MSD
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/23/2016 2338
 Prep Date: 11/23/2016 1445
 Leach Date: N/A

Analysis Batch: 280-353028
 Prep Batch: 280-352489
 Leach Batch: N/A

Instrument ID: MT_077
 Lab File ID: 181SMPL.d
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Manganese, Dissolved	307	388	85 - 117	1	20	4	4

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-352489**

**Method: 6020
Preparation: 3005A
Dissolved**

MS Lab Sample ID: 280-91030-D-2-B MS Units: mg/L
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/23/2016 2334
 Prep Date: 11/23/2016 1445
 Leach Date: N/A

MSD Lab Sample ID: 280-91030-D-2-C MSD
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/23/2016 2338
 Prep Date: 11/23/2016 1445
 Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Manganese, Dissolved	2.7	0.0400	0.0400	2.84 4	2.88 4

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

Method Blank - Batch: 280-352777

Lab Sample ID: MB 280-352777/1-A
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/29/2016 0617
 Prep Date: 11/28/2016 1441
 Leach Date: N/A

Analysis Batch: 280-353513
 Prep Batch: 280-352777
 Leach Batch: N/A
 Units: mg/L

**Method: 6020
 Preparation: 3005A
 Total Recoverable**

Instrument ID: MT_078
 Lab File ID: 250_BLK.d
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL	RL
Antimony, Total	ND		0.0010	0.0010
Barium, Total	ND		0.0010	0.0010
Beryllium, Total	ND		0.0010	0.0010
Cadmium, Total	ND		0.00020	0.00020
Chromium, Total	ND		0.0030	0.0030
Copper, Total	ND		0.0020	0.0020
Lead, Total	ND		0.0010	0.0010
Manganese, Total	ND		0.0010	0.0010
Nickel, Total	ND		0.0040	0.0040
Selenium, Total	ND		0.0010	0.0010
Silver, Total	ND		0.0020	0.0020
Thallium, Total	ND		0.0010	0.0010
Vanadium, Total	ND		0.0020	0.0020
Zinc, Total	ND		0.0050	0.0050

Lab Control Sample - Batch: 280-352777

Lab Sample ID: LCS 280-352777/2-A
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/29/2016 0620
 Prep Date: 11/28/2016 1441
 Leach Date: N/A

Analysis Batch: 280-353513
 Prep Batch: 280-352777
 Leach Batch: N/A
 Units: mg/L

**Method: 6020
 Preparation: 3005A
 Total Recoverable**

Instrument ID: MT_078
 Lab File ID: 251_LCS.d
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Antimony, Total	0.0400	0.0388	97	85 - 115	
Barium, Total	0.0400	0.0383	96	85 - 118	
Beryllium, Total	0.0400	0.0381	95	80 - 125	
Cadmium, Total	0.0400	0.0397	99	85 - 115	
Chromium, Total	0.0400	0.0391	98	84 - 121	
Copper, Total	0.0400	0.0391	98	85 - 119	
Lead, Total	0.0400	0.0393	98	85 - 118	
Manganese, Total	0.0400	0.0394	98	85 - 117	
Nickel, Total	0.0400	0.0400	100	85 - 119	
Selenium, Total	0.0400	0.0382	95	77 - 122	
Silver, Total	0.0400	0.0400	100	85 - 115	
Thallium, Total	0.0400	0.0387	97	85 - 118	
Vanadium, Total	0.0400	0.0392	98	85 - 120	
Zinc, Total	0.0400	0.0419	105	83 - 122	

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-352777**

**Method: 6020
Preparation: 3005A
Total Recoverable**

MS Lab Sample ID: 280-91049-1
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/29/2016 0710
Prep Date: 11/28/2016 1441
Leach Date: N/A

Analysis Batch: 280-353513
Prep Batch: 280-352777
Leach Batch: N/A

Instrument ID: MT_078
Lab File ID: 264SMPL.d
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

MSD Lab Sample ID: 280-91049-1
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/29/2016 0714
Prep Date: 11/28/2016 1441
Leach Date: N/A

Analysis Batch: 280-353513
Prep Batch: 280-352777
Leach Batch: N/A

Instrument ID: MT_078
Lab File ID: 265SMPL.d
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Antimony, Total	94	96	85 - 115	2	20		
Barium, Total	91	95	85 - 118	4	20		
Beryllium, Total	96	99	80 - 125	4	20		
Cadmium, Total	93	95	85 - 115	2	20		
Chromium, Total	101	102	84 - 121	0	20		
Copper, Total	95	97	85 - 119	2	20		
Lead, Total	95	96	85 - 118	1	20		
Manganese, Total	98	99	85 - 117	1	20		
Nickel, Total	95	96	85 - 119	1	20		
Silver, Total	94	96	85 - 115	2	20		
Thallium, Total	94	96	85 - 118	3	20		
Vanadium, Total	98	96	85 - 120	1	20		
Zinc, Total	95	98	83 - 122	3	20		

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-352777**

**Method: 6020
Preparation: 3005A
Total Recoverable**

MS Lab Sample ID: 280-91049-1
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/29/2016 1752
Prep Date: 11/28/2016 1441
Leach Date: N/A

Analysis Batch: 280-353693
Prep Batch: 280-352777
Leach Batch: N/A

Instrument ID: MT_078
Lab File ID: 049SMPL.d
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

MSD Lab Sample ID: 280-91049-1
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/29/2016 1756
Prep Date: 11/28/2016 1441
Leach Date: N/A

Analysis Batch: 280-353693
Prep Batch: 280-352777
Leach Batch: N/A

Instrument ID: MT_078
Lab File ID: 050SMPL.d
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Selenium, Total	94	97	77 - 122	3	20		

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-352777**

**Method: 6020
Preparation: 3005A
Total Recoverable**

MS Lab Sample ID: 280-91049-1 Units: mg/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/29/2016 0710
Prep Date: 11/28/2016 1441
Leach Date: N/A

MSD Lab Sample ID: 280-91049-1
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/29/2016 0714
Prep Date: 11/28/2016 1441
Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Antimony, Total	ND	0.0400	0.0400	0.0377	0.0386
Barium, Total	0.0027	0.0400	0.0400	0.0392	0.0406
Beryllium, Total	ND	0.0400	0.0400	0.0383	0.0398
Cadmium, Total	ND	0.0400	0.0400	0.0373	0.0381
Chromium, Total	ND	0.0400	0.0400	0.0406	0.0407
Copper, Total	ND	0.0400	0.0400	0.0379	0.0387
Lead, Total	ND	0.0400	0.0400	0.0379	0.0383
Manganese, Total	ND	0.0400	0.0400	0.0391	0.0397
Nickel, Total	ND	0.0400	0.0400	0.0380	0.0384
Silver, Total	ND	0.0400	0.0400	0.0378	0.0386
Thallium, Total	ND	0.0400	0.0400	0.0375	0.0385
Vanadium, Total	0.0043	0.0400	0.0400	0.0434	0.0428
Zinc, Total	ND	0.0400	0.0400	0.0380	0.0393

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-352777**

**Method: 6020
Preparation: 3005A
Total Recoverable**

MS Lab Sample ID: 280-91049-1 Units: mg/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/29/2016 1752
Prep Date: 11/28/2016 1441
Leach Date: N/A

MSD Lab Sample ID: 280-91049-1
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/29/2016 1756
Prep Date: 11/28/2016 1441
Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Selenium, Total	ND	0.0400	0.0400	0.0377	0.0389

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

Method Blank - Batch: 280-354220

Method: 300.0
Preparation: N/A

Lab Sample ID: MB 280-354220/6	Analysis Batch: 280-354220	Instrument ID: WC_IonChrom10
Client Matrix: Water	Prep Batch: N/A	Lab File ID: Info 2_DENPC179_Anic
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 12/05/2016 1105	Units: mg/L	Final Weight/Volume: 5 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	Result	Qual	RL	RL
Chloride	ND		1.0	1.0
Sulfate	ND		1.0	1.0

Method Reporting Limit Check - Batch: 280-354220

Method: 300.0
Preparation: N/A

Lab Sample ID: MRL 280-354220/3	Analysis Batch: 280-354220	Instrument ID: WC_IonChrom10
Client Matrix: Water	Prep Batch: N/A	Lab File ID: Info 2_DENPC179_Anic
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 12/05/2016 1019	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	95	50 - 150	
Sulfate	2.50	ND	94	50 - 150	

Lab Control Sample/

Method: 300.0
Preparation: N/A

Lab Control Sample Duplicate Recovery Report - Batch: 280-354220

LCS Lab Sample ID: LCS 280-354220/4	Analysis Batch: 280-354220	Instrument ID: WC_IonChrom10
Client Matrix: Water	Prep Batch: N/A	Lab File ID: Info 2_DENPC179_Anic
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 12/05/2016 1034	Units: mg/L	Final Weight/Volume: 5 mL
Prep Date: N/A		5 uL
Leach Date: N/A		

LCSD Lab Sample ID: LCSD 280-354220/5	Analysis Batch: 280-354220	Instrument ID: WC_IonChrom10
Client Matrix: Water	Prep Batch: N/A	Lab File ID: Info 2_DENPC179_Anic
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 12/05/2016 1050	Units: mg/L	Final Weight/Volume: 5 mL
Prep Date: N/A		5 uL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Chloride	103	103	90 - 110	0	10		
Sulfate	102	102	90 - 110	0	10		

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

**Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-354220**

**Method: 300.0
Preparation: N/A**

LCS Lab Sample ID: LCS 280-354220/4 Units: mg/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/05/2016 1034
Prep Date: N/A
Leach Date: N/A

LCSD Lab Sample ID: LCSD 280-354220/5
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/05/2016 1050
Prep Date: N/A
Leach Date: N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Chloride	100	100	103	103
Sulfate	100	100	102	102

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-354220**

**Method: 300.0
Preparation: N/A**

MS Lab Sample ID: 280-91049-1
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/05/2016 2249
Prep Date: N/A
Leach Date: N/A

Analysis Batch: 280-354220
Prep Batch: N/A
Leach Batch: N/A

Instrument ID: WC_IonChrom10
Lab File ID: Info_2_DENPC179_Anic
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL
5 uL

MSD Lab Sample ID: 280-91049-1
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/05/2016 2305
Prep Date: N/A
Leach Date: N/A

Analysis Batch: 280-354220
Prep Batch: N/A
Leach Batch: N/A

Instrument ID: WC_IonChrom10
Lab File ID: Info_2_DENPC179_Anic
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL
5 uL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Chloride	104	105	80 - 120	1	20		
Sulfate	100	100	80 - 120	1	20		

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-354220**

**Method: 300.0
Preparation: N/A**

MS Lab Sample ID: 280-91049-6
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/06/2016 0124
Prep Date: N/A
Leach Date: N/A

Analysis Batch: 280-354220
Prep Batch: N/A
Leach Batch: N/A

Instrument ID: WC_IonChrom10
Lab File ID: Info_2_DENPC179_Anic
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL
5 uL

MSD Lab Sample ID: 280-91049-6
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/06/2016 0139
Prep Date: N/A
Leach Date: N/A

Analysis Batch: 280-354220
Prep Batch: N/A
Leach Batch: N/A

Instrument ID: WC_IonChrom10
Lab File ID: Info_2_DENPC179_Anic
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL
5 uL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Chloride	107	109	80 - 120	1	20		
Sulfate	104	105	80 - 120	1	20		

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-354220**

**Method: 300.0
Preparation: N/A**

MS Lab Sample ID: 280-91049-1 Units: mg/L
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/05/2016 2249
 Prep Date: N/A
 Leach Date: N/A

MSD Lab Sample ID: 280-91049-1
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/05/2016 2305
 Prep 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	27.8	28.0
Sulfate	2.2	25.0	25.0	27.1	27.3

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-354220**

**Method: 300.0
Preparation: N/A**

MS Lab Sample ID: 280-91049-6 Units: mg/L
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/06/2016 0124
 Prep Date: N/A
 Leach Date: N/A

MSD Lab Sample ID: 280-91049-6
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/06/2016 0139
 Prep Date: N/A
 Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Chloride	14	25.0	25.0	40.5	40.9
Sulfate	6.0	25.0	25.0	31.9	32.3

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

Duplicate - Batch: 280-354220

Method: 300.0
Preparation: N/A

Lab Sample ID:	280-91049-1	Analysis Batch:	280-354220	Instrument ID:	WC_IonChrom10
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	Info 2_DENPC179_Anic
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	12/05/2016 2234	Units:	mg/L	Final Weight/Volume:	5 mL
Prep Date:	N/A				5 uL
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Chloride	1.8	1.78	0.05	15	
Sulfate	2.2	2.19	0.7	15	

Duplicate - Batch: 280-354220

Method: 300.0
Preparation: N/A

Lab Sample ID:	280-91049-6	Analysis Batch:	280-354220	Instrument ID:	WC_IonChrom10
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	Info 2_DENPC179_Anic
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	12/06/2016 0037	Units:	mg/L	Final Weight/Volume:	5 mL
Prep Date:	N/A				5 uL
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Chloride	14	13.6	0	15	
Sulfate	6.0	5.92	0.6	15	

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

Method Blank - Batch: 280-352943

**Method: 350.1
Preparation: N/A**

Lab Sample ID: MB 280-352943/61	Analysis Batch: 280-352943	Instrument ID: WC_Alp 3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: C:\FLOW_4\112316.RS
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 11/23/2016 1610	Units: mg/L	Final Weight/Volume:
Prep Date: N/A		
Leach Date: N/A		

Analyte	Result	Qual	RL	RL
Ammonia (as N)	ND		0.030	0.030

**Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-352943**

**Method: 350.1
Preparation: N/A**

LCS Lab Sample ID: LCS 280-352943/59	Analysis Batch: 280-352943	Instrument ID: WC_Alp 3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: C:\FLOW_4\112316.RS
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 100 mL
Analysis Date: 11/23/2016 1606	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

LCSD Lab Sample ID: LCSD 280-352943/60	Analysis Batch: 280-352943	Instrument ID: WC_Alp 3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: C:\FLOW_4\112316.RS
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 100 mL
Analysis Date: 11/23/2016 1608	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Ammonia (as N)	100	97	90 - 110	2	10		

**Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-352943**

**Method: 350.1
Preparation: N/A**

LCS Lab Sample ID: LCS 280-352943/59	Units: mg/L	LCSD Lab Sample ID: LCSD 280-352943/60
Client Matrix: Water		Client Matrix: Water
Dilution: 1.0		Dilution: 1.0
Analysis Date: 11/23/2016 1606		Analysis Date: 11/23/2016 1608
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	2.49	2.43

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-352943**

**Method: 350.1
Preparation: N/A**

MS Lab Sample ID: 280-91049-5
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/23/2016 1708
 Prep Date: N/A
 Leach Date: N/A

Analysis Batch: 280-352943
 Prep Batch: N/A
 Leach Batch: N/A

Instrument ID: WC_Alp 3
 Lab File ID: C:\FLOW_4\112316.RS
 Initial Weight/Volume: 10 mL
 Final Weight/Volume: 10 mL

MSD Lab Sample ID: 280-91049-5
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/23/2016 1710
 Prep Date: N/A
 Leach Date: N/A

Analysis Batch: 280-352943
 Prep Batch: N/A
 Leach Batch: N/A

Instrument ID: WC_Alp 3
 Lab File ID: C:\FLOW_4\112316.RS
 Initial Weight/Volume: 10 mL
 Final Weight/Volume: 10 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Ammonia (as N)	109	109	90 - 110	0	10		

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-352943**

**Method: 350.1
Preparation: N/A**

MS Lab Sample ID: 280-91049-5
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/23/2016 1708
 Prep Date: N/A
 Leach Date: N/A

Units: mg/L

MSD Lab Sample ID: 280-91049-5
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/23/2016 1710
 Prep 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	1.09	1.09

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

Method Blank - Batch: 280-354397

Method: 353.2
Preparation: N/A

Lab Sample ID:	MB 280-354397/1	Analysis Batch:	280-354397	Instrument ID:	No Equipment Assigned
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	12/06/2016 0931	Units:	mg/L	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	RL	RL
Nitrate as N	ND		0.050	0.050

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

Method Blank - Batch: 280-352384

Method: SM 2320B

Preparation: N/A

Lab Sample ID: MB 280-352384/5
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/20/2016 1340
Prep Date: N/A
Leach Date: N/A

Analysis Batch: 280-352384
Prep Batch: N/A
Leach Batch: N/A
Units: mg/L

Instrument ID: WC_AT2
Lab File ID: 112016 alk.TXT
Initial Weight/Volume:
Final Weight/Volume:

Analyte	Result	Qual	RL	RL
Alkalinity, Total (As CaCO ₃)	ND		5.0	5.0
Alkalinity, Bicarbonate (As CaCO ₃)	ND		5.0	5.0

Method Blank - Batch: 280-352384

Method: SM 2320B

Preparation: N/A

Lab Sample ID: MB 280-352384/31
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/20/2016 1605
Prep Date: N/A
Leach Date: N/A

Analysis Batch: 280-352384
Prep Batch: N/A
Leach Batch: N/A
Units: mg/L

Instrument ID: WC_AT2
Lab File ID: 112016 alk.TXT
Initial Weight/Volume:
Final Weight/Volume:

Analyte	Result	Qual	RL	RL
Alkalinity, Total (As CaCO ₃)	ND		5.0	5.0
Alkalinity, Bicarbonate (As CaCO ₃)	ND		5.0	5.0

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

Lab Control Sample - Batch: 280-352384

Method: SM 2320B

Preparation: N/A

Lab Sample ID: LCS 280-352384/4	Analysis Batch: 280-352384	Instrument ID: WC_AT2
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 112016 alk.TXT
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 11/20/2016 1334	Units: mg/L	Final Weight/Volume:
Prep Date: N/A		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Alkalinity, Total (As CaCO3)	200	202	101	90 - 110	

Lab Control Sample - Batch: 280-352384

Method: SM 2320B

Preparation: N/A

Lab Sample ID: LCS 280-352384/30	Analysis Batch: 280-352384	Instrument ID: WC_AT2
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 112016 alk.TXT
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 11/20/2016 1559	Units: mg/L	Final Weight/Volume:
Prep Date: N/A		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Alkalinity, Total (As CaCO3)	200	195	98	90 - 110	

Duplicate - Batch: 280-352384

Method: SM 2320B

Preparation: N/A

Lab Sample ID: 280-91099-A-3 DU	Analysis Batch: 280-352384	Instrument ID: WC_AT2
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 112016 alk.TXT
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 11/20/2016 1351	Units: mg/L	Final Weight/Volume:
Prep Date: N/A		
Leach Date: N/A		

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Alkalinity, Total (As CaCO3)	280	280	0.2	10	

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

Method Blank - Batch: 280-352501

Method: SM 2540C
Preparation: N/A

Lab Sample ID: MB 280-352501/1	Analysis Batch: 280-352501	Instrument ID: No Equipment Assigned
Client Matrix: Water	Prep Batch: N/A	Lab File ID: N/A
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 100 mL
Analysis Date: 11/21/2016 1702	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	Result	Qual	RL	RL
Total Dissolved Solids (TDS)	ND		5.0	5.0

Lab Control Sample - Batch: 280-352501

Method: SM 2540C
Preparation: N/A

Lab Sample ID: LCS 280-352501/2	Analysis Batch: 280-352501	Instrument ID: No Equipment Assigned
Client Matrix: Water	Prep Batch: N/A	Lab File ID: N/A
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 100 mL
Analysis Date: 11/21/2016 1702	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Total Dissolved Solids (TDS)	500	496	99	86 - 110	

Duplicate - Batch: 280-352501

Method: SM 2540C
Preparation: N/A

Lab Sample ID: 280-91049-6	Analysis Batch: 280-352501	Instrument ID: No Equipment Assigned
Client Matrix: Water	Prep Batch: N/A	Lab File ID: N/A
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 100 mL
Analysis Date: 11/21/2016 1702	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Total Dissolved Solids (TDS)	140	132	4	10	

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

Method Blank - Batch: 280-352718

Method: SM 2540D
Preparation: N/A

Lab Sample ID: MB 280-352718/2	Analysis Batch: 280-352718	Instrument ID: No Equipment Assigned
Client Matrix: Water	Prep Batch: N/A	Lab File ID: N/A
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 250 mL
Analysis Date: 11/22/2016 1639	Units: mg/L	Final Weight/Volume: 250 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	Result	Qual	RL	RL
Total Suspended Solids	ND		4.0	4.0

Lab Control Sample - Batch: 280-352718

Method: SM 2540D
Preparation: N/A

Lab Sample ID: LCS 280-352718/1	Analysis Batch: 280-352718	Instrument ID: No Equipment Assigned
Client Matrix: Water	Prep Batch: N/A	Lab File ID: N/A
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 250 mL
Analysis Date: 11/22/2016 1639	Units: mg/L	Final Weight/Volume: 250 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Total Suspended Solids	100	93.6	94	86 - 114	

Duplicate - Batch: 280-352718

Method: SM 2540D
Preparation: N/A

Lab Sample ID: 280-91074-A-2 DU	Analysis Batch: 280-352718	Instrument ID: No Equipment Assigned
Client Matrix: Water	Prep Batch: N/A	Lab File ID: N/A
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 250 mL
Analysis Date: 11/22/2016 1639	Units: mg/L	Final Weight/Volume: 250 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Total Suspended Solids	35	33.6	5	10	

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

Method Blank - Batch: 280-353712

Method: SM 5310B

Preparation: N/A

Lab Sample ID: MB 280-353712/5	Analysis Batch: 280-353712	Instrument ID: WC_SHI3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 112916.txt
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 11/29/2016 1831	Units: mg/L	Final Weight/Volume:
Prep Date: N/A		
Leach Date: N/A		

Analyte	Result	Qual	RL	RL
Total Organic Carbon - Average	ND		1.0	1.0

Lab Control Sample/

Method: SM 5310B

Lab Control Sample Duplicate Recovery Report - Batch: 280-353712

Preparation: N/A

LCS Lab Sample ID: LCS 280-353712/3	Analysis Batch: 280-353712	Instrument ID: WC_SHI3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 112916.txt
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 11/29/2016 1759	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

LCSD Lab Sample ID: LCSD 280-353712/4	Analysis Batch: 280-353712	Instrument ID: WC_SHI3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 112916.txt
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 11/29/2016 1814	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Total Organic Carbon - Average	98	98	88 - 112	0	15		

Laboratory Control/

Method: SM 5310B

Laboratory Duplicate Data Report - Batch: 280-353712

Preparation: N/A

LCS Lab Sample ID: LCS 280-353712/3	Units: mg/L	LCSD Lab Sample ID: LCSD 280-353712/4
Client Matrix: Water		Client Matrix: Water
Dilution: 1.0		Dilution: 1.0
Analysis Date: 11/29/2016 1759		Analysis Date: 11/29/2016 1814
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
Total Organic Carbon - Average	25.0	25.0	24.6	24.5

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-353712**

**Method: SM 5310B
Preparation: N/A**

MS Lab Sample ID: 280-90915-B-2 MS	Analysis Batch: 280-353712	Instrument ID: WC_SHI3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 112916.txt
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 11/29/2016 1919		Final Weight/Volume: 50 mL
Prep Date: N/A		
Leach Date: N/A		

MSD Lab Sample ID: 280-90915-B-2 MSD	Analysis Batch: 280-353712	Instrument ID: WC_SHI3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 112916.txt
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 11/29/2016 1934		Final Weight/Volume: 50 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Total Organic Carbon - Average	101	101	88 - 112	1	15		

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-353712**

**Method: SM 5310B
Preparation: N/A**

MS Lab Sample ID: 280-90915-B-2 MS	Units: mg/L	MSD Lab Sample ID: 280-90915-B-2 MSD
Client Matrix: Water		Client Matrix: Water
Dilution: 1.0		Dilution: 1.0
Analysis Date: 11/29/2016 1919		Analysis Date: 11/29/2016 1934
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	ND	25.0	25.0	25.4	25.2

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

Method Blank - Batch: 280-354209

Method: SM 5310B

Preparation: N/A

Lab Sample ID: MB 280-354209/4	Analysis Batch: 280-354209	Instrument ID: WC_SHI3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 120216.txt
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 12/02/2016 1512	Units: mg/L	Final Weight/Volume:
Prep Date: N/A		
Leach Date: N/A		

Analyte	Result	Qual	RL	RL
Total Organic Carbon - Average	ND		1.0	1.0

Lab Control Sample - Batch: 280-354209

Method: SM 5310B

Preparation: N/A

Lab Sample ID: LCS 280-354209/3	Analysis Batch: 280-354209	Instrument ID: WC_SHI3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 120216.txt
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 12/02/2016 1458	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	24.4	98	88 - 112	

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-354209**

Method: SM 5310B

Preparation: N/A

MS Lab Sample ID: 280-91049-3	Analysis Batch: 280-354209	Instrument ID: WC_SHI3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 120216.txt
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 12/02/2016 1558		Final Weight/Volume: 50 mL
Prep Date: N/A		
Leach Date: N/A		

MSD Lab Sample ID: 280-91049-3	Analysis Batch: 280-354209	Instrument ID: WC_SHI3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 120216.txt
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 12/02/2016 1613		Final Weight/Volume: 50 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Total Organic Carbon - Average	102	102	88 - 112	0	15		

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-354209**

**Method: SM 5310B
Preparation: N/A**

MS Lab Sample ID: 280-91049-3 Units: mg/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/02/2016 1558
Prep Date: N/A
Leach Date: N/A

MSD Lab Sample ID: 280-91049-3
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/02/2016 1613
Prep 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	ND	25.0	25.0	25.5	25.5

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

Laboratory Chronicle

Lab ID: 280-91049-1

Client ID: MW-35

Sample Date/Time: 11/15/2016 09:50 Received Date/Time: 11/16/2016 10:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	280-91049-F-1		480-333378		11/23/2016 23:06	1	TAL BUF	NMD1
A:8260C	280-91049-F-1		480-333378		11/23/2016 23:06	1	TAL BUF	NMD1
P:5030C	280-91049-K-1		480-332322		11/18/2016 00:36	1	TAL BUF	NMD1
A:8260C SIM	280-91049-K-1		480-332322		11/18/2016 00:36	1	TAL BUF	NMD1
P:3005A	280-91049-E-1-B		280-354165	280-352772	11/29/2016 07:26	1	TAL DEN	TEB
A:6010B	280-91049-E-1-B		280-354165	280-352772	12/03/2016 23:23	1	TAL DEN	LLB
P:3005A	280-91049-D-1-A		280-354204	280-352775	11/28/2016 14:41	1	TAL DEN	SEJ
A:6010B	280-91049-D-1-A		280-354204	280-352775	12/04/2016 19:46	1	TAL DEN	CRR
P:3005A	280-91049-E-1-B		280-354385	280-352772	11/29/2016 07:26	1	TAL DEN	TEB
A:6010B	280-91049-E-1-B		280-354385	280-352772	12/05/2016 23:15	1	TAL DEN	CRR
P:3005A	280-91049-E-1-A		280-353028	280-352489	11/23/2016 14:45	1	TAL DEN	SEJ
A:6020	280-91049-E-1-A		280-353028	280-352489	11/24/2016 00:46	1	TAL DEN	LMT
P:3005A	280-91049-D-1-B		280-353513	280-352777	11/28/2016 14:41	1	TAL DEN	SEJ
A:6020	280-91049-D-1-B		280-353513	280-352777	11/29/2016 07:02	1	TAL DEN	JM
P:3005A	280-91049-D-1-B		280-353693	280-352777	11/28/2016 14:41	1	TAL DEN	SEJ
A:6020	280-91049-D-1-B		280-353693	280-352777	11/29/2016 17:44	1	TAL DEN	JM
A:300.0	280-91049-A-1		280-354220		12/05/2016 22:18	1	TAL DEN	AFB
A:350.1	280-91049-C-1		280-352943		11/23/2016 16:44	1	TAL DEN	MAS
A:353.2	280-91049-A-1		280-354397		12/06/2016 09:31	1	TAL DEN	AJA
A:SM 2320B	280-91049-A-1		280-352384		11/20/2016 16:18	1	TAL DEN	MMC
A:SM 2540C	280-91049-A-1		280-352501		11/21/2016 17:02	1	TAL DEN	SVC
A:SM 2540D	280-91049-B-1		280-352718		11/22/2016 16:39	1	TAL DEN	SVC
A:SM 5310B	280-91049-C-1		280-353712		11/29/2016 22:39	1	TAL DEN	CCJ
A:Field Sampling	280-91049-A-1		280-352756		11/15/2016 10:50	1	TAL DEN	C1K

Lab ID: 280-91049-1 MS

Client ID: MW-35

Sample Date/Time: 11/15/2016 09:50 Received Date/Time: 11/16/2016 10:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3005A	280-91049-D-1-C MS		280-353513	280-352777	11/28/2016 14:41	1	TAL DEN	SEJ
A:6020	280-91049-D-1-C MS		280-353513	280-352777	11/29/2016 07:10	1	TAL DEN	JM
P:3005A	280-91049-D-1-C MS		280-353693	280-352777	11/28/2016 14:41	1	TAL DEN	SEJ
A:6020	280-91049-D-1-C MS		280-353693	280-352777	11/29/2016 17:52	1	TAL DEN	JM
A:300.0	280-91049-A-1 MS		280-354220		12/05/2016 22:49	1	TAL DEN	AFB

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

Laboratory Chronicle

Lab ID: 280-91049-1 MSD

Client ID: MW-35

Sample Date/Time: 11/15/2016 09:50 Received Date/Time: 11/16/2016 10:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3005A	280-91049-D-1-D MSD		280-353513	280-352777	11/28/2016 14:41	1	TAL DEN	SEJ
A:6020	280-91049-D-1-D MSD		280-353513	280-352777	11/29/2016 07:14	1	TAL DEN	JM
P:3005A	280-91049-D-1-D MSD		280-353693	280-352777	11/28/2016 14:41	1	TAL DEN	SEJ
A:6020	280-91049-D-1-D MSD		280-353693	280-352777	11/29/2016 17:56	1	TAL DEN	JM
A:300.0	280-91049-A-1 MSD		280-354220		12/05/2016 23:05	1	TAL DEN	AFB

Lab ID: 280-91049-1 DU

Client ID: MW-35

Sample Date/Time: 11/15/2016 09:50 Received Date/Time: 11/16/2016 10:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:300.0	280-91049-A-1 DU		280-354220		12/05/2016 22:34	1	TAL DEN	AFB

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

Laboratory Chronicle

Lab ID: 280-91049-2

Client ID: MW-34C

Sample Date/Time: 11/15/2016 11:15 Received Date/Time: 11/16/2016 10:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	280-91049-F-2		480-333552		11/26/2016 11:59	1	TAL BUF	NEA
A:8260C	280-91049-F-2		480-333552		11/26/2016 11:59	1	TAL BUF	NEA
P:5030C	280-91049-K-2		480-332322		11/18/2016 01:00	1	TAL BUF	NMD1
A:8260C SIM	280-91049-K-2		480-332322		11/18/2016 01:00	1	TAL BUF	NMD1
P:3005A	280-91049-E-2-B		280-354165	280-352772	11/29/2016 07:26	1	TAL DEN	TEB
A:6010B	280-91049-E-2-B		280-354165	280-352772	12/03/2016 23:26	1	TAL DEN	LLB
P:3005A	280-91049-D-2-A		280-354204	280-352775	11/28/2016 14:41	1	TAL DEN	SEJ
A:6010B	280-91049-D-2-A		280-354204	280-352775	12/04/2016 19:49	1	TAL DEN	CRR
P:3005A	280-91049-E-2-B ^5		280-354577	280-352772	11/29/2016 07:26	5	TAL DEN	TEB
A:6010B	280-91049-E-2-B ^5		280-354577	280-352772	12/06/2016 17:06	5	TAL DEN	CML
P:3005A	280-91049-E-2-A		280-353028	280-352489	11/23/2016 14:45	1	TAL DEN	SEJ
A:6020	280-91049-E-2-A		280-353028	280-352489	11/24/2016 00:50	1	TAL DEN	LMT
P:3005A	280-91049-D-2-B		280-353513	280-352777	11/28/2016 14:41	1	TAL DEN	SEJ
A:6020	280-91049-D-2-B		280-353513	280-352777	11/29/2016 07:21	1	TAL DEN	JM
P:3005A	280-91049-D-2-B		280-353693	280-352777	11/28/2016 14:41	1	TAL DEN	SEJ
A:6020	280-91049-D-2-B		280-353693	280-352777	11/29/2016 18:03	1	TAL DEN	JM
A:300.0	280-91049-A-2		280-354220		12/05/2016 23:20	1	TAL DEN	AFB
A:350.1	280-91049-C-2		280-352943		11/23/2016 16:46	1	TAL DEN	MAS
A:353.2	280-91049-A-2		280-354397		12/06/2016 09:31	1	TAL DEN	AJA
A:SM 2320B	280-91049-A-2		280-352384		11/20/2016 16:23	1	TAL DEN	MMC
A:SM 2540C	280-91049-A-2		280-352501		11/21/2016 17:02	1	TAL DEN	SVC
A:SM 2540D	280-91049-B-2		280-352718		11/22/2016 16:39	1	TAL DEN	SVC
A:SM 5310B	280-91049-C-2		280-353712		11/29/2016 22:56	1	TAL DEN	CCJ
A:Field Sampling	280-91049-A-2		280-352756		11/15/2016 12:15	1	TAL DEN	C1K

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

Laboratory Chronicle

Lab ID: 280-91049-3

Client ID: MW-34A

Sample Date/Time: 11/15/2016 12:00 Received Date/Time: 11/16/2016 10:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	280-91049-F-3		480-333552		11/26/2016 12:26	1	TAL BUF	NEA
A:8260C	280-91049-F-3		480-333552		11/26/2016 12:26	1	TAL BUF	NEA
P:5030C	280-91049-K-3		480-332322		11/18/2016 01:24	1	TAL BUF	NMD1
A:8260C SIM	280-91049-K-3		480-332322		11/18/2016 01:24	1	TAL BUF	NMD1
P:3005A	280-91049-E-3-B		280-354165	280-352772	11/29/2016 07:26	1	TAL DEN	TEB
A:6010B	280-91049-E-3-B		280-354165	280-352772	12/03/2016 23:28	1	TAL DEN	LLB
P:3005A	280-91049-D-3-A		280-354204	280-352775	11/28/2016 14:41	1	TAL DEN	SEJ
A:6010B	280-91049-D-3-A		280-354204	280-352775	12/04/2016 19:51	1	TAL DEN	CRR
P:3005A	280-91049-E-3-B		280-354385	280-352772	11/29/2016 07:26	1	TAL DEN	TEB
A:6010B	280-91049-E-3-B		280-354385	280-352772	12/05/2016 23:20	1	TAL DEN	CRR
P:3005A	280-91049-E-3-A		280-353028	280-352489	11/23/2016 14:45	1	TAL DEN	SEJ
A:6020	280-91049-E-3-A		280-353028	280-352489	11/24/2016 00:54	1	TAL DEN	LMT
P:3005A	280-91049-D-3-B		280-353513	280-352777	11/28/2016 14:41	1	TAL DEN	SEJ
A:6020	280-91049-D-3-B		280-353513	280-352777	11/29/2016 07:25	1	TAL DEN	JM
P:3005A	280-91049-D-3-B		280-353693	280-352777	11/28/2016 14:41	1	TAL DEN	SEJ
A:6020	280-91049-D-3-B		280-353693	280-352777	11/29/2016 18:07	1	TAL DEN	JM
A:300.0	280-91049-A-3		280-354220		12/05/2016 23:36	1	TAL DEN	AFB
A:350.1	280-91049-C-3		280-352943		11/23/2016 16:48	1	TAL DEN	MAS
A:353.2	280-91049-A-3		280-354397		12/06/2016 09:31	1	TAL DEN	AJA
A:SM 2320B	280-91049-A-3		280-352384		11/20/2016 16:28	1	TAL DEN	MMC
A:SM 2540C	280-91049-A-3		280-352501		11/21/2016 17:02	1	TAL DEN	SVC
A:SM 2540D	280-91049-B-3		280-352718		11/22/2016 16:39	1	TAL DEN	SVC
A:SM 5310B	280-91049-C-3		280-354209		12/02/2016 15:44	1	TAL DEN	CCJ
A:Field Sampling	280-91049-A-3		280-352756		11/15/2016 13:00	1	TAL DEN	C1K

Lab ID: 280-91049-3 MS

Client ID: MW-34A

Sample Date/Time: 11/15/2016 12:00 Received Date/Time: 11/16/2016 10:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:SM 5310B	280-91049-C-3 MS		280-354209		12/02/2016 15:58	1	TAL DEN	CCJ

Lab ID: 280-91049-3 MSD

Client ID: MW-34A

Sample Date/Time: 11/15/2016 12:00 Received Date/Time: 11/16/2016 10:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:SM 5310B	280-91049-C-3 MSD		280-354209		12/02/2016 16:13	1	TAL DEN	CCJ

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

Laboratory Chronicle

Lab ID: 280-91049-4

Client ID: MW-36A

Sample Date/Time: 11/15/2016 12:51 Received Date/Time: 11/16/2016 10:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	280-91049-F-4		480-333552		11/26/2016 12:53	1	TAL BUF	NEA
A:8260C	280-91049-F-4		480-333552		11/26/2016 12:53	1	TAL BUF	NEA
P:5030C	280-91049-K-4		480-332322		11/18/2016 01:49	1	TAL BUF	NMD1
A:8260C SIM	280-91049-K-4		480-332322		11/18/2016 01:49	1	TAL BUF	NMD1
P:3005A	280-91049-E-4-B		280-354165	280-352772	11/29/2016 07:26	1	TAL DEN	TEB
A:6010B	280-91049-E-4-B		280-354165	280-352772	12/03/2016 23:31	1	TAL DEN	LLB
P:3005A	280-91049-D-4-A		280-354204	280-352775	11/28/2016 14:41	1	TAL DEN	SEJ
A:6010B	280-91049-D-4-A		280-354204	280-352775	12/04/2016 19:54	1	TAL DEN	CRR
P:3005A	280-91049-E-4-B		280-354385	280-352772	11/29/2016 07:26	1	TAL DEN	TEB
A:6010B	280-91049-E-4-B		280-354385	280-352772	12/05/2016 23:23	1	TAL DEN	CRR
P:3005A	280-91049-E-4-B		280-354577	280-352772	11/29/2016 07:26	1	TAL DEN	TEB
A:6010B	280-91049-E-4-B		280-354577	280-352772	12/06/2016 17:09	1	TAL DEN	CML
P:3005A	280-91049-E-4-A		280-353028	280-352489	11/23/2016 14:45	1	TAL DEN	SEJ
A:6020	280-91049-E-4-A		280-353028	280-352489	11/24/2016 00:58	1	TAL DEN	LMT
P:3005A	280-91049-D-4-B		280-353513	280-352777	11/28/2016 14:41	1	TAL DEN	SEJ
A:6020	280-91049-D-4-B		280-353513	280-352777	11/29/2016 07:29	1	TAL DEN	JM
P:3005A	280-91049-D-4-B		280-353693	280-352777	11/28/2016 14:41	1	TAL DEN	SEJ
A:6020	280-91049-D-4-B		280-353693	280-352777	11/29/2016 18:11	1	TAL DEN	JM
A:300.0	280-91049-A-4		280-354220		12/05/2016 23:51	1	TAL DEN	AFB
A:350.1	280-91049-C-4		280-352943		11/23/2016 16:50	1	TAL DEN	MAS
A:353.2	280-91049-A-4		280-354397		12/06/2016 09:31	1	TAL DEN	AJA
A:SM 2320B	280-91049-A-4		280-352384		11/20/2016 16:33	1	TAL DEN	MMC
A:SM 2540C	280-91049-A-4		280-352501		11/21/2016 17:02	1	TAL DEN	SVC
A:SM 2540D	280-91049-B-4		280-352718		11/22/2016 16:39	1	TAL DEN	SVC
A:SM 5310B	280-91049-C-4		280-354209		12/02/2016 16:28	1	TAL DEN	CCJ
A:Field Sampling	280-91049-A-4		280-352756		11/15/2016 13:51	1	TAL DEN	C1K

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

Laboratory Chronicle

Lab ID: 280-91049-5

Client ID: MW-15R

Sample Date/Time: 11/15/2016 13:50 Received Date/Time: 11/16/2016 10:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	280-91049-F-5		480-333552		11/26/2016 13:21	1	TAL BUF	NEA
A:8260C	280-91049-F-5		480-333552		11/26/2016 13:21	1	TAL BUF	NEA
P:5030C	280-91049-K-5		480-332322		11/18/2016 02:13	1	TAL BUF	NMD1
A:8260C SIM	280-91049-K-5		480-332322		11/18/2016 02:13	1	TAL BUF	NMD1
P:3005A	280-91049-E-5-B		280-354165	280-352772	11/29/2016 07:26	1	TAL DEN	TEB
A:6010B	280-91049-E-5-B		280-354165	280-352772	12/03/2016 23:34	1	TAL DEN	LLB
P:3005A	280-91049-D-5-A		280-354204	280-352775	11/28/2016 14:41	1	TAL DEN	SEJ
A:6010B	280-91049-D-5-A		280-354204	280-352775	12/04/2016 19:56	1	TAL DEN	CRR
P:3005A	280-91049-E-5-B		280-354385	280-352772	11/29/2016 07:26	1	TAL DEN	TEB
A:6010B	280-91049-E-5-B		280-354385	280-352772	12/05/2016 23:25	1	TAL DEN	CRR
P:3005A	280-91049-E-5-A		280-353028	280-352489	11/23/2016 14:45	1	TAL DEN	SEJ
A:6020	280-91049-E-5-A		280-353028	280-352489	11/24/2016 01:01	1	TAL DEN	LMT
P:3005A	280-91049-D-5-B		280-353513	280-352777	11/28/2016 14:41	1	TAL DEN	SEJ
A:6020	280-91049-D-5-B		280-353513	280-352777	11/29/2016 07:33	1	TAL DEN	JM
P:3005A	280-91049-D-5-B		280-353693	280-352777	11/28/2016 14:41	1	TAL DEN	SEJ
A:6020	280-91049-D-5-B		280-353693	280-352777	11/29/2016 18:15	1	TAL DEN	JM
A:300.0	280-91049-A-5		280-354220		12/06/2016 00:07	1	TAL DEN	AFB
A:350.1	280-91049-C-5		280-352943		11/23/2016 17:06	1	TAL DEN	MAS
A:353.2	280-91049-A-5		280-354397		12/06/2016 09:31	1	TAL DEN	AJA
A:SM 2320B	280-91049-A-5		280-352384		11/20/2016 16:38	1	TAL DEN	MMC
A:SM 2540C	280-91049-A-5		280-352501		11/21/2016 17:02	1	TAL DEN	SVC
A:SM 2540D	280-91049-B-5		280-352718		11/22/2016 16:39	1	TAL DEN	SVC
A:SM 5310B	280-91049-C-5		280-354209		12/02/2016 16:42	1	TAL DEN	CCJ
A:Field Sampling	280-91049-A-5		280-352756		11/15/2016 14:50	1	TAL DEN	C1K

Lab ID: 280-91049-5 MS

Client ID: MW-15R

Sample Date/Time: 11/15/2016 13:50 Received Date/Time: 11/16/2016 10:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:350.1	280-91049-C-5 MS		280-352943		11/23/2016 17:08	1	TAL DEN	MAS

Lab ID: 280-91049-5 MSD

Client ID: MW-15R

Sample Date/Time: 11/15/2016 13:50 Received Date/Time: 11/16/2016 10:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:350.1	280-91049-C-5 MSD		280-352943		11/23/2016 17:10	1	TAL DEN	MAS

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

Laboratory Chronicle

Lab ID: 280-91049-6

Client ID: MW-2B1

Sample Date/Time: 11/15/2016 14:53 Received Date/Time: 11/16/2016 10:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	280-91049-F-6		480-333552		11/26/2016 13:48	1	TAL BUF	NEA
A:8260C	280-91049-F-6		480-333552		11/26/2016 13:48	1	TAL BUF	NEA
P:5030C	280-91049-K-6		480-332322		11/18/2016 02:38	1	TAL BUF	NMD1
A:8260C SIM	280-91049-K-6		480-332322		11/18/2016 02:38	1	TAL BUF	NMD1
P:3005A	280-91049-D-6-A		280-354204	280-352775	11/28/2016 14:41	1	TAL DEN	SEJ
A:6010B	280-91049-D-6-A		280-354204	280-352775	12/04/2016 19:59	1	TAL DEN	CRR
P:3005A	280-91049-E-6-B		280-354385	280-352772	11/29/2016 07:26	1	TAL DEN	TEB
A:6010B	280-91049-E-6-B		280-354385	280-352772	12/05/2016 23:38	1	TAL DEN	CRR
P:3005A	280-91049-E-6-A		280-353028	280-352489	11/23/2016 14:45	1	TAL DEN	SEJ
A:6020	280-91049-E-6-A		280-353028	280-352489	11/24/2016 01:05	1	TAL DEN	LMT
P:3005A	280-91049-D-6-B		280-353513	280-352777	11/28/2016 14:41	1	TAL DEN	SEJ
A:6020	280-91049-D-6-B		280-353513	280-352777	11/29/2016 07:37	1	TAL DEN	JM
P:3005A	280-91049-D-6-B		280-353693	280-352777	11/28/2016 14:41	1	TAL DEN	SEJ
A:6020	280-91049-D-6-B		280-353693	280-352777	11/29/2016 18:19	1	TAL DEN	JM
A:300.0	280-91049-A-6		280-354220		12/06/2016 00:22	1	TAL DEN	AFB
A:350.1	280-91049-C-6		280-352943		11/23/2016 17:12	1	TAL DEN	MAS
A:353.2	280-91049-A-6		280-354397		12/06/2016 09:31	1	TAL DEN	AJA
A:SM 2320B	280-91049-A-6		280-352384		11/20/2016 16:43	1	TAL DEN	MMC
A:SM 2540C	280-91049-A-6		280-352501		11/21/2016 17:02	1	TAL DEN	SVC
A:SM 2540D	280-91049-B-6		280-352718		11/22/2016 16:39	1	TAL DEN	SVC
A:SM 5310B	280-91049-C-6		280-354209		12/02/2016 16:57	1	TAL DEN	CCJ
A:Field Sampling	280-91049-A-6		280-352756		11/15/2016 15:53	1	TAL DEN	C1K

Lab ID: 280-91049-6 MS

Client ID: MW-2B1

Sample Date/Time: 11/15/2016 14:53 Received Date/Time: 11/16/2016 10:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:300.0	280-91049-A-6 MS		280-354220		12/06/2016 01:24	1	TAL DEN	AFB

Lab ID: 280-91049-6 MSD

Client ID: MW-2B1

Sample Date/Time: 11/15/2016 14:53 Received Date/Time: 11/16/2016 10:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:300.0	280-91049-A-6 MSD		280-354220		12/06/2016 01:39	1	TAL DEN	AFB

Lab ID: 280-91049-6 DU

Client ID: MW-2B1

Sample Date/Time: 11/15/2016 14:53 Received Date/Time: 11/16/2016 10:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:300.0	280-91049-A-6 DU		280-354220		12/06/2016 00:37	1	TAL DEN	AFB
A:SM 2540C	280-91049-A-6 DU		280-352501		11/21/2016 17:02	1	TAL DEN	SVC

TestAmerica Denver

A = Analytical Method P = Prep Method

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

Laboratory Chronicle

Lab ID: 280-91049-7

Client ID: TRIP BLANK

Sample Date/Time: 11/15/2016 00:00 Received Date/Time: 11/16/2016 10:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	280-91049-A-7		480-333552		11/26/2016 14:15	1	TAL BUF	NEA
A:8260C	280-91049-A-7		480-333552		11/26/2016 14:15	1	TAL BUF	NEA
P:5030C	280-91049-B-7		480-332322		11/18/2016 03:02	1	TAL BUF	NMD1
A:8260C SIM	280-91049-B-7		480-332322		11/18/2016 03:02	1	TAL BUF	NMD1

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 480-333378/6		480-333378		11/23/2016 22:23	1	TAL BUF	NMD1
A:8260C	MB 480-333378/6		480-333378		11/23/2016 22:23	1	TAL BUF	NMD1
P:5030C	MB 480-333552/6		480-333552		11/26/2016 11:15	1	TAL BUF	NEA
A:8260C	MB 480-333552/6		480-333552		11/26/2016 11:15	1	TAL BUF	NEA
P:5030C	MB 480-332322/7		480-332322		11/17/2016 21:54	1	TAL BUF	NMD1
A:8260C SIM	MB 480-332322/7		480-332322		11/17/2016 21:54	1	TAL BUF	NMD1
P:3005A	MB 280-352772/1-A		280-354165	280-352772	11/29/2016 07:26	1	TAL DEN	TEB
A:6010B	MB 280-352772/1-A		280-354165	280-352772	12/03/2016 22:44	1	TAL DEN	LLB
P:3005A	MB 280-352775/1-A		280-354204	280-352775	11/28/2016 14:41	1	TAL DEN	SEJ
A:6010B	MB 280-352775/1-A		280-354204	280-352775	12/04/2016 19:04	1	TAL DEN	CRR
P:3005A	MB 280-352772/1-A		280-354385	280-352772	11/29/2016 07:26	1	TAL DEN	TEB
A:6010B	MB 280-352772/1-A		280-354385	280-352772	12/05/2016 22:36	1	TAL DEN	CRR
P:3005A	MB 280-352489/1-A		280-353028	280-352489	11/23/2016 14:45	1	TAL DEN	SEJ
A:6020	MB 280-352489/1-A		280-353028	280-352489	11/23/2016 23:15	1	TAL DEN	LMT
P:3005A	MB 280-352777/1-A		280-353513	280-352777	11/28/2016 14:41	1	TAL DEN	SEJ
A:6020	MB 280-352777/1-A		280-353513	280-352777	11/29/2016 06:17	1	TAL DEN	JM
A:300.0	MB 280-354220/6		280-354220		12/05/2016 11:05	1	TAL DEN	AFB
A:350.1	MB 280-352943/61		280-352943		11/23/2016 16:10	1	TAL DEN	MAS
A:353.2	MB 280-354397/1		280-354397		12/06/2016 09:31	1	TAL DEN	AJA
A:SM 2320B	MB 280-352384/5		280-352384		11/20/2016 13:40	1	TAL DEN	MMC
A:SM 2320B	MB 280-352384/31		280-352384		11/20/2016 16:05	1	TAL DEN	MMC
A:SM 2540C	MB 280-352501/1		280-352501		11/21/2016 17:02	1	TAL DEN	SVC
A:SM 2540D	MB 280-352718/2		280-352718		11/22/2016 16:39	1	TAL DEN	SVC
A:SM 5310B	MB 280-353712/5		280-353712		11/29/2016 18:31	1	TAL DEN	CCJ
A:SM 5310B	MB 280-354209/4		280-354209		12/02/2016 15:12	1	TAL DEN	CCJ

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

Laboratory Chronicle

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 480-333378/4		480-333378		11/23/2016 21:28	1	TAL BUF	NMD1
A:8260C	LCS 480-333378/4		480-333378		11/23/2016 21:28	1	TAL BUF	NMD1
P:5030C	LCS 480-333552/4		480-333552		11/26/2016 10:20	1	TAL BUF	NEA
A:8260C	LCS 480-333552/4		480-333552		11/26/2016 10:20	1	TAL BUF	NEA
P:5030C	LCS 480-332322/4		480-332322		11/17/2016 20:41	1	TAL BUF	NMD1
A:8260C SIM	LCS 480-332322/4		480-332322		11/17/2016 20:41	1	TAL BUF	NMD1
P:3005A	LCS 280-352772/2-A		280-354165	280-352772	11/29/2016 07:26	1	TAL DEN	TEB
A:6010B	LCS 280-352772/2-A		280-354165	280-352772	12/03/2016 22:47	1	TAL DEN	LLB
P:3005A	LCS 280-352775/2-A		280-354204	280-352775	11/28/2016 14:41	1	TAL DEN	SEJ
A:6010B	LCS 280-352775/2-A		280-354204	280-352775	12/04/2016 19:06	1	TAL DEN	CRR
P:3005A	LCS 280-352772/2-A		280-354385	280-352772	11/29/2016 07:26	1	TAL DEN	TEB
A:6010B	LCS 280-352772/2-A		280-354385	280-352772	12/05/2016 22:38	1	TAL DEN	CRR
P:3005A	LCS 280-352489/2-A		280-353028	280-352489	11/23/2016 14:45	1	TAL DEN	SEJ
A:6020	LCS 280-352489/2-A		280-353028	280-352489	11/23/2016 23:19	1	TAL DEN	LMT
P:3005A	LCS 280-352777/2-A		280-353513	280-352777	11/28/2016 14:41	1	TAL DEN	SEJ
A:6020	LCS 280-352777/2-A		280-353513	280-352777	11/29/2016 06:20	1	TAL DEN	JM
A:300.0	LCS 280-354220/4		280-354220		12/05/2016 10:34	1	TAL DEN	AFB
A:350.1	LCS 280-352943/59		280-352943		11/23/2016 16:06	1	TAL DEN	MAS
A:SM 2320B	LCS 280-352384/4		280-352384		11/20/2016 13:34	1	TAL DEN	MMC
A:SM 2320B	LCS 280-352384/30		280-352384		11/20/2016 15:59	1	TAL DEN	MMC
A:SM 2540C	LCS 280-352501/2		280-352501		11/21/2016 17:02	1	TAL DEN	SVC
A:SM 2540D	LCS 280-352718/1		280-352718		11/22/2016 16:39	1	TAL DEN	SVC
A:SM 5310B	LCS 280-353712/3		280-353712		11/29/2016 17:59	1	TAL DEN	CCJ
A:SM 5310B	LCS 280-354209/3		280-354209		12/02/2016 14:58	1	TAL DEN	CCJ

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 480-332322/5		480-332322		11/17/2016 21:05	1	TAL BUF	NMD1
A:8260C SIM	LCSD 480-332322/5		480-332322		11/17/2016 21:05	1	TAL BUF	NMD1
A:300.0	LCSD 280-354220/5		280-354220		12/05/2016 10:50	1	TAL DEN	AFB
A:350.1	LCSD 280-352943/60		280-352943		11/23/2016 16:08	1	TAL DEN	MAS
A:SM 5310B	LCSD 280-353712/4		280-353712		11/29/2016 18:14	1	TAL DEN	CCJ

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 280-354220/3		280-354220		12/05/2016 10:19	1	TAL DEN	AFB

Quality Control Results

Client: Waste Management

Job Number: 280-91049-1

Laboratory Chronicle

Lab ID: MS

Client ID: N/A

Sample Date/Time: 11/15/2016 08:30 Received Date/Time: 11/16/2016 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	480-109672-R-1 MS		480-333378		11/24/2016 06:22	40	TAL BUF	NMD1
A:8260C	480-109672-R-1 MS		480-333378		11/24/2016 06:22	40	TAL BUF	NMD1
P:5030C	480-109670-K-2 MS		480-333552		11/26/2016 19:16	100	TAL BUF	NEA
A:8260C	480-109670-K-2 MS		480-333552		11/26/2016 19:16	100	TAL BUF	NEA
P:5030C	280-91030-J-2 MS		480-332322		11/18/2016 03:27	4	TAL BUF	NMD1
A:8260C SIM	280-91030-J-2 MS		480-332322		11/18/2016 03:27	4	TAL BUF	NMD1
P:3005A	280-91099-D-1-B MS		280-354204	280-352775	11/28/2016 14:41	1	TAL DEN	SEJ
A:6010B	280-91099-D-1-B MS		280-354204	280-352775	12/04/2016 19:14	1	TAL DEN	CRR
P:3005A	280-91149-A-2-B MS		280-354385	280-352772	11/29/2016 07:26	1	TAL DEN	TEB
A:6010B	280-91149-A-2-B MS		280-354385	280-352772	12/05/2016 22:46	1	TAL DEN	CRR
P:3005A	280-91030-D-2-B MS		280-353028	280-352489	11/23/2016 14:45	1	TAL DEN	SEJ
A:6020	280-91030-D-2-B MS		280-353028	280-352489	11/23/2016 23:34	1	TAL DEN	LMT
A:SM 5310B	280-90915-B-2 MS		280-353712		11/29/2016 19:19	1	TAL DEN	CCJ

Lab ID: MSD

Client ID: N/A

Sample Date/Time: 11/15/2016 08:30 Received Date/Time: 11/16/2016 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	480-109672-R-1 MSD		480-333378		11/24/2016 06:49	40	TAL BUF	NMD1
A:8260C	480-109672-R-1 MSD		480-333378		11/24/2016 06:49	40	TAL BUF	NMD1
P:5030C	480-109670-K-2 MSD		480-333552		11/26/2016 19:44	100	TAL BUF	NEA
A:8260C	480-109670-K-2 MSD		480-333552		11/26/2016 19:44	100	TAL BUF	NEA
P:5030C	280-91030-J-2 MSD		480-332322		11/18/2016 03:51	4	TAL BUF	NMD1
A:8260C SIM	280-91030-J-2 MSD		480-332322		11/18/2016 03:51	4	TAL BUF	NMD1
P:3005A	280-91099-D-1-C MSD		280-354204	280-352775	11/28/2016 14:41	1	TAL DEN	SEJ
A:6010B	280-91099-D-1-C MSD		280-354204	280-352775	12/04/2016 19:16	1	TAL DEN	CRR
P:3005A	280-91149-A-2-C MSD		280-354385	280-352772	11/29/2016 07:26	1	TAL DEN	TEB
A:6010B	280-91149-A-2-C MSD		280-354385	280-352772	12/05/2016 22:49	1	TAL DEN	CRR
P:3005A	280-91030-D-2-C MSD		280-353028	280-352489	11/23/2016 14:45	1	TAL DEN	SEJ
A:6020	280-91030-D-2-C MSD		280-353028	280-352489	11/23/2016 23:38	1	TAL DEN	LMT
A:SM 5310B	280-90915-B-2 MSD		280-353712		11/29/2016 19:34	1	TAL DEN	CCJ

Lab ID: DU

Client ID: N/A

Sample Date/Time: 11/15/2016 11:25 Received Date/Time: 11/16/2016 10:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:SM 2320B	280-91099-A-3 DU		280-352384		11/20/2016 13:51	1	TAL DEN	MMC
A:SM 2540D	280-91074-A-2 DU		280-352718		11/22/2016 16:39	1	TAL DEN	SVC

Client: Waste Management

Job Number: 280-91049-1

Laboratory Chronicle

Lab References:

TAL BUF = TestAmerica Buffalo

TAL DEN = TestAmerica Denver

Chain of Custody Record

Client Information Client Contact: Mr. Patrick Madej Company: Waste Management Address: 2615 Davis Street City: San Leandro State, Zip: CA, 94577 Phone: 612-940-2980 Email: SGrabner@scsengineers.com		Lab PM: Sara, Betsy A E-Mail: betsy.sara@testamericainc.com		Carrier Tracking No(s): 8104 B151 6938 8104 B151 6949 Job #: 04204027.19		COC No: 280-17318-3224-1 Page: 1 of 1																					
Due Date Requested: TAT Requested (days): PO #: WO #: Project #: 28002692 SSONW#: Project Name: WA02/Olympic View Sanitary LF Event Desc: Quarterly GW App/III - Mar Jun Sep Dec Site: Washington		Barcode: 280-91049 Chain of Custody		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - ph 4-5 Z - other (specify)		Total Number of containers Special Instructions/Note: Short Hold: NO3(cad) Arsenic - Direct sub to ARI																					
Sample Identification MW-35 MW-34C MW-34A MW-36A MW-15R MW-2B1 Trip blank		Sample Date 11/15/16 11/15 12/00 12/51 13/50 14/53 - -		Sample Time 930 1115 1200 1251 1350 1453 - -		Sample Type (C=Comp, G=grab) 6 		Matrix (W=water, S=solid, O=wastewater, BT=BIOTISSUE, AS=AS) W 		Field Filtered Sample (Yes or No) X 		Perform MS/MSD (Yes or No) X 		TDS/AIKS/CI/SO4/NO3(cad) N 		Dissolved Metals A 		Ammonia/TOC A 		8260B - long list (TA Buffalo) A 		8260B SIM (TA Buffalo) A 		Total Metals A 		Total Arsenic (direct sub to ARI) A 	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Date: 11/15/16 1630 Date/Time: 11-16-16 1000		Company: SCS Company: TAD		Relinquished by: Dan Ah Relinquished by: Dan Ah Relinquished by: Dan Ah		Date/Time: 11-16-16 1000 Date/Time: 11-16-16 1000 Date/Time: 11-16-16 1000		Company: SCS Company: TAD Company: TAD		Relinquished by: Dan Ah Relinquished by: Dan Ah Relinquished by: Dan Ah		Date/Time: 11-16-16 1000 Date/Time: 11-16-16 1000 Date/Time: 11-16-16 1000		Company: SCS Company: TAD Company: TAD											
Empty Kit Relinquished by: Relinquished by: Relinquished by: Relinquished by:		Date: 11/15/16 1630 Date/Time: 11-16-16 1000 Date/Time: 11-16-16 1000		Company: SCS Company: TAD Company: TAD		Relinquished by: Dan Ah Relinquished by: Dan Ah Relinquished by: Dan Ah		Date/Time: 11-16-16 1000 Date/Time: 11-16-16 1000 Date/Time: 11-16-16 1000		Company: SCS Company: TAD Company: TAD		Relinquished by: Dan Ah Relinquished by: Dan Ah Relinquished by: Dan Ah		Date/Time: 11-16-16 1000 Date/Time: 11-16-16 1000 Date/Time: 11-16-16 1000		Company: SCS Company: TAD Company: TAD											
Custody Seal No.: 876313 876314		Custody Seal No.: 876313 876314		Custody Seal No.: 876313 876314		Custody Seal No.: 876313 876314		Custody Seal No.: 876313 876314		Custody Seal No.: 876313 876314		Custody Seal No.: 876313 876314		Custody Seal No.: 876313 876314		Custody Seal No.: 876313 876314											
Relinquished by: Relinquished by: Relinquished by:		Date/Time: 11/15/16 1630 Date/Time: 11-16-16 1000 Date/Time: 11-16-16 1000		Company: SCS Company: TAD Company: TAD		Relinquished by: Dan Ah Relinquished by: Dan Ah Relinquished by: Dan Ah		Date/Time: 11-16-16 1000 Date/Time: 11-16-16 1000 Date/Time: 11-16-16 1000		Company: SCS Company: TAD Company: TAD		Relinquished by: Dan Ah Relinquished by: Dan Ah Relinquished by: Dan Ah		Date/Time: 11-16-16 1000 Date/Time: 11-16-16 1000 Date/Time: 11-16-16 1000		Company: SCS Company: TAD Company: TAD											
Custody Seals Intact: Yes No		Custody Seal No.: 876313 876314		Custody Seal No.: 876313 876314		Custody Seal No.: 876313 876314		Custody Seal No.: 876313 876314		Custody Seal No.: 876313 876314		Custody Seal No.: 876313 876314		Custody Seal No.: 876313 876314		Custody Seal No.: 876313 876314											
Relinquished by: Relinquished by: Relinquished by:		Date/Time: 11/15/16 1630 Date/Time: 11-16-16 1000 Date/Time: 11-16-16 1000		Company: SCS Company: TAD Company: TAD		Relinquished by: Dan Ah Relinquished by: Dan Ah Relinquished by: Dan Ah		Date/Time: 11-16-16 1000 Date/Time: 11-16-16 1000 Date/Time: 11-16-16 1000		Company: SCS Company: TAD Company: TAD		Relinquished by: Dan Ah Relinquished by: Dan Ah Relinquished by: Dan Ah		Date/Time: 11-16-16 1000 Date/Time: 11-16-16 1000 Date/Time: 11-16-16 1000		Company: SCS Company: TAD Company: TAD											
Custody Seals Intact: Yes No		Custody Seal No.: 876313 876314		Custody Seal No.: 876313 876314		Custody Seal No.: 876313 876314		Custody Seal No.: 876313 876314		Custody Seal No.: 876313 876314		Custody Seal No.: 876313 876314		Custody Seal No.: 876313 876314		Custody Seal No.: 876313 876314											

FIELD INFORMATION FORM



Site Name: OSL

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID: _____

Site No.: _____
 Sample Point: MW-34C
 Sample ID: _____

PURGE INFO

111516	1025	50			
PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs:min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)	WELL VOLs PURGED

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment... Dedicated: Y or N

Filter Device: Y or N | 0.45 μ or _____ μ (circle or fill in)

Purging Device: C | A-Submersible Pump | D-Bailer
 B-Peristaltic Pump | E-Piston Pump
 Sampling Device: C | C-QED Bladder Pump | F-Dipper/Bottle

Filter Type: A | A-In-line Disposable | C-Vacuum
 B-Pressure | X-Other: _____

X-Other: _____ | Sample Tube Type: D | A-Teflon | C-PVC | X-Other: _____
 B-Stainless Steel | D-Polypropylene

WELL DATA

Well Elevation (at TOC): _____ (ft/msl) | Depth to Water (DTW) (from TOC): 4073 (ft) | Groundwater Elevation (site datum, from TOC): _____ (ft/msl)

Total Well Depth (from TOC): _____ (ft) | Stick Up (from ground elevation): _____ (ft) | Casing ID: _____ (in) | Casing Material: _____

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (μmhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
110412	350	1 st						
110449		2 nd						
110500		3 rd	231	13.72		1.58	414	
110513		4 th	232	13.13	490	0.64	667	
110516			231	13.08	894	0.47	573	
110519			231	13.05	1120	0.43	493	
111015	200		232	12.40	1180	0.47	428	4073
111110			232	12.63	958	0.54	426	
111115			231	12.60	779	0.58	416	

Suggested range for 3 consec. readings or note Permit/State requirements:
 pH: +/- 0.2 | Conductance: +/- 3% | Temp: - | Turbidity: - | D.O.: +/- 10% | eH/ORP: +/- 25 mV | DTW: Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (umhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: <u>fine</u> Units
111516	745	231	12.60	779	0.58	416	1115

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: particulates, cloudy | Odor: _____ | Color: _____ | Other: _____

Weather Conditions (required daily, or as conditions change): _____ | Direction/Speed: _____ | Outlook: _____ | Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required): _____

FIELD COMMENTS

Performed extended purge to clear up water

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

11.15.16 | Sam Graber | [Signature] | SCS

Date | Name | Signature | Company

FIELD INFORMATION FORM



Site Name: OSL
 Site No.: 111516 Sample Point: MW-34A
 Sample ID

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID: _____

PURGE INFO
 PURGE DATE (MM DD YY): 11/15/16 PURGE TIME (2400 Hr Clock): 11:08 ELAPSED HRS (hrs:min): 11:42
 WATER VOL IN CASING (Gallons): _____ ACTUAL VOL PURGED (Gallons): _____ WELL VOLs PURGED: _____
 Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: Y or N Filter Device: Y or N 0.45 μ or _____ μ (circle or fill in)
 Purging Device: C A-Submersible Pump D-Bailer Filter Type: A A-In-line Disposable C-Vacuum
 B-Peristaltic Pump E-Piston Pump B-Pressure X-Other _____
 Sampling Device: C C-QED Bladder Pump F-Dipper/Bottle Filter Type: B A-Teflon C-PVC X-Other: _____
 X-Other: _____ Sample Tube Type: D B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC) _____ (ft/msl) Depth to Water (DTW) (from TOC) 3841 (ft) Groundwater Elevation (site datum, from TOC) _____ (ft/msl)
 Total Well Depth (from TOC) _____ (ft) Stick Up (from ground elevation) _____ (ft) Casing ID _____ (in) Casing Material _____
 Note: Total Well Depth, Stick Up, Casing Id. etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)	Sample Time (2400 Hr Clock)	Rate/Unit ml/min	pH (std)	Conductance (SC/EC) (μ mhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
		<u>11:45</u>	<u>330</u>	<u>7.18</u>	<u>189</u>	<u>12.53</u>		<u>12.44</u>	<u>192.7</u>
	<u>11:50</u>		<u>6.90</u>	<u>194</u>	<u>12.61</u>		<u>10.84</u>	<u>110.74</u>	
	<u>11:53</u>		<u>6.85</u>	<u>190</u>	<u>12.61</u>		<u>10.67</u>	<u>111.7</u>	
	<u>11:56</u>		<u>6.84</u>	<u>186</u>	<u>12.54</u>		<u>10.58</u>	<u>114.0</u>	
	<u>11:58</u>		<u>6.810</u>	<u>178</u>	<u>12.48</u>		<u>10.50</u>	<u>119.3</u>	
	<u>12:00</u>		<u>6.79</u>	<u>177</u>	<u>12.47</u>	<u>1.25</u>	<u>10.51</u>	<u>119.6</u>	<u>3841</u>

Suggested range for 3 consec. readings or note Permit/State requirements:
 pH: +/- 0.2 Conductance: +/- 3% Temp: - D.O.: +/- 10% eH/ORP: +/- 25 mV Stabilize

FIELD DATA
 SAMPLE DATE (MM DD YY): 11/15/16 pH (std): 6.79 CONDUCTANCE (μ mhos/cm @ 25°C): 177 TEMP. (°C): 12.47 TURBIDITY (ntu): 1.25 DO (mg/L-ppm): 10.51 eH/ORP (mV): 119.6 Other: Time
 Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: Clear Odor: - Color: - Other: -
 Weather Conditions (required daily, or as conditions change): _____ Direction/Speed: - Outlook: - Precipitation: Y or N
 Specific Comments (including purge/well volume calculations if required): _____

FIELD COMMENTS

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
11/15/16 Sam Garber [Signature] SCS
 Date Name Signature Company

FIELD INFORMATION FORM



Site Name: OUSL
 Sample Point: MW-36A
Sample ID

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO	<u>111516</u>	<u>12132</u>	<u>119</u>			
	PURGE DATE <small>(MM DD YY)</small>	PURGE TIME <small>(2400 Hr Clock)</small>	ELAPSED HRS <small>(hrs:min)</small>	WATER VOL IN CASING <small>(Gallons)</small>	ACTUAL VOL PURGED <small>(Gallons)</small>	WELL VOLs PURGED

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

Purging and Sampling Equipment... Dedicated: Y or N

Filter Device: or N 0.45 μ or _____ μ (circle or fill in)

Purging Device: C A-Submersible Pump D-Bailer
 B B-Peristaltic Pump E-Piston Pump
 Sampling Device: C C-QED Bladder Pump F-Dipper/Bottle
 X-Other: _____

Filter Type: A A-In-line Disposable C-Vacuum
 B B-Pressure X-Other: _____

Sample Tube Type: D A-Teflon C-PVC X-Other: _____
 B-Stainless Steel D-Polypropylene

WELL DATA

Well Elevation (at TOC) _____ (ft/msl) Depth to Water (DTW) (from TOC) 3043 (ft) Groundwater Elevation (site datum, from TOC) _____ (ft/msl)

Total Well Depth (from TOC) _____ (ft) Stick Up (from ground elevation) _____ (ft) Casing ID _____ (in) Casing Material _____

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)	Sample Time (2400 Hr Clock)	Rate/Unit <small>ml/min</small>	pH (std)	Conductance (SC/EC) <small>(μmhos/cm@25°C)</small>	Temp. (°C)	Turbidity (ntu)	D.O. <small>(mg/L - ppm)</small>	eH/ORP <small>(mV)</small>	DTW <small>(ft)</small>
		<u>12:35</u>	<u>30p</u>	<u>7.06</u>	<u>127</u>	<u>9.78</u>		<u>4.32</u>	<u>1273</u>
	<u>12:40</u>		<u>6.90</u>	<u>128</u>	<u>9.75</u>		<u>3.12</u>	<u>1244</u>	
	<u>12:43</u>		<u>6.80</u>	<u>128</u>	<u>9.72</u>		<u>2.49</u>	<u>1329</u>	
	<u>12:46</u>		<u>6.81</u>	<u>128</u>	<u>9.76</u>		<u>2.65</u>	<u>1327</u>	
	<u>12:48</u>		<u>6.81</u>	<u>128</u>	<u>9.71</u>		<u>2.75</u>	<u>1329</u>	
	<u>12:51</u>	<u>W</u>	<u>6.81</u>	<u>128</u>	<u>9.70</u>	<u>1.75</u>	<u>2.90</u>	<u>1333</u>	<u>3075</u>

Suggested range for 3 consec. readings or note Permit/State requirements: +/- 0.2 +/- 3% +/- 10% +/- 25 mV Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/State. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. **If more fields above are needed, use separate sheet or form.**

FIELD DATA

SAMPLE DATE (MM DD YY) 111516 pH (std) 6.81 CONDUCTANCE (umhos/cm @ 25°C) 128 TEMP. (°C) 9.71 TURBIDITY (ntu) 1.75 DO (mg/L-ppm) 2.90 eH/ORP (mV) 1333 Other: time Units

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/State).

Sample Appearance: clear Odor: _____ Color: _____ Other: _____

Weather Conditions (required daily, or as conditions change): _____ Direction/Speed: _____ Outlook: _____ Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required): _____

FIELD COMMENTS

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

11/15/16 Sum Graber _____ SLS

_____/_____/_____/_____/_____ _____ _____ _____

Date Name Signature Company

FIELD INFORMATION FORM



Site Name: OU5L
 Site No.:
 Sample Point: M10-15R
 Sample ID:

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO
 PURGE DATE: 11 15 16 PURGE TIME: 12:1 ELAPSED HRS: 1:32:9
 WATER VOL IN CASING: ACTUAL VOL PURGED: WELL VOLS PURGED:
(MM DD YY) (2400 Hr Clock) (hrs:min) (Gallons) (Gallons) (ft)
 Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: Y or N
 Purging Device: C A-Submersible Pump D-Bailer
 Sampling Device: C B-Peristaltic Pump E-Piston Pump
 X-Other: C-QED Bladder Pump F-Dipper/Bottle
 Filter Device: Y or N 0.45 μ or μ (circle or fill in)
 Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other:
 Sample Tube Type: D A-Teflon C-PVC X-Other:
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC): (ft/msl) Depth to Water (DTW) (from TOC): 1830 (ft)
 Groundwater Elevation (site datum, from TOC): (ft/msl)
 Total Well Depth (from TOC): (ft) Stick Up (from ground elevation): (ft)
 Casing ID: (in) Casing Material:
 Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

Sample Time (2400 Hr Clock)	Rate/Unit (ml/min)	pH (std)	Conductance (SC/EC) (μmhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
13:30	350	7.46	148	10.50		3.42	110.4	
13:35		7.36	151	10.49		2.62	113.2	
13:38		7.25	154	10.47		1.38	116.9	
13:41		7.30	154	10.45		1.09	112.8	
13:44		7.34	154	10.45		0.98	110.8	
13:47		7.36	155	10.44		0.90	109.7	
13:50		7.37	155	10.45	1.21	0.85	109.0	18.35

Suggested range for 3 consec. readings or note Permit/State requirements:
 pH: +/- 0.2 Conductance: +/- 3% Temp: - Turbidity: - D.O.: +/- 10% eH/ORP: +/- 25 mV DTW: Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA
 SAMPLE DATE (MM DD YY): 11 15 16 pH (std): 7.37 CONDUCTANCE (umhos/cm @ 25°C): 155 TEMP. (°C): 10.45 TURBIDITY (ntu): 1.21 DO (mg/L-ppm): 0.85 eH/ORP (mV): 109.0 Other: Time Units: 1350
 Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: clear Odor: No Color: - Other: -
 Weather Conditions (required daily, or as conditions change): Direction/Speed: - Outlook: - Precipitation: Y or N
 Specific Comments (including purge/well volume calculations if required):

FIELD COMMENTS

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
11 15 16 Sam Graber [Signature] SLC
 Date Name Signature Company

FIELD INFORMATION FORM



Site Name: OVSL
 Site No.:
 Sample Point: MW-2B1
 Sample ID:

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO
 PURGE DATE: 11/15/16 (MM DD YY)
 PURGE TIME: 14:30 (2400 Hr Clock)
 ELAPSED HRS: 23 (hrs:min)
 WATER VOL IN CASING: (Gallons)
 ACTUAL VOL PURGED: (Gallons)
 WELL VOLS PURGED:

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment...Dedicated: Y or N
 Purging Device: C A-Submersible Pump D-Bailer
 Sampling Device: C B-Peristaltic Pump E-Piston Pump
 X-Other: C-QED Bladder Pump F-Dipper/Bottle
 Filter Device: Y or N 0.45 μ or μ (circle or fill in)
 Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other:
 Sample Tube Type: D A-Teflon C-PVC X-Other:
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC): (ft/msl)
 Depth to Water (DTW) (from TOC): 620 (ft)
 Groundwater Elevation (site datum, from TOC): (ft/msl)
 Total Well Depth (from TOC): (ft)
 Stick Up (from ground elevation): (ft)
 Casing ID: (in)
 Casing Material:

Note: Total Well Depth, Stick Up, Casing Id. etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)	Sample Time (2400 Hr Clock)	Rate/Unit (L/min)	pH (std)	Conductance (SC/EC) (μmhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
		<u>14:33</u>	<u>>50</u>	<u>7.43</u>	<u>250</u>	<u>13.46</u>	<u> </u>	<u>0.59</u>	<u>91.8</u>
	<u>14:33</u>	<u> </u>	<u>7.40</u>	<u>245</u>	<u>13.47</u>	<u> </u>	<u>0.36</u>	<u>97.4</u>	<u> </u>
	<u>14:34</u>	<u> </u>	<u>7.38</u>	<u>243</u>	<u>13.48</u>	<u> </u>	<u>0.32</u>	<u>95.9</u>	<u> </u>
	<u>14:34</u>	<u> </u>	<u>7.34</u>	<u>242</u>	<u>13.46</u>	<u> </u>	<u>0.35</u>	<u>93.2</u>	<u> </u>
	<u>14:37</u>	<u> </u>	<u>7.32</u>	<u>242</u>	<u>13.41</u>	<u> </u>	<u>0.21</u>	<u>82.1</u>	<u> </u>
	<u>14:50</u>	<u> </u>	<u>7.31</u>	<u>242</u>	<u>13.43</u>	<u>18.00</u>	<u>0.19</u>	<u>81.4</u>	<u>17.40</u>
	<u>14:53</u>	<u> </u>	<u>7.29</u>	<u>241</u>	<u>13.35</u>	<u>17.21</u>	<u>0.17</u>	<u>80.2</u>	<u> </u>

Suggested range for 3 consec. readings or note Permit/State requirements: pH +/- 0.2, Conductance +/- 3%, Temp. - , Turbidity - , D.O. +/- 10%, eH/ORP +/- 25 mV, Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA
 SAMPLE DATE: 11/15/16 (MM DD YY)
 pH (std): 7.29
 CONDUCTANCE (umhos/cm @ 25°C): 241
 TEMP. (°C): 13.35
 TURBIDITY (ntu): 7.21
 DO (mg/L-ppm): 0.17
 eH/ORP (mV): 80.2
 Other: time Units: 1453

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: clear Odor: No Color: - Other: -
 Weather Conditions (required daily, or as conditions change): Direction/Speed: - Outlook: - Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required):

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
11/15/16 Sam Graber [Signature] OVSL
 Date Name Signature Company

Chain of Custody Record



Client Information (Sub Contract Lab)		Lab PM: Sara, Betsy A	Carrier Tracking No(s): 280-378023.1
Client Contact: Shipping/Receiving		E-Mail: betsy.sara@testamericainc.com	State of Origin: Washington
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Oregon	
Address: 10 Hazelwood Drive, Amherst NY, 14228-2298		Due Date Requested: 12/5/2016	
Phone: 716-691-2600 (Tel) 716-691-7991 (Fax)		TAT Requested (days):	
Email:		PO #:	
Project Name: WA02/Olympic View Sanitary LF		WO #:	
Site: WA02/Olympic View Sanitary LF		Project #: 28002692	
		SSOW#:	

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=wastefoil, B=By-Product, A=Air)	Field Filled Sample (Yes or No)	8260C/5030C (MOD) Appendix II Volatiles	8260C SIM/5030C (MOD) Local Method	Total Number of Containers	Special Instructions (Note)
MW-35 (280-91049-1)	11/15/16	09:50 Pacific	Water	Water	X	X	X	6	
MW-34C (280-91049-2)	11/15/16	11:15 Pacific	Water	Water	X	X	X	6	
MW-34A (280-91049-3)	11/15/16	12:00 Pacific	Water	Water	X	X	X	6	
MW-36A (280-91049-4)	11/15/16	12:51 Pacific	Water	Water	X	X	X	6	
MW-15R (280-91049-5)	11/15/16	13:50 Pacific	Water	Water	X	X	X	6	
MW-2B1 (280-91049-6)	11/15/16	14:53 Pacific	Water	Water	X	X	X	6	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon our 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/test/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 compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification

Unconfirmed _____
 Deliverable Requested: I, II, III, IV, Other (specify) _____
 Primary Deliverable Rank: 2
 Date: _____

Empty Kit Relinquished by: _____
 Relinquished by: *Se* Date/Time: 11/16/16 15:10 Company: *DAD*
 Relinquished by: _____ Date/Time: _____ Company: _____
 Relinquished by: _____ Date/Time: _____ Company: _____

Custody Seals Intact: _____
 Δ Yes Δ No

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months
 Special Instructions/QC Requirements: _____

Method of Shipment: _____
 Date/Time: 11/17/16 09:45 Company: *FABUS*
 Date/Time: _____ Company: _____
 Date/Time: _____ Company: _____
 Cooler Temperature(s) °C and Other Remarks: *#1 3.5°C*

Chain of Custody Record



<p>Client Information (Sub Contract Lab) Client Contact: Sara, Betsy A Shipping/Receiving: betsy_sara@testamericainc.com Company: TestAmerica Laboratories, Inc. Address: 10 Hazelwood Drive, Amherst, NY, 14228-2298 Phone: 716-691-2600(Tel) 716-691-7991(Fax) Email: [Redacted] Project #: 28002692 Site: WAO2 Olympic View Sanitary LF</p>		<p>Sampler: Lab PM: Sara, Betsy A Carrier Tracking No(s): 280-378039-1 State of Origin: Washington Page: Page 1 of 1 Job #: 280-91049-1</p>	
<p>Due Date Requested: 12/5/2016 TAT Requested (days):</p>		<p>Accreditations Required (See note): NELAP - Oregon</p>	
<p>Analysis Requested: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Ice V - Acetone W - MCAA X - pH 4-5 Y - EDTA Z - other (specify)</p>		<p>Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Antichlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:</p>	
<p>Sample Identification - Client ID (Lab ID) TRIP BLANK (280-91049-7)</p>		<p>Field Filtered Sample (Yes or No) X Performance/MSD (Yes/No) X 8260C/5030C (MOD) Appendix II Volatiles X 8260C_SIM/5030C (MOD) Local Method X</p>	
<p>Sample Date 11/15/16 Sample Time Pacific Sample Type (C=comp, G=grab) Matrix (W=water, S=solid, O=soil, BT=Tissue, A=air) Water</p>		<p>Total Number of Containers 2</p>	
<p>Special Instructions/Note:</p>			

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/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 compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification
 Return To Client Disposal By Lab Archive For _____ Months
 Special Instructions/QC Requirements:

Primary Deliverable Rank: 2
 Empty Kit Relinquished by: _____ Date: _____
 Relinquished by: *SK* Date/Time: 11-16-16 1:10
 Relinquished by: _____ Date/Time: _____
 Relinquished by: _____ Date/Time: _____
 Custody Seal No.: _____
 Cooler Temperature(s) °C and Other Remarks: *A1 3.50*

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-91049-1

Login Number: 91049
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.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-91049-1

Login Number: 91049
List Number: 2
Creator: Wallace, Cameron

List Source: TestAmerica Buffalo
List Creation: 11/17/16 04:37 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	3.5 #1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

ANALYTICAL REPORT

Job Number: 280-91030-1

Job Description: WA02|Olympic View Sanitary LF

For:

Waste Management
Sun Valley Hauling
9081 Tujunga Avenue
Sun Valley, CA 91352

Attention: Mr. Phil Perley



Approved for release.
Betsy A Sara
Project Manager II
12/8/2016 10:21 AM

Betsy A Sara, Project Manager II
4955 Yarrow Street, Arvada, CO, 80002
(303)736-0189
betsy.sara@testamericainc.com
12/08/2016

cc: Mr. Dan Venchiarutti

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.

TestAmerica Laboratories, Inc.

TestAmerica Denver 4955 Yarrow Street, Arvada, CO 80002
Tel (303) 736-0100 Fax (303) 431-7171 www.testamericainc.com



Table of Contents

Cover Title Page	1
Report Narrative	3
Executive Summary	5
Method Summary	7
Method / Analyst Summary	8
Sample Summary	9
Sample Results	10
Sample Datasheets	11
Data Qualifiers	32
QC Results	33
Qc Association Summary	34
Surrogate Recovery Report	39
Qc Reports	41
Laboratory Chronicle	96
Client Chain of Custody	102
Sample Receipt Checklist	106

CASE NARRATIVE

Client: Waste Management

Project: WA02|Olympic View Sanitary LF

Report Number: 280-91030-1

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

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

Sample Receiving

The samples were received on 11/15/2016; the samples arrived on ice. The temperature of the cooler at receipt was 0.4 C.

One of six hydrochloric preserved VOA vials for sample L-INF contained a bubble greater than 6 mm. The laboratory used vials without headspace to perform the analysis. The client was notified on 11/16/2016.

Holding Times

All holding times were within established control limits.

Method Blanks

Vinyl chloride Method 8260C SIM was detected in the Method Blank below the project established reporting limit. No corrective action is taken for any values in Method Blanks that are below the requested reporting limits.

All other Method Blank recoveries 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)

The Matrix Spikes and Matrix Spike Duplicates performed on samples from other clients exhibited recoveries outside control limits for Chloroethane Method 8260B and Chloride Method 300.0. Because the corresponding Laboratory Control Samples and the Method Blank samples were within control limits, these anomalies may be due to matrix interference and no corrective action was taken.

The percent recoveries and/or relative percent difference of the MS/MSD performed on sample L-INF were outside control limits for Dissolved Barium and Dissolved Manganese Method 6020 because the sample concentration was greater than four times the spike amount. Because the corresponding Laboratory Control Sample and the Method Blank sample were within control limits, no corrective action was taken.

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

Sample Duplicate

The RPD for Total Dissolved Solids (TDS) Method 2540C performed on sample OBWL-TD was outside control limits. Because all other QC and calibration criteria were met no corrective action was needed.

Organics

The sample L-INF was analyzed at a dilution for Method 8260C due to foaming at the time of purging during the analysis. Elevated reporting limits (RL) are provided.

The sample L-INF was analyzed at a dilution for Method 8260C SIM due to foaming at the time of purging during the analysis. Elevated reporting limits (RL) are provided.

The prepreserved hydrochloric acid preserved vials for Method 8260C and 8260C SIM analyses for the sample L-INF exhibited pH values greater than 2. This is non-compliant with Method 8260C and 8260C SIM which require samples to be preserved with hydrochloric acid to a pH of less than 2. Because this sample is a leachate sample, a buffering effect was suspected.

Metals

The bracketing Continuing Calibration Verification Samples (CCV) surrounding the Method Blank were above control limits for Dissolved Sodium during Method 6010B analysis. Because the data are considered to be biased high and Dissolved Sodium was not detected in the Method Blank sample above the reporting limit, corrective action was deemed unnecessary.

General Comments

The analyses for Volatile Organics by Method 8260C and Volatile Organics by Method 8260C SIM were performed by TestAmerica Buffalo. Their address and phone number are:

TestAmerica Buffalo
10 Hazelwood Drive, Suite 106
Amherst, NY 14228
716-691-2600

For samples requiring analysis at a dilution, the dilution factor has been multiplied by the Method Detection Limit (MDL) for each analyte and evaluated versus the project-specific reporting limit (PSRL). If the obtained value is below the PSRL, then the PSRL is preserved as the reporting limit for the diluted result, otherwise, the obtained value becomes the reporting limit. This is done in order to maintain the PSRL to meet permit requirements at the request of the client and to report the lowest possible RL for each analyte.

EXECUTIVE SUMMARY - Detections

Client: Waste Management

Job Number: 280-91030-1

Lab Sample ID	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-91030-1	OBWL-TD					
Specific Conductivity		145			umhos/cm	Field Sampling
Dissolved Oxygen		8.53			mg/L	Field Sampling
eH		129.3			millivolts	Field Sampling
Turbidity		25.77			NTU	Field Sampling
Temperature		13.29			Degrees C	Field Sampling
pH		6.98			SU	Field Sampling
Sulfate		22		1.0	mg/L	300.0
Nitrate/Nitrite		0.27		0.050	mg/L	353.2
Chemical Oxygen Demand (COD)		14		10	mg/L	410.4
Alkalinity, Total (As CaCO3)		57		5.0	mg/L	SM 2320B
Alkalinity, Bicarbonate (As CaCO3)		57		5.0	mg/L	SM 2320B
Total Dissolved Solids (TDS)		140		5.0	mg/L	SM 2540C
Total Organic Carbon - Average		1.6		1.0	mg/L	SM 5310B
<i>Dissolved</i>						
Calcium, Dissolved		24		0.040	mg/L	6010B
Magnesium, Dissolved		2.9		0.050	mg/L	6010B
Potassium, Dissolved		2.1		1.0	mg/L	6010B
Sodium, Dissolved		5.7		1.0	mg/L	6010B
Antimony, Dissolved		0.0029		0.0010	mg/L	6020
Barium, Dissolved		0.015		0.0010	mg/L	6020
Manganese, Dissolved		0.0080		0.0010	mg/L	6020
Nickel, Dissolved		0.0047		0.0040	mg/L	6020
Zinc, Dissolved		0.13		0.0050	mg/L	6020

EXECUTIVE SUMMARY - Detections

Client: Waste Management

Job Number: 280-91030-1

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-91030-2	L-INF					
Butyl alcohol, tert-		190		50	ug/L	8260C
Tetrahydrofuran		43		25	ug/L	8260C
Vinyl chloride		0.046	J B	0.080	ug/L	8260C SIM
Specific Conductivity		43.83			umhos/cm	Field Sampling
Dissolved Oxygen		6.16			mg/L	Field Sampling
eH		104.0			millivolts	Field Sampling
Turbidity		31.38			NTU	Field Sampling
Temperature		18.24			Degrees C	Field Sampling
pH		7.83			SU	Field Sampling
Chloride		680		10	mg/L	300.0
Sulfate		280		10	mg/L	300.0
Ammonia (as N)		150		1.5	mg/L	350.1
Nitrate/Nitrite		0.36		0.050	mg/L	353.2
Chemical Oxygen Demand (COD)		340		50	mg/L	410.4
Alkalinity, Total (As CaCO3)		1600		5.0	mg/L	SM 2320B
Alkalinity, Bicarbonate (As CaCO3)		1600		5.0	mg/L	SM 2320B
Total Dissolved Solids (TDS)		2700		10	mg/L	SM 2540C
Total Organic Carbon - Average		100		5.0	mg/L	SM 5310B
<i>Dissolved</i>						
Calcium, Dissolved		150		0.040	mg/L	6010B
Cobalt, Dissolved		0.0071		0.0030	mg/L	6010B
Iron, Dissolved		0.42		0.060	mg/L	6010B
Magnesium, Dissolved		94		0.050	mg/L	6010B
Potassium, Dissolved		100		1.0	mg/L	6010B
Sodium, Dissolved		690		1.0	mg/L	6010B
Barium, Dissolved		0.19		0.0010	mg/L	6020
Chromium, Dissolved		0.0068		0.0030	mg/L	6020
Manganese, Dissolved		2.7		0.0010	mg/L	6020
Nickel, Dissolved		0.061		0.0040	mg/L	6020
Vanadium, Dissolved		0.0069		0.0020	mg/L	6020

METHOD SUMMARY

Client: Waste Management

Job Number: 280-91030-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Metals (ICP)	TAL DEN	SW846 6010B	
Preparation, Total Recoverable or Dissolved Metals	TAL DEN		SW846 3005A
Sample Filtration, Field			FIELD_FLTRD
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	
Nitrogen, Ammonia	TAL DEN	MCAWW 350.1	
Nitrogen, Nitrate-Nitrite	TAL DEN	MCAWW 353.2	
COD	TAL DEN	MCAWW 410.4	
Alkalinity	TAL DEN	SM SM 2320B	
Solids, Total Dissolved (TDS)	TAL DEN	SM SM 2540C	
Organic Carbon, Total (TOC)	TAL DEN	SM SM 5310B	
Field Sampling	TAL DEN	EPA Field Sampling	
Volatile Organic Compounds by GC/MS	TAL BUF	SW846 8260C	
Purge and Trap	TAL BUF		SW846 5030C
Volatile Organic Compounds (GC/MS)	TAL BUF	SW846 8260C SIM	
Purge and Trap	TAL BUF		SW846 5030C

Lab References:

TAL BUF = TestAmerica Buffalo

TAL DEN = TestAmerica Denver

Method References:

EPA = US Environmental Protection Agency

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: Waste Management

Job Number: 280-91030-1

Method	Analyst	Analyst ID
SW846 8260C	Archer, Nicholas E	NEA
SW846 8260C	Youngman, Shawna M	SMY
SW846 8260C SIM	Dias, Nicole M	NMD1
SW846 6010B	Broander, Laura L	LLB
SW846 6010B	Lackey, Cara M	CML
SW846 6010B	Scott, Samantha J	SJS
SW846 6020	Trudell, Lynn-Anne M	LMT
EPA Field Sampling	Krisorn, Chamaiporn 1	C1K
MCAWW 300.0	Benson, Alex F	AFB
MCAWW 350.1	Spedale, Morgan A	MAS
MCAWW 353.2	Cherry, Scott V	SVC
MCAWW 410.4	Jewell, Connie C	CCJ
SM SM 2320B	Carter, Melynda M	MMC
SM SM 2540C	Pedrick, Joshua A	JAP
SM SM 5310B	Jewell, Connie C	CCJ

SAMPLE SUMMARY

Client: Waste Management

Job Number: 280-91030-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-91030-1	OBWL-TD	Water	11/14/2016 1025	11/15/2016 0850
280-91030-2	L-INF	Water	11/14/2016 1100	11/15/2016 0850
280-91030-3TB	TRIP BLANK	Water	11/14/2016 0000	11/15/2016 0850

SAMPLE RESULTS

Analytical Data

Client: Waste Management

Job Number: 280-91030-1

Client Sample ID: OBWL-TD

Lab Sample ID: 280-91030-1

Date Sampled: 11/14/2016 1025

Client Matrix: Water

Date Received: 11/15/2016 0850

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333416	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S9893.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/25/2016 1122		Final Weight/Volume: 5 mL
Prep Date: 11/25/2016 1122		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	ND		0.35	1.0
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,1-Dichloropropene	ND		0.72	1.0
1,2,3-Trichlorobenzene	ND		0.41	1.0
1,2,3-Trichloropropane	ND		0.89	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2,4-Trimethylbenzene	ND		0.75	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane (EDB)	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloroethene, Total	ND		0.81	2.0
1,2-Dichloropropane	ND		0.72	1.0
1,3,5-Trichlorobenzene	ND		0.23	1.0
1,3,5-Trimethylbenzene	ND		0.77	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,3-Dichloropropane	ND		0.75	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
1,4-Dioxane	ND		9.3	40
2,2-Dichloropropane	ND		0.40	1.0
2-Butanone (MEK)	ND		1.3	10
2-Chloroethyl vinyl ether	ND		0.96	5.0
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Acetonitrile	ND		4.9	15
Acrolein	ND		0.91	20
Acrylonitrile	ND		0.83	5.0
Benzene	ND		0.41	1.0
Bromobenzene	ND		0.80	1.0
Bromochloromethane	ND		0.87	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Butyl alcohol, n-	ND		8.9	40
Butyl alcohol, tert-	ND		3.3	10
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Chlorodifluoromethane	ND		0.26	1.0
Chloroethane	ND		0.32	1.0

Analytical Data

Client: Waste Management

Job Number: 280-91030-1

Client Sample ID: OBWL-TD

Lab Sample ID: 280-91030-1

Date Sampled: 11/14/2016 1025

Client Matrix: Water

Date Received: 11/15/2016 0850

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333416	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S9893.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/25/2016 1122		Final Weight/Volume: 5 mL
Prep Date: 11/25/2016 1122		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dibromochloromethane	ND		0.32	1.0
Dibromomethane	ND		0.41	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Dichlorofluoromethane	ND		0.34	1.0
Ethyl acetate	ND		0.66	1.0
Ethyl ether	ND		0.72	1.0
Ethyl tert-butyl ether	ND		0.29	1.0
Ethylbenzene	ND		0.74	1.0
Hexachlorobutadiene	ND		0.28	1.0
Hexane	ND		0.40	10
Iodomethane	ND		0.30	1.0
Isobutanol	ND		4.8	25
Isopropyl ether	ND		0.59	1.0
Isopropylbenzene	ND		0.79	1.0
Methacrylonitrile	ND		0.69	5.0
Methyl acetate	ND		1.3	2.5
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
Naphthalene	ND		0.43	1.0
n-Butylbenzene	ND		0.64	1.0
N-Propylbenzene	ND		0.69	1.0
o-Chlorotoluene	ND		0.86	1.0
o-Xylene	ND		0.76	1.0
p-Chlorotoluene	ND		0.84	1.0
p-Cymene	ND		0.31	1.0
sec-Butylbenzene	ND		0.75	1.0
Styrene	ND		0.73	1.0
Tert-amyl methyl ether	ND		0.27	1.0
tert-Butylbenzene	ND		0.81	1.0
Tetrachloroethene	ND		0.36	1.0
Tetrahydrofuran	ND		1.3	5.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
trans-1,4-Dichloro-2-butene	ND		0.22	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0
Vinyl acetate	ND		0.85	5.0
Vinyl chloride	ND		0.90	1.0

Analytical Data

Client: Waste Management

Job Number: 280-91030-1

Client Sample ID: OBWL-TD

Lab Sample ID: 280-91030-1

Date Sampled: 11/14/2016 1025

Client Matrix: Water

Date Received: 11/15/2016 0850

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333416	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S9893.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/25/2016 1122		Final Weight/Volume: 5 mL
Prep Date: 11/25/2016 1122		

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	100		77 - 120
4-Bromofluorobenzene (Surr)	95		73 - 120
Toluene-d8 (Surr)	99		80 - 120

Analytical Data

Client: Waste Management

Job Number: 280-91030-1

Client Sample ID: OBWL-TD

Lab Sample ID: 280-91030-1

Date Sampled: 11/14/2016 1025

Client Matrix: Water

Date Received: 11/15/2016 0850

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analysis Batch: 480-333416

Instrument ID: HP5973S

Prep Method: 5030C

Prep Batch: N/A

Lab File ID: S9893.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Analysis Date: 11/25/2016 1122

Final Weight/Volume: 5 mL

Prep Date: 11/25/2016 1122

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
67-72-1	Hexachloroethane TIC	ND	

Analytical Data

Client: Waste Management

Job Number: 280-91030-1

Client Sample ID: L-INF

Lab Sample ID: 280-91030-2

Date Sampled: 11/14/2016 1100

Client Matrix: Water

Date Received: 11/15/2016 0850

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333215	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S9819.D
Dilution: 5.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 1644		Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 1644		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	ND		1.8	5.0
1,1,1-Trichloroethane	ND		4.1	5.0
1,1,2,2-Tetrachloroethane	ND		1.1	5.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.6	5.0
1,1,2-Trichloroethane	ND		1.2	5.0
1,1-Dichloroethane	ND		1.9	5.0
1,1-Dichloroethene	ND		1.5	5.0
1,1-Dichloropropene	ND		3.6	5.0
1,2,3-Trichlorobenzene	ND		2.1	5.0
1,2,3-Trichloropropane	ND		4.5	5.0
1,2,4-Trichlorobenzene	ND		2.1	5.0
1,2,4-Trimethylbenzene	ND		3.8	5.0
1,2-Dibromo-3-Chloropropane	ND		2.0	5.0
1,2-Dibromoethane (EDB)	ND		3.7	5.0
1,2-Dichlorobenzene	ND		4.0	5.0
1,2-Dichloroethane	ND		1.1	5.0
1,2-Dichloroethene, Total	ND		4.1	10
1,2-Dichloropropane	ND		3.6	5.0
1,3,5-Trichlorobenzene	ND		1.2	5.0
1,3,5-Trimethylbenzene	ND		3.9	5.0
1,3-Dichlorobenzene	ND		3.9	5.0
1,3-Dichloropropane	ND		3.8	5.0
1,4-Dichlorobenzene	ND		4.2	5.0
1,4-Dioxane	ND		47	200
2,2-Dichloropropane	ND		2.0	5.0
2-Butanone (MEK)	ND		6.6	50
2-Chloroethyl vinyl ether	ND		4.8	25
2-Hexanone	ND		6.2	25
4-Methyl-2-pentanone (MIBK)	ND		11	25
Acetone	ND		15	50
Acetonitrile	ND		25	75
Acrolein	ND		4.6	100
Acrylonitrile	ND		4.2	25
Benzene	ND		2.1	5.0
Bromobenzene	ND		4.0	5.0
Bromochloromethane	ND		4.4	5.0
Bromodichloromethane	ND		2.0	5.0
Bromoform	ND		1.3	5.0
Bromomethane	ND		3.5	5.0
Butyl alcohol, n-	ND		44	200
Butyl alcohol, tert-	190		17	50
Carbon disulfide	ND		0.95	5.0
Carbon tetrachloride	ND		1.4	5.0
Chlorobenzene	ND		3.8	5.0
Chlorodifluoromethane	ND		1.3	5.0
Chloroethane	ND		1.6	5.0

Analytical Data

Client: Waste Management

Job Number: 280-91030-1

Client Sample ID: L-INF

Lab Sample ID: 280-91030-2

Date Sampled: 11/14/2016 1100

Client Matrix: Water

Date Received: 11/15/2016 0850

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C Analysis Batch: 480-333215 Instrument ID: HP5973S
Prep Method: 5030C Prep Batch: N/A Lab File ID: S9819.D
Dilution: 5.0 Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 1644 Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 1644

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloroform	ND		1.7	5.0
Chloromethane	ND		1.8	5.0
cis-1,2-Dichloroethene	ND		4.1	5.0
cis-1,3-Dichloropropene	ND		1.8	5.0
Cyclohexane	ND		0.90	5.0
Dibromochloromethane	ND		1.6	5.0
Dibromomethane	ND		2.1	5.0
Dichlorodifluoromethane	ND		3.4	5.0
Dichlorofluoromethane	ND		1.7	5.0
Ethyl acetate	ND		3.3	5.0
Ethyl ether	ND		3.6	5.0
Ethyl tert-butyl ether	ND		1.5	5.0
Ethylbenzene	ND		3.7	5.0
Hexachlorobutadiene	ND		1.4	5.0
Hexane	ND		2.0	50
Iodomethane	ND		1.5	5.0
Isobutanol	ND		24	130
Isopropyl ether	ND		3.0	5.0
Isopropylbenzene	ND		4.0	5.0
Methacrylonitrile	ND		3.5	25
Methyl acetate	ND		6.5	13
Methyl tert-butyl ether	ND		0.80	5.0
Methylcyclohexane	ND		0.80	5.0
Methylene Chloride	ND		2.2	5.0
m-Xylene & p-Xylene	ND		3.3	10
Naphthalene	ND		2.2	5.0
n-Butylbenzene	ND		3.2	5.0
N-Propylbenzene	ND		3.5	5.0
o-Chlorotoluene	ND		4.3	5.0
o-Xylene	ND		3.8	5.0
p-Chlorotoluene	ND		4.2	5.0
p-Cymene	ND		1.6	5.0
sec-Butylbenzene	ND		3.8	5.0
Styrene	ND		3.7	5.0
Tert-amyl methyl ether	ND		1.4	5.0
tert-Butylbenzene	ND		4.1	5.0
Tetrachloroethene	ND		1.8	5.0
Tetrahydrofuran	43		6.3	25
Toluene	ND		2.6	5.0
trans-1,2-Dichloroethene	ND		4.5	5.0
trans-1,3-Dichloropropene	ND		1.9	5.0
trans-1,4-Dichloro-2-butene	ND		1.1	5.0
Trichloroethene	ND		2.3	5.0
Trichlorofluoromethane	ND		4.4	5.0
Vinyl acetate	ND		4.3	25
Vinyl chloride	ND		4.5	5.0

Analytical Data

Client: Waste Management

Job Number: 280-91030-1

Client Sample ID: L-INF

Lab Sample ID: 280-91030-2

Date Sampled: 11/14/2016 1100

Client Matrix: Water

Date Received: 11/15/2016 0850

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333215	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S9819.D
Dilution: 5.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 1644		Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 1644		

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	102		77 - 120
4-Bromofluorobenzene (Surr)	97		73 - 120
Toluene-d8 (Surr)	101		80 - 120

Analytical Data

Client: Waste Management

Job Number: 280-91030-1

Client Sample ID: L-INF

Lab Sample ID: 280-91030-2

Date Sampled: 11/14/2016 1100

Client Matrix: Water

Date Received: 11/15/2016 0850

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analysis Batch: 480-333215

Instrument ID: HP5973S

Prep Method: 5030C

Prep Batch: N/A

Lab File ID: S9819.D

Dilution: 5.0

Initial Weight/Volume: 5 mL

Analysis Date: 11/23/2016 1644

Final Weight/Volume: 5 mL

Prep Date: 11/23/2016 1644

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
67-72-1	Hexachloroethane TIC	ND	

Analytical Data

Client: Waste Management

Job Number: 280-91030-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 280-91030-3TB

Date Sampled: 11/14/2016 0000

Client Matrix: Water

Date Received: 11/15/2016 0850

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333219	Instrument ID: HP5973P
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: P20497.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 1156		Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 1156		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	ND		0.35	1.0
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,1-Dichloropropene	ND		0.72	1.0
1,2,3-Trichlorobenzene	ND		0.41	1.0
1,2,3-Trichloropropane	ND		0.89	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2,4-Trimethylbenzene	ND		0.75	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane (EDB)	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloroethene, Total	ND		0.81	2.0
1,2-Dichloropropane	ND		0.72	1.0
1,3,5-Trichlorobenzene	ND		0.23	1.0
1,3,5-Trimethylbenzene	ND		0.77	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,3-Dichloropropane	ND		0.75	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
1,4-Dioxane	ND		9.3	40
2,2-Dichloropropane	ND		0.40	1.0
2-Butanone (MEK)	ND		1.3	10
2-Chloroethyl vinyl ether	ND		0.96	5.0
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Acetonitrile	ND		4.9	15
Acrolein	ND		0.91	20
Acrylonitrile	ND		0.83	5.0
Benzene	ND		0.41	1.0
Bromobenzene	ND		0.80	1.0
Bromochloromethane	ND		0.87	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Butyl alcohol, n-	ND		8.9	40
Butyl alcohol, tert-	ND		3.3	10
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Chlorodifluoromethane	ND		0.26	1.0
Chloroethane	ND		0.32	1.0

Analytical Data

Client: Waste Management

Job Number: 280-91030-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 280-91030-3TB

Date Sampled: 11/14/2016 0000

Client Matrix: Water

Date Received: 11/15/2016 0850

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C Analysis Batch: 480-333219 Instrument ID: HP5973P
Prep Method: 5030C Prep Batch: N/A Lab File ID: P20497.D
Dilution: 1.0 Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 1156 Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 1156

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dibromochloromethane	ND		0.32	1.0
Dibromomethane	ND		0.41	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Dichlorofluoromethane	ND		0.34	1.0
Ethyl acetate	ND		0.66	1.0
Ethyl ether	ND		0.72	1.0
Ethyl tert-butyl ether	ND		0.29	1.0
Ethylbenzene	ND		0.74	1.0
Hexachlorobutadiene	ND		0.28	1.0
Hexane	ND		0.40	10
Iodomethane	ND		0.30	1.0
Isobutanol	ND		4.8	25
Isopropyl ether	ND		0.59	1.0
Isopropylbenzene	ND		0.79	1.0
Methacrylonitrile	ND		0.69	5.0
Methyl acetate	ND		1.3	2.5
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
Naphthalene	ND		0.43	1.0
n-Butylbenzene	ND		0.64	1.0
N-Propylbenzene	ND		0.69	1.0
o-Chlorotoluene	ND		0.86	1.0
o-Xylene	ND		0.76	1.0
p-Chlorotoluene	ND		0.84	1.0
p-Cymene	ND		0.31	1.0
sec-Butylbenzene	ND		0.75	1.0
Styrene	ND		0.73	1.0
Tert-amyl methyl ether	ND		0.27	1.0
tert-Butylbenzene	ND		0.81	1.0
Tetrachloroethene	ND		0.36	1.0
Tetrahydrofuran	ND		1.3	5.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
trans-1,4-Dichloro-2-butene	ND		0.22	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0
Vinyl acetate	ND		0.85	5.0
Vinyl chloride	ND		0.90	1.0

Analytical Data

Client: Waste Management

Job Number: 280-91030-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 280-91030-3TB

Date Sampled: 11/14/2016 0000

Client Matrix: Water

Date Received: 11/15/2016 0850

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333219	Instrument ID: HP5973P
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: P20497.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 1156		Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 1156		

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	105		77 - 120
4-Bromofluorobenzene (Surr)	96		73 - 120
Toluene-d8 (Surr)	100		80 - 120

Analytical Data

Client: Waste Management

Job Number: 280-91030-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 280-91030-3TB

Date Sampled: 11/14/2016 0000

Client Matrix: Water

Date Received: 11/15/2016 0850

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analysis Batch: 480-333219

Instrument ID: HP5973P

Prep Method: 5030C

Prep Batch: N/A

Lab File ID: P20497.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Analysis Date: 11/23/2016 1156

Final Weight/Volume: 5 mL

Prep Date: 11/23/2016 1156

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
67-72-1	Hexachloroethane TIC	ND	

Analytical Data

Client: Waste Management

Job Number: 280-91030-1

Client Sample ID: OBWL-TD

Lab Sample ID: 280-91030-1

Date Sampled: 11/14/2016 1025

Client Matrix: Water

Date Received: 11/15/2016 0850

8260C SIM Volatile Organic Compounds (GC/MS)

Analysis Method: 8260C SIM	Analysis Batch: 480-332322	Instrument ID: HP5973J
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: J1466.D
Dilution: 1.0		Initial Weight/Volume: 25 mL
Analysis Date: 11/17/2016 2323		Final Weight/Volume: 25 mL
Prep Date: 11/17/2016 2323		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		0.0040	0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	96		50 - 150
TBA-d9 (Surr)	110		50 - 150

Analytical Data

Client: Waste Management

Job Number: 280-91030-1

Client Sample ID: L-INF

Lab Sample ID: 280-91030-2

Date Sampled: 11/14/2016 1100

Client Matrix: Water

Date Received: 11/15/2016 0850

8260C SIM Volatile Organic Compounds (GC/MS)

Analysis Method: 8260C SIM	Analysis Batch: 480-332322	Instrument ID: HP5973J
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: J1467.D
Dilution: 4.0		Initial Weight/Volume: 25 mL
Analysis Date: 11/17/2016 2348		Final Weight/Volume: 25 mL
Prep Date: 11/17/2016 2348		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	0.046	J B	0.016	0.080

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	99		50 - 150
TBA-d9 (Surr)	125		50 - 150

Analytical Data

Client: Waste Management

Job Number: 280-91030-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 280-91030-3TB

Date Sampled: 11/14/2016 0000

Client Matrix: Water

Date Received: 11/15/2016 0850

8260C SIM Volatile Organic Compounds (GC/MS)

Analysis Method:	8260C SIM	Analysis Batch:	480-332322	Instrument ID:	HP5973J
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	J1468.D
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	11/18/2016 0012			Final Weight/Volume:	25 mL
Prep Date:	11/18/2016 0012				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		0.0040	0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	98		50 - 150
TBA-d9 (Surr)	125		50 - 150

Analytical Data

Client: Waste Management

Job Number: 280-91030-1

Client Sample ID: OBWL-TD

Lab Sample ID: 280-91030-1

Date Sampled: 11/14/2016 1025

Client Matrix: Water

Date Received: 11/15/2016 0850

6010B Metals (ICP)-Dissolved

Analysis Method: 6010B Analysis Batch: 280-354109 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-352694 Lab File ID: 25a120216BB.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 12/03/2016 0020 Final Weight/Volume: 50 mL
Prep Date: 11/25/2016 1545

Analyte	Result (mg/L)	Qualifier	RL	RL
Calcium, Dissolved	24		0.040	0.040
Cobalt, Dissolved	ND		0.0030	0.0030
Iron, Dissolved	ND		0.060	0.060
Magnesium, Dissolved	2.9		0.050	0.050
Potassium, Dissolved	2.1		1.0	1.0

Analysis Method: 6010B Analysis Batch: 280-354656 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-352694 Lab File ID: 25A120716A.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 12/07/2016 1127 Final Weight/Volume: 50 mL
Prep Date: 11/25/2016 1545

Analyte	Result (mg/L)	Qualifier	RL	RL
Sodium, Dissolved	5.7		1.0	1.0

6020 Metals (ICP/MS)-Dissolved

Analysis Method: 6020 Analysis Batch: 280-353028 Instrument ID: MT_077
Prep Method: 3005A Prep Batch: 280-352489 Lab File ID: 177SMPL.d
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 11/23/2016 2323 Final Weight/Volume: 50 mL
Prep Date: 11/23/2016 1445

Analyte	Result (mg/L)	Qualifier	RL	RL
Antimony, Dissolved	0.0029		0.0010	0.0010
Barium, Dissolved	0.015		0.0010	0.0010
Beryllium, Dissolved	ND		0.0010	0.0010
Cadmium, Dissolved	ND		0.00020	0.00020
Chromium, Dissolved	ND		0.0030	0.0030
Copper, Dissolved	ND		0.0020	0.0020
Lead, Dissolved	ND		0.0010	0.0010
Manganese, Dissolved	0.0080		0.0010	0.0010
Nickel, Dissolved	0.0047		0.0040	0.0040
Selenium, Dissolved	ND		0.0010	0.0010
Silver, Dissolved	ND		0.0020	0.0020
Thallium, Dissolved	ND		0.0010	0.0010
Vanadium, Dissolved	ND		0.0020	0.0020
Zinc, Dissolved	0.13		0.0050	0.0050

Analytical Data

Client: Waste Management

Job Number: 280-91030-1

Client Sample ID: L-INF

Lab Sample ID: 280-91030-2

Date Sampled: 11/14/2016 1100

Client Matrix: Water

Date Received: 11/15/2016 0850

6010B Metals (ICP)-Dissolved

Analysis Method: 6010B Analysis Batch: 280-354109 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-352694 Lab File ID: 25a120216BB.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 12/03/2016 0023 Final Weight/Volume: 50 mL
Prep Date: 11/25/2016 1545

Analyte	Result (mg/L)	Qualifier	RL	RL
Calcium, Dissolved	150		0.040	0.040
Cobalt, Dissolved	0.0071		0.0030	0.0030
Iron, Dissolved	0.42		0.060	0.060
Magnesium, Dissolved	94		0.050	0.050
Potassium, Dissolved	100		1.0	1.0

Analysis Method: 6010B Analysis Batch: 280-354577 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-352694 Lab File ID: 25B120616.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 12/06/2016 1631 Final Weight/Volume: 50 mL
Prep Date: 11/25/2016 1545

Analyte	Result (mg/L)	Qualifier	RL	RL
Sodium, Dissolved	690		1.0	1.0

6020 Metals (ICP/MS)-Dissolved

Analysis Method: 6020 Analysis Batch: 280-353028 Instrument ID: MT_077
Prep Method: 3005A Prep Batch: 280-352489 Lab File ID: 178SMPL.d
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 11/23/2016 2327 Final Weight/Volume: 50 mL
Prep Date: 11/23/2016 1445

Analyte	Result (mg/L)	Qualifier	RL	RL
Antimony, Dissolved	ND		0.0010	0.0010
Barium, Dissolved	0.19		0.0010	0.0010
Beryllium, Dissolved	ND		0.0010	0.0010
Cadmium, Dissolved	ND		0.00020	0.00020
Chromium, Dissolved	0.0068		0.0030	0.0030
Copper, Dissolved	ND		0.0020	0.0020
Lead, Dissolved	ND		0.0010	0.0010
Manganese, Dissolved	2.7		0.0010	0.0010
Nickel, Dissolved	0.061		0.0040	0.0040
Selenium, Dissolved	ND		0.0010	0.0010
Silver, Dissolved	ND		0.0020	0.0020
Thallium, Dissolved	ND		0.0010	0.0010
Vanadium, Dissolved	0.0069		0.0020	0.0020
Zinc, Dissolved	ND		0.0050	0.0050

Client: Waste Management

Job Number: 280-91030-1

General Chemistry

Client Sample ID: OBWL-TD

Lab Sample ID: 280-91030-1

Date Sampled: 11/14/2016 1025

Client Matrix: Water

Date Received: 11/15/2016 0850

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Chloride	ND		mg/L	1.0	1.0	1.0	300.0
	Analysis Batch: 280-353988		Analysis Date: 12/02/2016 1422				
Sulfate	22		mg/L	1.0	1.0	1.0	300.0
	Analysis Batch: 280-353988		Analysis Date: 12/02/2016 1422				
Ammonia (as N)	ND		mg/L	0.030	0.030	1.0	350.1
	Analysis Batch: 280-352943		Analysis Date: 11/23/2016 1458				
Nitrate/Nitrite	0.27		mg/L	0.050	0.050	1.0	353.2
	Analysis Batch: 280-353604		Analysis Date: 11/29/2016 1906				
Chemical Oxygen Demand (COD)	14		mg/L	10	10	1.0	410.4
	Analysis Batch: 280-353505		Analysis Date: 11/29/2016 0923				
Alkalinity, Total (As CaCO3)	57		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-352383		Analysis Date: 11/20/2016 1310				
Alkalinity, Bicarbonate (As CaCO3)	57		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-352383		Analysis Date: 11/20/2016 1310				
Total Dissolved Solids (TDS)	140		mg/L	5.0	5.0	1.0	SM 2540C
	Analysis Batch: 280-352410		Analysis Date: 11/21/2016 1012				
Total Organic Carbon - Average	1.6		mg/L	1.0	1.0	1.0	SM 5310B
	Analysis Batch: 280-353712		Analysis Date: 11/30/2016 0034				

Client: Waste Management

Job Number: 280-91030-1

General Chemistry

Client Sample ID: L-INF

Lab Sample ID: 280-91030-2

Date Sampled: 11/14/2016 1100

Client Matrix: Water

Date Received: 11/15/2016 0850

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Chloride	680		mg/L	10	10	10	300.0
	Analysis Batch: 280-353988		Analysis Date: 12/02/2016 1458				
Sulfate	280		mg/L	10	10	10	300.0
	Analysis Batch: 280-353988		Analysis Date: 12/02/2016 1458				
Ammonia (as N)	150		mg/L	1.5	1.5	50	350.1
	Analysis Batch: 280-352943		Analysis Date: 11/23/2016 1504				
Nitrate/Nitrite	0.36		mg/L	0.050	0.050	1.0	353.2
	Analysis Batch: 280-353604		Analysis Date: 11/29/2016 1908				
Chemical Oxygen Demand (COD)	340		mg/L	50	50	5.0	410.4
	Analysis Batch: 280-353505		Analysis Date: 11/29/2016 0923				
Alkalinity, Total (As CaCO3)	1600		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-352383		Analysis Date: 11/20/2016 1317				
Alkalinity, Bicarbonate (As CaCO3)	1600		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-352383		Analysis Date: 11/20/2016 1317				
Total Dissolved Solids (TDS)	2700		mg/L	10	10	1.0	SM 2540C
	Analysis Batch: 280-352410		Analysis Date: 11/21/2016 1012				
Total Organic Carbon - Average	100		mg/L	5.0	5.0	5.0	SM 5310B
	Analysis Batch: 280-353712		Analysis Date: 11/30/2016 0124				

Analytical Data

Client: Waste Management

Job Number: 280-91030-1

Field Service / Mobile Lab

Client Sample ID: OBWL-TD

Lab Sample ID: 280-91030-1

Client Matrix: Water

Date Sampled: 11/14/2016 1025

Date Received: 11/15/2016 0850

Analyte	Result	Qual	Units	Dil	Method	Analysis Batch	Date Analyzed	Date Prepared
Specific Conductivity	145		umhos/cm	1.0	Field Sampling	280-352756	11/14/2016	1125
Dissolved Oxygen	8.53		mg/L	1.0	Field Sampling	280-352756	11/14/2016	1125
eH	129.3		millivolts	1.0	Field Sampling	280-352756	11/14/2016	1125
Turbidity	25.77		NTU	1.0	Field Sampling	280-352756	11/14/2016	1125
Temperature	13.29		Degrees C	1.0	Field Sampling	280-352756	11/14/2016	1125
pH	6.98		SU	1.0	Field Sampling	280-352756	11/14/2016	1125

Analytical Data

Client: Waste Management

Job Number: 280-91030-1

Field Service / Mobile Lab

Client Sample ID: L-INF

Lab Sample ID: 280-91030-2

Client Matrix: Water

Date Sampled: 11/14/2016 1100

Date Received: 11/15/2016 0850

Analyte	Result	Qual	Units	Dil	Method	Analysis Batch	Date Analyzed	Date Prepared
Specific Conductivity	43.83		umhos/cm	1.0	Field Sampling	280-352756	11/14/2016	1200
Dissolved Oxygen	6.16		mg/L	1.0	Field Sampling	280-352756	11/14/2016	1200
eH	104.0		millivolts	1.0	Field Sampling	280-352756	11/14/2016	1200
Turbidity	31.38		NTU	1.0	Field Sampling	280-352756	11/14/2016	1200
Temperature	18.24		Degrees C	1.0	Field Sampling	280-352756	11/14/2016	1200
pH	7.83		SU	1.0	Field Sampling	280-352756	11/14/2016	1200

DATA REPORTING QUALIFIERS

Client: Waste Management

Job Number: 280-91030-1

Lab Section	Qualifier	Description
GC/MS VOA	B	Compound was found in the blank and sample.
	F1	MS and/or MSD Recovery is outside acceptance limits.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
Metals	^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
	4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
General Chemistry	F3	Duplicate RPD exceeds the control limit
	F1	MS and/or MSD Recovery is outside acceptance limits.

QUALITY CONTROL RESULTS

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:480-332322					
LCS 480-332322/4	Lab Control Sample	T	Water	8260C SIM	
LCSD 480-332322/5	Lab Control Sample Duplicate	T	Water	8260C SIM	
MB 480-332322/7	Method Blank	T	Water	8260C SIM	
280-91030-1	OBWL-TD	T	Water	8260C SIM	
280-91030-2	L-INF	T	Water	8260C SIM	
280-91030-2MS	Matrix Spike	T	Water	8260C SIM	
280-91030-2MSD	Matrix Spike Duplicate	T	Water	8260C SIM	
280-91030-3TB	TRIP BLANK	T	Water	8260C SIM	
Analysis Batch:480-333215					
LCS 480-333215/4	Lab Control Sample	T	Water	8260C	
MB 480-333215/6	Method Blank	T	Water	8260C	
280-91030-2	L-INF	T	Water	8260C	
280-91030-2MS	Matrix Spike	T	Water	8260C	
280-91030-2MSD	Matrix Spike Duplicate	T	Water	8260C	
Analysis Batch:480-333219					
LCS 480-333219/7	Lab Control Sample	T	Water	8260C	
MB 480-333219/9	Method Blank	T	Water	8260C	
280-91030-3TB	TRIP BLANK	T	Water	8260C	
480-109585-K-8 MS	Matrix Spike	T	Water	8260C	
480-109585-K-8 MSD	Matrix Spike Duplicate	T	Water	8260C	
Analysis Batch:480-333416					
LCS 480-333416/5	Lab Control Sample	T	Water	8260C	
MB 480-333416/30	Method Blank	T	Water	8260C	
280-91030-1	OBWL-TD	T	Water	8260C	
280-91051-R-1 MS	Matrix Spike	T	Water	8260C	
280-91051-S-1 MSD	Matrix Spike Duplicate	T	Water	8260C	

Report Basis

T = Total

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 280-352489					
LCS 280-352489/2-A	Lab Control Sample	R	Water	3005A	
MB 280-352489/1-A	Method Blank	R	Water	3005A	
280-91030-1	OBWL-TD	D	Water	3005A	
280-91030-2	L-INF	D	Water	3005A	
280-91030-2MS	Matrix Spike	D	Water	3005A	
280-91030-2MSD	Matrix Spike Duplicate	D	Water	3005A	
Prep Batch: 280-352694					
LCS 280-352694/2-A	Lab Control Sample	R	Water	3005A	
MB 280-352694/1-A	Method Blank	R	Water	3005A	
280-90984-E-1-E MS	Matrix Spike	D	Water	3005A	
280-90984-E-1-F MSD	Matrix Spike Duplicate	D	Water	3005A	
280-91030-1	OBWL-TD	D	Water	3005A	
280-91030-2	L-INF	D	Water	3005A	
Analysis Batch:280-353028					
LCS 280-352489/2-A	Lab Control Sample	R	Water	6020	280-352489
MB 280-352489/1-A	Method Blank	R	Water	6020	280-352489
280-91030-1	OBWL-TD	D	Water	6020	280-352489
280-91030-2	L-INF	D	Water	6020	280-352489
280-91030-2MS	Matrix Spike	D	Water	6020	280-352489
280-91030-2MSD	Matrix Spike Duplicate	D	Water	6020	280-352489
Analysis Batch:280-354109					
LCS 280-352694/2-A	Lab Control Sample	R	Water	6010B	280-352694
MB 280-352694/1-A	Method Blank	R	Water	6010B	280-352694
280-90984-E-1-E MS	Matrix Spike	D	Water	6010B	280-352694
280-90984-E-1-F MSD	Matrix Spike Duplicate	D	Water	6010B	280-352694
280-91030-1	OBWL-TD	D	Water	6010B	280-352694
280-91030-2	L-INF	D	Water	6010B	280-352694
Analysis Batch:280-354577					
LCS 280-352694/2-A	Lab Control Sample	R	Water	6010B	280-352694
MB 280-352694/1-A	Method Blank	R	Water	6010B	280-352694
280-90984-E-1-E MS	Matrix Spike	D	Water	6010B	280-352694
280-90984-E-1-F MSD	Matrix Spike Duplicate	D	Water	6010B	280-352694
280-91030-1	OBWL-TD	D	Water	6010B	280-352694
280-91030-2	L-INF	D	Water	6010B	280-352694
Analysis Batch:280-354656					
280-91030-1	OBWL-TD	D	Water	6010B	280-352694

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
---------------	------------------	--------------	---------------	--------	------------

Report Basis

D = Dissolved

R = Total Recoverable

Field Service / Mobile Lab

Analysis Batch:280-352756

280-91030-1	OBWL-TD	T	Water	Field Sampling	
280-91030-2	L-INF	T	Water	Field Sampling	

Report Basis

T = Total

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:280-352383					
LCS 280-352383/4	Lab Control Sample	T	Water	SM 2320B	
MB 280-352383/5	Method Blank	T	Water	SM 2320B	
280-90999-A-1 DU	Duplicate	T	Water	SM 2320B	
280-91030-1	OBWL-TD	T	Water	SM 2320B	
280-91030-2	L-INF	T	Water	SM 2320B	
Analysis Batch:280-352410					
LCS 280-352410/2	Lab Control Sample	T	Water	SM 2540C	
MB 280-352410/1	Method Blank	T	Water	SM 2540C	
280-91030-1	OBWL-TD	T	Water	SM 2540C	
280-91030-1DU	Duplicate	T	Water	SM 2540C	
280-91030-2	L-INF	T	Water	SM 2540C	
Analysis Batch:280-352831					
LCS 280-352831/30	Lab Control Sample	T	Water	SM 2320B	
MB 280-352831/31	Method Blank	T	Water	SM 2320B	
280-91030-2	L-INF	T	Water	SM 2320B	
280-91153-A-1 DU	Duplicate	T	Water	SM 2320B	
Analysis Batch:280-352943					
LCS 280-352943/18	Lab Control Sample	T	Water	350.1	
LCSD 280-352943/19	Lab Control Sample Duplicate	T	Water	350.1	
MB 280-352943/20	Method Blank	T	Water	350.1	
280-91030-1	OBWL-TD	T	Water	350.1	
280-91030-1MS	Matrix Spike	T	Water	350.1	
280-91030-1MSD	Matrix Spike Duplicate	T	Water	350.1	
280-91030-2	L-INF	T	Water	350.1	
Analysis Batch:280-353099					
LCS 280-353099/110	Lab Control Sample	T	Water	350.1	
LCSD 280-353099/111	Lab Control Sample Duplicate	T	Water	350.1	
MB 280-353099/112	Method Blank	T	Water	350.1	
280-91030-2	L-INF	T	Water	350.1	
Analysis Batch:280-353505					
LCS 280-353505/3	Lab Control Sample	T	Water	410.4	
LCSD 280-353505/4	Lab Control Sample Duplicate	T	Water	410.4	
MB 280-353505/5	Method Blank	T	Water	410.4	
280-91030-1	OBWL-TD	T	Water	410.4	
280-91030-1MS	Matrix Spike	T	Water	410.4	
280-91030-1MSD	Matrix Spike Duplicate	T	Water	410.4	
280-91030-2	L-INF	T	Water	410.4	

TestAmerica Denver

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:280-353604					
LCS 280-353604/22	Lab Control Sample	T	Water	353.2	
LCS 280-353604/66	Lab Control Sample	T	Water	353.2	
MB 280-353604/23	Method Blank	T	Water	353.2	
MB 280-353604/67	Method Blank	T	Water	353.2	
280-90973-B-12 MS	Matrix Spike	T	Water	353.2	
280-90973-B-12 MSD	Matrix Spike Duplicate	T	Water	353.2	
280-91030-1	OBWL-TD	T	Water	353.2	
280-91030-2	L-INF	T	Water	353.2	
Analysis Batch:280-353712					
LCS 280-353712/3	Lab Control Sample	T	Water	SM 5310B	
LCSD 280-353712/4	Lab Control Sample Duplicate	T	Water	SM 5310B	
MB 280-353712/5	Method Blank	T	Water	SM 5310B	
280-90918-F-1 MS	Matrix Spike	T	Water	SM 5310B	
280-90918-F-1 MSD	Matrix Spike Duplicate	T	Water	SM 5310B	
280-91030-1	OBWL-TD	T	Water	SM 5310B	
280-91030-2	L-INF	T	Water	SM 5310B	
Analysis Batch:280-353988					
LCS 280-353988/4	Lab Control Sample	T	Water	300.0	
LCSD 280-353988/5	Lab Control Sample Duplicate	T	Water	300.0	
MB 280-353988/6	Method Blank	T	Water	300.0	
280-90914-A-1 DU	Duplicate	T	Water	300.0	
280-90914-A-1 MS	Matrix Spike	T	Water	300.0	
280-90914-A-1 MSD	Matrix Spike Duplicate	T	Water	300.0	
280-91030-1	OBWL-TD	T	Water	300.0	
280-91030-2	L-INF	T	Water	300.0	
280-91667-D-11 DU	Duplicate	T	Water	300.0	
280-91667-F-11 MS	Matrix Spike	T	Water	300.0	
280-91667-E-11 MSD	Matrix Spike Duplicate	T	Water	300.0	

Report Basis

T = Total

Client: Waste Management

Job Number: 280-91030-1

Surrogate Recovery Report

8260C Volatile Organic Compounds by GC/MS

Client Matrix: Water

Lab Sample ID	Client Sample ID	DCA %Rec	BFB %Rec	TOL %Rec
280-91030-1	OBWL-TD	100	95	99
280-91030-2	L-INF	102	97	101
280-91030-3	TRIP BLANK	105	96	100
MB 480-333215/6		102	100	101
MB 480-333219/9		104	99	100
MB 480-333416/30		100	94	101
LCS 480-333215/4		102	98	102
LCS 480-333219/7		100	100	100
LCS 480-333416/5		100	98	103
280-91030-2 MS	L-INF MS	100	97	101
480-109585-K-8 MS		101	95	99
280-91051-R-1 MS		101	95	102
280-91030-2 MSD	L-INF MSD	99	98	104
480-109585-K-8 MSD		101	100	101
280-91051-S-1 MSD		101	96	103

Surrogate	Acceptance Limits
DCA = 1,2-Dichloroethane-d4 (Surr)	77-120
BFB = 4-Bromofluorobenzene (Surr)	73-120
TOL = Toluene-d8 (Surr)	80-120

Client: Waste Management

Job Number: 280-91030-1

Surrogate Recovery Report

8260C SIM Volatile Organic Compounds (GC/MS)

Client Matrix: Water

Lab Sample ID	Client Sample ID	DBFM %Rec	TBA %Rec
280-91030-1	OBWL-TD	96	110
280-91030-2	L-INF	99	125
280-91030-3	TRIP BLANK	98	125
MB 480-332322/7		97	122
LCS 480-332322/4		99	104
LCSD 480-332322/5		104	117
280-91030-2 MS	L-INF MS	104	142
280-91030-2 MSD	L-INF MSD	104	138

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

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

Method Blank - Batch: 480-333215

**Method: 8260C
Preparation: 5030C**

Lab Sample ID: MB 480-333215/6
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/23/2016 1043
 Prep Date: 11/23/2016 1043
 Leach Date: N/A

Analysis Batch: 480-333215
 Prep Batch: N/A
 Leach Batch: N/A
 Units: ug/L

Instrument ID: HP5973S
 Lab File ID: S9804.D
 Initial Weight/Volume: 5 mL
 Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
1,1,1,2-Tetrachloroethane	ND		0.35	1.0
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,1-Dichloropropene	ND		0.72	1.0
1,2,3-Trichlorobenzene	ND		0.41	1.0
1,2,3-Trichloropropane	ND		0.89	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2,4-Trimethylbenzene	ND		0.75	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane (EDB)	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloroethene, Total	ND		0.81	2.0
1,2-Dichloropropane	ND		0.72	1.0
1,3,5-Trichlorobenzene	ND		0.23	1.0
1,3,5-Trimethylbenzene	ND		0.77	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,3-Dichloropropane	ND		0.75	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
1,4-Dioxane	ND		9.3	40
2,2-Dichloropropane	ND		0.40	1.0
2-Butanone (MEK)	ND		1.3	10
2-Chloroethyl vinyl ether	ND		0.96	5.0
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Acetonitrile	ND		4.9	15
Acrolein	ND		0.91	20
Acrylonitrile	ND		0.83	5.0
Benzene	ND		0.41	1.0
Bromobenzene	ND		0.80	1.0
Bromochloromethane	ND		0.87	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Butyl alcohol, n-	ND		8.9	40
Butyl alcohol, tert-	ND		3.3	10
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Chlorodifluoromethane	ND		0.26	1.0

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

Method Blank - Batch: 480-333215

**Method: 8260C
Preparation: 5030C**

Lab Sample ID: MB 480-333215/6
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/23/2016 1043
 Prep Date: 11/23/2016 1043
 Leach Date: N/A

Analysis Batch: 480-333215
 Prep Batch: N/A
 Leach Batch: N/A
 Units: ug/L

Instrument ID: HP5973S
 Lab File ID: S9804.D
 Initial Weight/Volume: 5 mL
 Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
Chloroethane	ND		0.32	1.0
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dibromochloromethane	ND		0.32	1.0
Dibromomethane	ND		0.41	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Dichlorofluoromethane	ND		0.34	1.0
Ethyl acetate	ND		0.66	1.0
Ethyl ether	ND		0.72	1.0
Ethyl tert-butyl ether	ND		0.29	1.0
Ethylbenzene	ND		0.74	1.0
Hexachlorobutadiene	ND		0.28	1.0
Hexane	ND		0.40	10
Iodomethane	ND		0.30	1.0
Isobutanol	ND		4.8	25
Isopropyl ether	ND		0.59	1.0
Isopropylbenzene	ND		0.79	1.0
Methacrylonitrile	ND		0.69	5.0
Methyl acetate	ND		1.3	2.5
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
Naphthalene	ND		0.43	1.0
n-Butylbenzene	ND		0.64	1.0
N-Propylbenzene	ND		0.69	1.0
o-Chlorotoluene	ND		0.86	1.0
o-Xylene	ND		0.76	1.0
p-Chlorotoluene	ND		0.84	1.0
p-Cymene	ND		0.31	1.0
sec-Butylbenzene	ND		0.75	1.0
Styrene	ND		0.73	1.0
Tert-amyl methyl ether	ND		0.27	1.0
tert-Butylbenzene	ND		0.81	1.0
Tetrachloroethene	ND		0.36	1.0
Tetrahydrofuran	ND		1.3	5.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
trans-1,4-Dichloro-2-butene	ND		0.22	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

Method Blank - Batch: 480-333215

Method: 8260C
Preparation: 5030C

Lab Sample ID: MB 480-333215/6	Analysis Batch: 480-333215	Instrument ID: HP5973S
Client Matrix: Water	Prep Batch: N/A	Lab File ID: S9804.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 1043	Units: ug/L	Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 1043		
Leach Date: N/A		

Analyte	Result	Qual	MDL	RL
Vinyl acetate	ND		0.85	5.0
Vinyl chloride	ND		0.90	1.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	102	77 - 120
4-Bromofluorobenzene (Surr)	100	73 - 120
Toluene-d8 (Surr)	101	80 - 120

Method Blank TICs- Batch: 480-333215

Cas Number	Analyte	RT	Est. Result (ug)	Qual
67-72-1	Hexachloroethane TIC	0.00	ND	

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

Lab Control Sample - Batch: 480-333215

**Method: 8260C
Preparation: 5030C**

Lab Sample ID:	LCS 480-333215/4	Analysis Batch:	480-333215	Instrument ID:	HP5973S
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	S9802.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	11/23/2016 0950	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	11/23/2016 0950				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,1,1,2-Tetrachloroethane	25.0	26.8	107	80 - 120	
1,1,1-Trichloroethane	25.0	25.9	104	73 - 126	
1,1,2,2-Tetrachloroethane	25.0	25.6	102	76 - 120	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	24.8	99	61 - 148	
1,1,2-Trichloroethane	25.0	25.5	102	76 - 122	
1,1-Dichloroethane	25.0	25.0	100	77 - 120	
1,1-Dichloroethene	25.0	27.2	109	66 - 127	
1,1-Dichloropropene	25.0	25.6	102	72 - 122	
1,2,3-Trichlorobenzene	25.0	24.9	100	75 - 123	
1,2,3-Trichloropropane	25.0	24.3	97	68 - 122	
1,2,4-Trichlorobenzene	25.0	25.6	102	79 - 122	
1,2,4-Trimethylbenzene	25.0	25.9	103	76 - 121	
1,2-Dibromo-3-Chloropropane	25.0	25.0	100	56 - 134	
1,2-Dibromoethane (EDB)	25.0	25.3	101	77 - 120	
1,2-Dichlorobenzene	25.0	26.1	105	80 - 124	
1,2-Dichloroethane	25.0	24.0	96	75 - 120	
1,2-Dichloropropane	25.0	24.4	98	76 - 120	
1,3,5-Trimethylbenzene	25.0	26.0	104	77 - 121	
1,3-Dichlorobenzene	25.0	25.8	103	77 - 120	
1,3-Dichloropropane	25.0	24.6	98	75 - 120	
1,4-Dichlorobenzene	25.0	25.4	102	80 - 120	
1,4-Dioxane	500	398	80	50 - 150	
2,2-Dichloropropane	25.0	27.3	109	63 - 136	
2-Butanone (MEK)	125	115	92	57 - 140	
2-Chloroethyl vinyl ether	25.0	24.4	98	70 - 129	
2-Hexanone	125	111	89	65 - 127	
4-Methyl-2-pentanone (MIBK)	125	109	87	71 - 125	
Acetone	125	115	92	56 - 142	
Acrolein	125	108	87	52 - 143	
Acrylonitrile	250	232	93	63 - 125	
Benzene	25.0	25.1	100	71 - 124	
Bromobenzene	25.0	24.5	98	78 - 120	
Bromochloromethane	25.0	26.6	107	72 - 130	
Bromodichloromethane	25.0	25.4	101	80 - 122	
Bromoform	25.0	25.4	102	61 - 132	
Bromomethane	25.0	25.1	100	55 - 144	
Butyl alcohol, tert-	250	219	88	75 - 125	
Carbon disulfide	25.0	23.1	92	59 - 134	
Carbon tetrachloride	25.0	26.0	104	72 - 134	
Chlorobenzene	25.0	24.9	99	80 - 120	
Chloroethane	25.0	28.0	112	69 - 136	
Chloroform	25.0	25.1	100	73 - 127	
Chloromethane	25.0	24.7	99	68 - 124	
cis-1,2-Dichloroethene	25.0	25.4	102	74 - 124	
cis-1,3-Dichloropropene	25.0	24.9	100	74 - 124	
Cyclohexane	25.0	25.1	100	59 - 135	

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

Lab Control Sample - Batch: 480-333215

**Method: 8260C
Preparation: 5030C**

Lab Sample ID: LCS 480-333215/4	Analysis Batch: 480-333215	Instrument ID: HP5973S
Client Matrix: Water	Prep Batch: N/A	Lab File ID: S9802.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 0950	Units: ug/L	Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 0950		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Dibromochloromethane	25.0	25.3	101	75 - 125	
Dibromomethane	25.0	25.1	100	76 - 127	
Dichlorodifluoromethane	25.0	25.5	102	59 - 135	
Dichlorofluoromethane	25.0	24.4	98	76 - 127	
Ethyl ether	25.0	26.2	105	76 - 123	
Ethylbenzene	25.0	24.3	97	77 - 123	
Hexachlorobutadiene	25.0	24.4	98	68 - 131	
Hexane	25.0	24.9	100	54 - 146	
Iodomethane	25.0	24.8	99	78 - 123	
Isobutanol	625	572	92	51 - 150	
Isopropylbenzene	25.0	25.4	102	77 - 122	
Methyl acetate	125	110	88	74 - 133	
Methyl tert-butyl ether	25.0	24.3	97	77 - 120	
Methylcyclohexane	25.0	26.0	104	68 - 134	
Methylene Chloride	25.0	23.9	95	75 - 124	
m-Xylene & p-Xylene	25.0	24.4	98	76 - 122	
Naphthalene	25.0	24.3	97	66 - 125	
n-Butylbenzene	25.0	26.5	106	71 - 128	
N-Propylbenzene	25.0	25.3	101	75 - 127	
o-Chlorotoluene	25.0	25.0	100	76 - 121	
o-Xylene	25.0	24.7	99	76 - 122	
p-Chlorotoluene	25.0	25.2	101	77 - 121	
p-Cymene	25.0	26.0	104	73 - 120	
sec-Butylbenzene	25.0	25.4	101	74 - 127	
Styrene	25.0	24.8	99	80 - 120	
tert-Butylbenzene	25.0	26.0	104	75 - 123	
Tetrachloroethene	25.0	25.0	100	74 - 122	
Tetrahydrofuran	50.0	41.2	82	62 - 132	
Toluene	25.0	24.8	99	80 - 122	
trans-1,2-Dichloroethene	25.0	25.8	103	73 - 127	
trans-1,3-Dichloropropene	25.0	25.1	100	80 - 120	
trans-1,4-Dichloro-2-butene	25.0	19.5	78	41 - 131	
Trichloroethene	25.0	25.1	101	74 - 123	
Trichlorofluoromethane	25.0	24.4	98	62 - 150	
Vinyl acetate	50.0	48.5	97	50 - 144	
Vinyl chloride	25.0	27.8	111	65 - 133	
Surrogate		% Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		102		77 - 120	
4-Bromofluorobenzene (Surr)		98		73 - 120	
Toluene-d8 (Surr)		102		80 - 120	

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 480-333215**

**Method: 8260C
Preparation: 5030C**

MS Lab Sample ID: 280-91030-2
Client Matrix: Water
Dilution: 5.0
Analysis Date: 11/23/2016 1902
Prep Date: 11/23/2016 1902
Leach Date: N/A

Analysis Batch: 480-333215
Prep Batch: N/A
Leach Batch: N/A

Instrument ID: HP5973S
Lab File ID: S9825.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL
5 mL

MSD Lab Sample ID: 280-91030-2
Client Matrix: Water
Dilution: 5.0
Analysis Date: 11/23/2016 1925
Prep Date: 11/23/2016 1925
Leach Date: N/A

Analysis Batch: 480-333215
Prep Batch: N/A
Leach Batch: N/A

Instrument ID: HP5973S
Lab File ID: S9826.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL
5 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
1,1,1,2-Tetrachloroethane	109	109	80 - 120	0	20		
1,1,1-Trichloroethane	109	105	73 - 126	4	15		
1,1,2,2-Tetrachloroethane	101	103	76 - 120	1	15		
1,1,2-Trichloro-1,2,2-trifluoroethane	106	98	61 - 148	8	20		
1,1,2-Trichloroethane	104	108	76 - 122	4	15		
1,1-Dichloroethane	104	100	77 - 120	4	20		
1,1-Dichloroethene	114	108	66 - 127	5	16		
1,1-Dichloropropene	110	106	72 - 122	4	20		
1,2,3-Trichlorobenzene	98	98	75 - 123	0	20		
1,2,3-Trichloropropane	97	98	68 - 122	1	14		
1,2,4-Trichlorobenzene	99	99	79 - 122	1	20		
1,2,4-Trimethylbenzene	106	103	76 - 121	3	20		
1,2-Dibromo-3-Chloropropane	97	100	56 - 134	4	15		
1,2-Dibromoethane (EDB)	102	105	77 - 120	3	15		
1,2-Dichlorobenzene	104	103	80 - 124	1	20		
1,2-Dichloroethane	97	93	75 - 120	4	20		
1,2-Dichloropropane	101	97	76 - 120	4	20		
1,3,5-Trimethylbenzene	105	102	77 - 121	3	20		
1,3-Dichlorobenzene	105	102	77 - 120	3	20		
1,3-Dichloropropane	99	102	75 - 120	3	20		
1,4-Dichlorobenzene	102	100	78 - 124	2	20		
1,4-Dioxane	69	82	50 - 150	17	20		
2,2-Dichloropropane	104	99	63 - 136	6	20		
2-Butanone (MEK)	88	86	57 - 140	2	20		
2-Chloroethyl vinyl ether	96	92	70 - 129	4	20		
2-Hexanone	84	87	65 - 127	4	15		
4-Methyl-2-pentanone (MIBK)	88	91	71 - 125	4	35		
Acetone	79	78	56 - 142	0	15		
Acrolein	88	86	52 - 143	3	20		
Acrylonitrile	93	89	63 - 125	4	20		
Benzene	106	101	71 - 124	4	13		
Bromobenzene	104	98	78 - 120	5	15		
Bromochloromethane	108	101	72 - 130	6	15		

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 480-333215**

**Method: 8260C
Preparation: 5030C**

MS Lab Sample ID: 280-91030-2
Client Matrix: Water
Dilution: 5.0
Analysis Date: 11/23/2016 1902
Prep Date: 11/23/2016 1902
Leach Date: N/A

Analysis Batch: 480-333215
Prep Batch: N/A
Leach Batch: N/A

Instrument ID: HP5973S
Lab File ID: S9825.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL
5 mL

MSD Lab Sample ID: 280-91030-2
Client Matrix: Water
Dilution: 5.0
Analysis Date: 11/23/2016 1925
Prep Date: 11/23/2016 1925
Leach Date: N/A

Analysis Batch: 480-333215
Prep Batch: N/A
Leach Batch: N/A

Instrument ID: HP5973S
Lab File ID: S9826.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL
5 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Bromodichloromethane	102	99	80 - 122	3	15		
Bromoform	97	99	61 - 132	2	15		
Bromomethane	109	98	55 - 144	11	15		
Butyl alcohol, tert-	75	80	75 - 125	6	15		
Carbon disulfide	98	93	59 - 134	6	15		
Carbon tetrachloride	115	106	72 - 134	8	15		
Chlorobenzene	102	103	80 - 120	1	25		
Chloroethane	117	113	69 - 136	4	15		
Chloroform	103	99	73 - 127	4	20		
Chloromethane	110	101	68 - 124	9	15		
cis-1,2-Dichloroethene	107	101	74 - 124	6	15		
cis-1,3-Dichloropropene	100	95	74 - 124	5	15		
Cyclohexane	112	103	59 - 135	8	20		
Dibromochloromethane	103	106	75 - 125	3	15		
Dibromomethane	102	100	76 - 127	2	15		
Dichlorodifluoromethane	109	100	59 - 135	8	20		
Dichlorofluoromethane	106	101	76 - 127	5	20		
Ethyl ether	106	102	76 - 123	4	20		
Ethylbenzene	103	101	77 - 123	2	15		
Hexachlorobutadiene	95	96	68 - 131	1	20		
Hexane	103	94	54 - 146	9			
Iodomethane	102	97	78 - 123	5	20		
Isobutanol	80	82	51 - 150	3	20		
Isopropylbenzene	105	102	77 - 122	2	20		
Methyl acetate	89	88	74 - 133	1	20		
Methyl tert-butyl ether	99	96	77 - 120	3	37		
Methylcyclohexane	110	101	68 - 134	8	20		
Methylene Chloride	98	96	75 - 124	3	15		
m-Xylene & p-Xylene	101	101	76 - 122	1	16		
Naphthalene	96	97	66 - 125	1	20		
n-Butylbenzene	106	102	71 - 128	3	15		
N-Propylbenzene	104	101	75 - 127	4	15		
o-Chlorotoluene	103	102	76 - 121	1	20		

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 480-333215**

**Method: 8260C
Preparation: 5030C**

MS Lab Sample ID: 280-91030-2	Analysis Batch: 480-333215	Instrument ID: HP5973S
Client Matrix: Water	Prep Batch: N/A	Lab File ID: S9825.D
Dilution: 5.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 1902		Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 1902		5 mL
Leach Date: N/A		

MSD Lab Sample ID: 280-91030-2	Analysis Batch: 480-333215	Instrument ID: HP5973S
Client Matrix: Water	Prep Batch: N/A	Lab File ID: S9826.D
Dilution: 5.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 1925		Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 1925		5 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
o-Xylene	102	103	76 - 122	2	16		
p-Chlorotoluene	103	101	77 - 121	2	15		
p-Cymene	105	102	73 - 120	3	20		
sec-Butylbenzene	104	102	74 - 127	3	15		
Styrene	102	103	80 - 120	0	20		
tert-Butylbenzene	107	104	75 - 123	3	15		
Tetrachloroethene	105	103	74 - 122	2	20		
Tetrahydrofuran	85	85	62 - 132	0	25		
Toluene	104	104	80 - 122	0	15		
trans-1,2-Dichloroethene	110	102	73 - 127	8	20		
trans-1,3-Dichloropropene	96	100	80 - 120	5	15		
trans-1,4-Dichloro-2-butene	65	69	41 - 131	5	20		
Trichloroethene	105	99	74 - 123	6	16		
Trichlorofluoromethane	110	103	62 - 150	6	20		
Vinyl acetate	91	91	50 - 144	1	23		
Vinyl chloride	123	115	65 - 133	7	15		
Surrogate		MS % Rec	MSD % Rec			Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		100	99			77 - 120	
4-Bromofluorobenzene (Surr)		97	98			73 - 120	
Toluene-d8 (Surr)		101	104			80 - 120	

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 480-333215**

**Method: 8260C
Preparation: 5030C**

MS Lab Sample ID: 280-91030-2
Client Matrix: Water
Dilution: 5.0
Analysis Date: 11/23/2016 1902
Prep Date: 11/23/2016 1902
Leach Date: N/A

Units: ug/L

MSD Lab Sample ID: 280-91030-2
Client Matrix: Water
Dilution: 5.0
Analysis Date: 11/23/2016 1925
Prep Date: 11/23/2016 1925
Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
1,1,1,2-Tetrachloroethane	ND	125	125	136	136
1,1,1-Trichloroethane	ND	125	125	136	131
1,1,2,2-Tetrachloroethane	ND	125	125	127	128
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	125	125	133	122
1,1,2-Trichloroethane	ND	125	125	130	135
1,1-Dichloroethane	ND	125	125	130	125
1,1-Dichloroethene	ND	125	125	142	135
1,1-Dichloropropene	ND	125	125	137	132
1,2,3-Trichlorobenzene	ND	125	125	122	123
1,2,3-Trichloropropane	ND	125	125	122	123
1,2,4-Trichlorobenzene	ND	125	125	124	123
1,2,4-Trimethylbenzene	ND	125	125	132	128
1,2-Dibromo-3-Chloropropane	ND	125	125	121	125
1,2-Dibromoethane (EDB)	ND	125	125	127	131
1,2-Dichlorobenzene	ND	125	125	130	128
1,2-Dichloroethane	ND	125	125	122	116
1,2-Dichloropropane	ND	125	125	127	122
1,3,5-Trimethylbenzene	ND	125	125	131	128
1,3-Dichlorobenzene	ND	125	125	131	128
1,3-Dichloropropane	ND	125	125	124	127
1,4-Dichlorobenzene	ND	125	125	127	125
1,4-Dioxane	ND	2500	2500	1730	2040
2,2-Dichloropropane	ND	125	125	130	123
2-Butanone (MEK)	ND	625	625	549	537
2-Chloroethyl vinyl ether	ND	125	125	119	115
2-Hexanone	ND	625	625	522	543
4-Methyl-2-pentanone (MIBK)	ND	625	625	550	570
Acetone	ND	625	625	492	490
Acrolein	ND	625	625	550	536
Acrylonitrile	ND	1250	1250	1160	1110
Benzene	ND	125	125	132	126
Bromobenzene	ND	125	125	130	123
Bromochloromethane	ND	125	125	135	127
Bromodichloromethane	ND	125	125	128	124
Bromoform	ND	125	125	122	124
Bromomethane	ND	125	125	136	123
Butyl alcohol, tert-	190	1250	1250	1130	1200
Carbon disulfide	ND	125	125	123	116
Carbon tetrachloride	ND	125	125	143	133
Chlorobenzene	ND	125	125	127	129
Chloroethane	ND	125	125	146	141
Chloroform	ND	125	125	129	124
Chloromethane	ND	125	125	138	126

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 480-333215**

**Method: 8260C
Preparation: 5030C**

MS Lab Sample ID: 280-91030-2
Client Matrix: Water
Dilution: 5.0
Analysis Date: 11/23/2016 1902
Prep Date: 11/23/2016 1902
Leach Date: N/A

Units: ug/L

MSD Lab Sample ID: 280-91030-2
Client Matrix: Water
Dilution: 5.0
Analysis Date: 11/23/2016 1925
Prep Date: 11/23/2016 1925
Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
cis-1,2-Dichloroethene	ND	125	125	134	126
cis-1,3-Dichloropropene	ND	125	125	125	119
Cyclohexane	ND	125	125	140	129
Dibromochloromethane	ND	125	125	128	132
Dibromomethane	ND	125	125	128	126
Dichlorodifluoromethane	ND	125	125	136	126
Dichlorofluoromethane	ND	125	125	133	126
Ethyl ether	ND	125	125	133	127
Ethylbenzene	ND	125	125	128	126
Hexachlorobutadiene	ND	125	125	119	120
Hexane	ND	125	125	129	117
Iodomethane	ND	125	125	127	121
Isobutanol	ND	3130	3130	2500	2570
Isopropylbenzene	ND	125	125	131	128
Methyl acetate	ND	625	625	555	548
Methyl tert-butyl ether	ND	125	125	123	120
Methylcyclohexane	ND	125	125	137	127
Methylene Chloride	ND	125	125	123	120
m-Xylene & p-Xylene	ND	125	125	126	127
Naphthalene	ND	125	125	121	121
n-Butylbenzene	ND	125	125	132	128
N-Propylbenzene	ND	125	125	130	126
o-Chlorotoluene	ND	125	125	128	127
o-Xylene	ND	125	125	127	129
p-Chlorotoluene	ND	125	125	128	126
p-Cymene	ND	125	125	131	127
sec-Butylbenzene	ND	125	125	130	127
Styrene	ND	125	125	128	128
tert-Butylbenzene	ND	125	125	134	130
Tetrachloroethene	ND	125	125	132	129
Tetrahydrofuran	43	250	250	256	255
Toluene	ND	125	125	130	130
trans-1,2-Dichloroethene	ND	125	125	138	127
trans-1,3-Dichloropropene	ND	125	125	120	125
trans-1,4-Dichloro-2-butene	ND	125	125	81.7	86.1
Trichloroethene	ND	125	125	131	124
Trichlorofluoromethane	ND	125	125	137	129
Vinyl acetate	ND	250	250	229	227
Vinyl chloride	ND	125	125	154	143

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

Method Blank - Batch: 480-333219

**Method: 8260C
Preparation: 5030C**

Lab Sample ID: MB 480-333219/9
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/23/2016 1112
 Prep Date: 11/23/2016 1112
 Leach Date: N/A

Analysis Batch: 480-333219
 Prep Batch: N/A
 Leach Batch: N/A
 Units: ug/L

Instrument ID: HP5973P
 Lab File ID: P20496.D
 Initial Weight/Volume: 5 mL
 Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
1,1,1,2-Tetrachloroethane	ND		0.35	1.0
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,1-Dichloropropene	ND		0.72	1.0
1,2,3-Trichlorobenzene	ND		0.41	1.0
1,2,3-Trichloropropane	ND		0.89	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2,4-Trimethylbenzene	ND		0.75	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane (EDB)	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloroethene, Total	ND		0.81	2.0
1,2-Dichloropropane	ND		0.72	1.0
1,3,5-Trichlorobenzene	ND		0.23	1.0
1,3,5-Trimethylbenzene	ND		0.77	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,3-Dichloropropane	ND		0.75	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
1,4-Dioxane	ND		9.3	40
2,2-Dichloropropane	ND		0.40	1.0
2-Butanone (MEK)	ND		1.3	10
2-Chloroethyl vinyl ether	ND		0.96	5.0
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Acetonitrile	ND		4.9	15
Acrolein	ND		0.91	20
Acrylonitrile	ND		0.83	5.0
Benzene	ND		0.41	1.0
Bromobenzene	ND		0.80	1.0
Bromochloromethane	ND		0.87	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Butyl alcohol, n-	ND		8.9	40
Butyl alcohol, tert-	ND		3.3	10
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Chlorodifluoromethane	ND		0.26	1.0

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

Method Blank - Batch: 480-333219

**Method: 8260C
Preparation: 5030C**

Lab Sample ID: MB 480-333219/9
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/23/2016 1112
 Prep Date: 11/23/2016 1112
 Leach Date: N/A

Analysis Batch: 480-333219
 Prep Batch: N/A
 Leach Batch: N/A
 Units: ug/L

Instrument ID: HP5973P
 Lab File ID: P20496.D
 Initial Weight/Volume: 5 mL
 Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
Chloroethane	ND		0.32	1.0
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dibromochloromethane	ND		0.32	1.0
Dibromomethane	ND		0.41	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Dichlorofluoromethane	ND		0.34	1.0
Ethyl acetate	ND		0.66	1.0
Ethyl ether	ND		0.72	1.0
Ethyl tert-butyl ether	ND		0.29	1.0
Ethylbenzene	ND		0.74	1.0
Hexachlorobutadiene	ND		0.28	1.0
Hexane	ND		0.40	10
Iodomethane	ND		0.30	1.0
Isobutanol	ND		4.8	25
Isopropyl ether	ND		0.59	1.0
Isopropylbenzene	ND		0.79	1.0
Methacrylonitrile	ND		0.69	5.0
Methyl acetate	ND		1.3	2.5
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
Naphthalene	ND		0.43	1.0
n-Butylbenzene	ND		0.64	1.0
N-Propylbenzene	ND		0.69	1.0
o-Chlorotoluene	ND		0.86	1.0
o-Xylene	ND		0.76	1.0
p-Chlorotoluene	ND		0.84	1.0
p-Cymene	ND		0.31	1.0
sec-Butylbenzene	ND		0.75	1.0
Styrene	ND		0.73	1.0
Tert-amyl methyl ether	ND		0.27	1.0
tert-Butylbenzene	ND		0.81	1.0
Tetrachloroethene	ND		0.36	1.0
Tetrahydrofuran	ND		1.3	5.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
trans-1,4-Dichloro-2-butene	ND		0.22	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

Method Blank - Batch: 480-333219

Method: 8260C
Preparation: 5030C

Lab Sample ID:	MB 480-333219/9	Analysis Batch:	480-333219	Instrument ID:	HP5973P
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	P20496.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	11/23/2016 1112	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	11/23/2016 1112				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Vinyl acetate	ND		0.85	5.0
Vinyl chloride	ND		0.90	1.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	104	77 - 120
4-Bromofluorobenzene (Surr)	99	73 - 120
Toluene-d8 (Surr)	100	80 - 120

Method Blank TICs- Batch: 480-333219

Cas Number	Analyte	RT	Est. Result (ug)	Qual
67-72-1	Hexachloroethane TIC	0.00	ND	

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

Lab Control Sample - Batch: 480-333219

**Method: 8260C
Preparation: 5030C**

Lab Sample ID: LCS 480-333219/7	Analysis Batch: 480-333219	Instrument ID: HP5973P
Client Matrix: Water	Prep Batch: N/A	Lab File ID: P20494.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 1017	Units: ug/L	Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 1017		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,1,1,2-Tetrachloroethane	25.0	24.9	100	80 - 120	
1,1,1-Trichloroethane	25.0	23.5	94	73 - 126	
1,1,2,2-Tetrachloroethane	25.0	23.7	95	76 - 120	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	23.9	96	61 - 148	
1,1,2-Trichloroethane	25.0	24.3	97	76 - 122	
1,1-Dichloroethane	25.0	23.7	95	77 - 120	
1,1-Dichloroethene	25.0	22.3	89	66 - 127	
1,1-Dichloropropene	25.0	23.7	95	72 - 122	
1,2,3-Trichlorobenzene	25.0	24.1	96	75 - 123	
1,2,3-Trichloropropane	25.0	23.7	95	68 - 122	
1,2,4-Trichlorobenzene	25.0	24.0	96	79 - 122	
1,2,4-Trimethylbenzene	25.0	24.3	97	76 - 121	
1,2-Dibromo-3-Chloropropane	25.0	23.5	94	56 - 134	
1,2-Dibromoethane (EDB)	25.0	24.4	97	77 - 120	
1,2-Dichlorobenzene	25.0	23.7	95	80 - 124	
1,2-Dichloroethane	25.0	24.1	96	75 - 120	
1,2-Dichloropropane	25.0	23.8	95	76 - 120	
1,3,5-Trimethylbenzene	25.0	23.9	96	77 - 121	
1,3-Dichlorobenzene	25.0	24.1	96	77 - 120	
1,3-Dichloropropane	25.0	24.0	96	75 - 120	
1,4-Dichlorobenzene	25.0	23.9	96	80 - 120	
1,4-Dioxane	500	507	101	50 - 150	
2,2-Dichloropropane	25.0	25.4	102	63 - 136	
2-Butanone (MEK)	125	125	100	57 - 140	
2-Chloroethyl vinyl ether	25.0	24.7	99	70 - 129	
2-Hexanone	125	122	97	65 - 127	
4-Methyl-2-pentanone (MIBK)	125	124	99	71 - 125	
Acetone	125	132	105	56 - 142	
Acrolein	125	131	105	52 - 143	
Acrylonitrile	250	241	96	63 - 125	
Benzene	25.0	23.7	95	71 - 124	
Bromobenzene	25.0	24.0	96	78 - 120	
Bromochloromethane	25.0	24.5	98	72 - 130	
Bromodichloromethane	25.0	24.4	97	80 - 122	
Bromoform	25.0	24.4	98	61 - 132	
Bromomethane	25.0	26.9	108	55 - 144	
Butyl alcohol, tert-	250	259	104	75 - 125	
Carbon disulfide	25.0	22.2	89	59 - 134	
Carbon tetrachloride	25.0	24.3	97	72 - 134	
Chlorobenzene	25.0	24.1	97	80 - 120	
Chloroethane	25.0	24.0	96	69 - 136	
Chloroform	25.0	23.6	94	73 - 127	
Chloromethane	25.0	23.5	94	68 - 124	
cis-1,2-Dichloroethene	25.0	24.2	97	74 - 124	
cis-1,3-Dichloropropene	25.0	24.6	99	74 - 124	
Cyclohexane	25.0	23.0	92	59 - 135	

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

Lab Control Sample - Batch: 480-333219

Method: 8260C
Preparation: 5030C

Lab Sample ID: LCS 480-333219/7	Analysis Batch: 480-333219	Instrument ID: HP5973P
Client Matrix: Water	Prep Batch: N/A	Lab File ID: P20494.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 1017	Units: ug/L	Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 1017		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Dibromochloromethane	25.0	25.0	100	75 - 125	
Dibromomethane	25.0	24.8	99	76 - 127	
Dichlorodifluoromethane	25.0	22.8	91	59 - 135	
Dichlorofluoromethane	25.0	26.6	107	76 - 127	
Ethyl ether	25.0	23.5	94	76 - 123	
Ethylbenzene	25.0	24.1	97	77 - 123	
Hexachlorobutadiene	25.0	24.0	96	68 - 131	
Hexane	25.0	23.7	95	54 - 146	
Iodomethane	25.0	24.4	98	78 - 123	
Isobutanol	625	647	103	51 - 150	
Isopropylbenzene	25.0	24.0	96	77 - 122	
Methyl acetate	125	120	96	74 - 133	
Methyl tert-butyl ether	25.0	24.4	97	77 - 120	
Methylcyclohexane	25.0	23.2	93	68 - 134	
Methylene Chloride	25.0	22.4	89	75 - 124	
m-Xylene & p-Xylene	25.0	24.2	97	76 - 122	
Naphthalene	25.0	24.0	96	66 - 125	
n-Butylbenzene	25.0	23.8	95	71 - 128	
N-Propylbenzene	25.0	24.4	97	75 - 127	
o-Chlorotoluene	25.0	24.3	97	76 - 121	
o-Xylene	25.0	23.5	94	76 - 122	
p-Chlorotoluene	25.0	24.2	97	77 - 121	
p-Cymene	25.0	24.1	97	73 - 120	
sec-Butylbenzene	25.0	23.9	95	74 - 127	
Styrene	25.0	24.6	98	80 - 120	
tert-Butylbenzene	25.0	23.4	94	75 - 123	
Tetrachloroethene	25.0	25.0	100	74 - 122	
Tetrahydrofuran	50.0	46.8	94	62 - 132	
Toluene	25.0	23.9	96	80 - 122	
trans-1,2-Dichloroethene	25.0	23.6	95	73 - 127	
trans-1,3-Dichloropropene	25.0	25.3	101	80 - 120	
trans-1,4-Dichloro-2-butene	25.0	20.3	81	41 - 131	
Trichloroethene	25.0	23.5	94	74 - 123	
Trichlorofluoromethane	25.0	24.9	99	62 - 150	
Vinyl acetate	50.0	50.3	101	50 - 144	
Vinyl chloride	25.0	23.9	96	65 - 133	
Surrogate		% Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		100		77 - 120	
4-Bromofluorobenzene (Surr)		100		73 - 120	
Toluene-d8 (Surr)		100		80 - 120	

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 480-333219**

**Method: 8260C
Preparation: 5030C**

MS Lab Sample ID: 480-109585-K-8 MS	Analysis Batch: 480-333219	Instrument ID: HP5973P
Client Matrix: Water	Prep Batch: N/A	Lab File ID: P20513.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 1912		Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 1912		5 mL
Leach Date: N/A		

MSD Lab Sample ID: 480-109585-K-8 MSD	Analysis Batch: 480-333219	Instrument ID: HP5973P
Client Matrix: Water	Prep Batch: N/A	Lab File ID: P20514.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 1940		Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 1940		5 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
1,1,1,2-Tetrachloroethane	105	107	80 - 120	2	20		
1,1,1-Trichloroethane	103	108	73 - 126	4	15		
1,1,2,2-Tetrachloroethane	104	105	76 - 120	1	15		
1,1,2-Trichloroethane	103	108	76 - 122	4	15		
1,1-Dichloroethane	106	107	77 - 120	1	20		
1,1-Dichloroethene	98	103	66 - 127	5	16		
1,2,3-Trichloropropane	102	104	68 - 122	1	14		
1,2-Dibromo-3-Chloropropane	100	98	56 - 134	2	15		
1,2-Dibromoethane (EDB)	102	108	77 - 120	6	15		
1,2-Dichlorobenzene	99	104	80 - 124	5	20		
1,2-Dichloroethane	105	104	75 - 120	1	20		
1,2-Dichloropropane	104	106	76 - 120	2	20		
1,4-Dichlorobenzene	99	103	78 - 124	4	20		
1,4-Dioxane	105	108	50 - 150	2	20		
2-Butanone (MEK)	113	111	57 - 140	2	20		
2-Hexanone	110	112	65 - 127	2	15		
4-Methyl-2-pentanone (MIBK)	111	113	71 - 125	2	35		
Acetone	121	118	56 - 142	2	15		
Acrylonitrile	104	103	63 - 125	1	20		
Benzene	103	106	71 - 124	3	13		
Bromochloromethane	102	103	72 - 130	1	15		
Bromodichloromethane	100	104	80 - 122	3	15		
Bromoform	83	88	61 - 132	6	15		
Bromomethane	108	93	55 - 144	14	15		
Carbon disulfide	100	102	59 - 134	1	15		
Carbon tetrachloride	106	111	72 - 134	5	15		
Chlorobenzene	102	108	80 - 120	6	25		
Chloroethane	112	103	69 - 136	8	15		
Chloroform	102	105	73 - 127	2	20		
Chloromethane	115	113	68 - 124	1	15		
cis-1,2-Dichloroethene	102	106	74 - 124	4	15		
cis-1,3-Dichloropropene	96	100	74 - 124	4	15		
Dibromochloromethane	97	103	75 - 125	6	15		

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 480-333219**

**Method: 8260C
Preparation: 5030C**

MS Lab Sample ID: 480-109585-K-8 MS	Analysis Batch: 480-333219	Instrument ID: HP5973P
Client Matrix: Water	Prep Batch: N/A	Lab File ID: P20513.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 1912		Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 1912		5 mL
Leach Date: N/A		

MSD Lab Sample ID: 480-109585-K-8 MSD	Analysis Batch: 480-333219	Instrument ID: HP5973P
Client Matrix: Water	Prep Batch: N/A	Lab File ID: P20514.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 1940		Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 1940		5 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Dibromomethane	106	106	76 - 127	0	15		
Ethylbenzene	102	110	77 - 123	7	15		
Iodomethane	103	106	78 - 123	3	20		
Methylene Chloride	99	101	75 - 124	2	15		
m-Xylene & p-Xylene	101	109	76 - 122	7	16		
o-Xylene	98	105	76 - 122	7	16		
Styrene	102	108	80 - 120	6	20		
Tetrachloroethene	102	110	74 - 122	8	20		
Tetrahydrofuran	109	107	62 - 132	2	25		
Toluene	102	109	80 - 122	6	15		
trans-1,2-Dichloroethene	103	106	73 - 127	3	20		
trans-1,3-Dichloropropene	98	105	80 - 120	7	15		
trans-1,4-Dichloro-2-butene	53	57	41 - 131	7	20		
Trichloroethene	101	104	74 - 123	3	16		
Trichlorofluoromethane	106	101	62 - 150	5	20		
Vinyl acetate	109	107	50 - 144	2	23		
Vinyl chloride	107	112	65 - 133	5	15		
Surrogate		MS % Rec	MSD % Rec			Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		101	101			77 - 120	
4-Bromofluorobenzene (Surr)		95	100			73 - 120	
Toluene-d8 (Surr)		99	101			80 - 120	

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 480-333219**

**Method: 8260C
Preparation: 5030C**

MS Lab Sample ID: 480-109585-K-8 MS Units: ug/L
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/23/2016 1912
 Prep Date: 11/23/2016 1912
 Leach Date: N/A

MSD Lab Sample ID: 480-109585-K-8 MSD
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/23/2016 1940
 Prep Date: 11/23/2016 1940
 Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
1,1,1,2-Tetrachloroethane	ND	25.0	25.0	26.2	26.8
1,1,1-Trichloroethane	ND	25.0	25.0	25.9	27.0
1,1,2,2-Tetrachloroethane	ND	25.0	25.0	26.0	26.2
1,1,2-Trichloroethane	ND	25.0	25.0	25.8	26.9
1,1-Dichloroethane	ND	25.0	25.0	26.6	26.9
1,1-Dichloroethene	ND	25.0	25.0	24.6	25.8
1,2,3-Trichloropropane	ND	25.0	25.0	25.6	25.9
1,2-Dibromo-3-Chloropropane	ND	25.0	25.0	25.1	24.6
1,2-Dibromoethane (EDB)	ND	25.0	25.0	25.4	26.9
1,2-Dichlorobenzene	ND	25.0	25.0	24.7	25.9
1,2-Dichloroethane	ND	25.0	25.0	26.3	26.0
1,2-Dichloropropane	ND	25.0	25.0	25.9	26.4
1,4-Dichlorobenzene	ND	25.0	25.0	24.8	25.8
1,4-Dioxane	ND	500	500	526	538
2-Butanone (MEK)	ND	125	125	141	138
2-Hexanone	ND	125	125	138	140
4-Methyl-2-pentanone (MIBK)	ND	125	125	139	142
Acetone	ND	125	125	151	148
Acrylonitrile	ND	250	250	260	258
Benzene	ND	25.0	25.0	25.7	26.6
Bromochloromethane	ND	25.0	25.0	25.5	25.7
Bromodichloromethane	ND	25.0	25.0	25.1	25.9
Bromoform	ND	25.0	25.0	20.6	21.9
Bromomethane	ND	25.0	25.0	26.9	23.3
Carbon disulfide	ND	25.0	25.0	25.1	25.5
Carbon tetrachloride	ND	25.0	25.0	26.6	27.9
Chlorobenzene	ND	25.0	25.0	25.5	27.0
Chloroethane	ND	25.0	25.0	28.1	25.9
Chloroform	ND	25.0	25.0	25.5	26.2
Chloromethane	ND	25.0	25.0	28.7	28.3
cis-1,2-Dichloroethene	ND	25.0	25.0	25.6	26.5
cis-1,3-Dichloropropene	ND	25.0	25.0	24.1	25.0
Dibromochloromethane	ND	25.0	25.0	24.2	25.7
Dibromomethane	ND	25.0	25.0	26.5	26.5
Ethylbenzene	ND	25.0	25.0	25.6	27.4
Iodomethane	ND	25.0	25.0	25.8	26.6
Methylene Chloride	ND	25.0	25.0	24.9	25.3
m-Xylene & p-Xylene	ND	25.0	25.0	25.3	27.2
o-Xylene	ND	25.0	25.0	24.5	26.3
Styrene	ND	25.0	25.0	25.5	27.0
Tetrachloroethene	ND	25.0	25.0	25.6	27.6
Tetrahydrofuran	ND	50.0	50.0	54.4	53.4
Toluene	ND	25.0	25.0	25.6	27.2

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 480-333219**

**Method: 8260C
Preparation: 5030C**

MS Lab Sample ID: 480-109585-K-8 MS Units: ug/L
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/23/2016 1912
 Prep Date: 11/23/2016 1912
 Leach Date: N/A

MSD Lab Sample ID: 480-109585-K-8 MSD
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/23/2016 1940
 Prep Date: 11/23/2016 1940
 Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
trans-1,2-Dichloroethene	ND	25.0	25.0	25.7	26.6
trans-1,3-Dichloropropene	ND	25.0	25.0	24.5	26.2
trans-1,4-Dichloro-2-butene	ND	25.0	25.0	13.2	14.2
Trichloroethene	ND	25.0	25.0	25.3	26.0
Trichlorofluoromethane	ND	25.0	25.0	26.6	25.4
Vinyl acetate	ND	50.0	50.0	54.5	53.6
Vinyl chloride	ND	25.0	25.0	26.7	28.0

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

Method Blank - Batch: 480-333416

Method: 8260C
Preparation: 5030C

Lab Sample ID: MB 480-333416/30
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/25/2016 1038
Prep Date: 11/25/2016 1038
Leach Date: N/A

Analysis Batch: 480-333416
Prep Batch: N/A
Leach Batch: N/A
Units: ug/L

Instrument ID: HP5973S
Lab File ID: S9891.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
1,1,1,2-Tetrachloroethane	ND		0.35	1.0
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,1-Dichloropropene	ND		0.72	1.0
1,2,3-Trichlorobenzene	ND		0.41	1.0
1,2,3-Trichloropropane	ND		0.89	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2,4-Trimethylbenzene	ND		0.75	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane (EDB)	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloroethene, Total	ND		0.81	2.0
1,2-Dichloropropane	ND		0.72	1.0
1,3,5-Trichlorobenzene	ND		0.23	1.0
1,3,5-Trimethylbenzene	ND		0.77	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,3-Dichloropropane	ND		0.75	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
1,4-Dioxane	ND		9.3	40
2,2-Dichloropropane	ND		0.40	1.0
2-Butanone (MEK)	ND		1.3	10
2-Chloroethyl vinyl ether	ND		0.96	5.0
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Acetonitrile	ND		4.9	15
Acrolein	ND		0.91	20
Acrylonitrile	ND		0.83	5.0
Benzene	ND		0.41	1.0
Bromobenzene	ND		0.80	1.0
Bromochloromethane	ND		0.87	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Butyl alcohol, n-	ND		8.9	40
Butyl alcohol, tert-	ND		3.3	10
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Chlorodifluoromethane	ND		0.26	1.0

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

Method Blank - Batch: 480-333416

**Method: 8260C
Preparation: 5030C**

Lab Sample ID: MB 480-333416/30
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/25/2016 1038
 Prep Date: 11/25/2016 1038
 Leach Date: N/A

Analysis Batch: 480-333416
 Prep Batch: N/A
 Leach Batch: N/A
 Units: ug/L

Instrument ID: HP5973S
 Lab File ID: S9891.D
 Initial Weight/Volume: 5 mL
 Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
Chloroethane	ND		0.32	1.0
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dibromochloromethane	ND		0.32	1.0
Dibromomethane	ND		0.41	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Dichlorofluoromethane	ND		0.34	1.0
Ethyl acetate	ND		0.66	1.0
Ethyl ether	ND		0.72	1.0
Ethyl tert-butyl ether	ND		0.29	1.0
Ethylbenzene	ND		0.74	1.0
Hexachlorobutadiene	ND		0.28	1.0
Hexane	ND		0.40	10
Iodomethane	ND		0.30	1.0
Isobutanol	ND		4.8	25
Isopropyl ether	ND		0.59	1.0
Isopropylbenzene	ND		0.79	1.0
Methacrylonitrile	ND		0.69	5.0
Methyl acetate	ND		1.3	2.5
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
Naphthalene	ND		0.43	1.0
n-Butylbenzene	ND		0.64	1.0
N-Propylbenzene	ND		0.69	1.0
o-Chlorotoluene	ND		0.86	1.0
o-Xylene	ND		0.76	1.0
p-Chlorotoluene	ND		0.84	1.0
p-Cymene	ND		0.31	1.0
sec-Butylbenzene	ND		0.75	1.0
Styrene	ND		0.73	1.0
Tert-amyl methyl ether	ND		0.27	1.0
tert-Butylbenzene	ND		0.81	1.0
Tetrachloroethene	ND		0.36	1.0
Tetrahydrofuran	ND		1.3	5.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
trans-1,4-Dichloro-2-butene	ND		0.22	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

Method Blank - Batch: 480-333416

Method: 8260C
Preparation: 5030C

Lab Sample ID:	MB 480-333416/30	Analysis Batch:	480-333416	Instrument ID:	HP5973S
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	S9891.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	11/25/2016 1038	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	11/25/2016 1038				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Vinyl acetate	ND		0.85	5.0
Vinyl chloride	ND		0.90	1.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	100	77 - 120
4-Bromofluorobenzene (Surr)	94	73 - 120
Toluene-d8 (Surr)	101	80 - 120

Method Blank TICs- Batch: 480-333416

Cas Number	Analyte	RT	Est. Result (ug)	Qual
67-72-1	Hexachloroethane TIC	0.00	ND	

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

Lab Control Sample - Batch: 480-333416

Method: 8260C
Preparation: 5030C

Lab Sample ID: LCS 480-333416/5	Analysis Batch: 480-333416	Instrument ID: HP5973S
Client Matrix: Water	Prep Batch: N/A	Lab File ID: S9887.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/25/2016 0906	Units: ug/L	Final Weight/Volume: 5 mL
Prep Date: 11/25/2016 0906		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,1,1,2-Tetrachloroethane	25.0	26.6	106	80 - 120	
1,1,1-Trichloroethane	25.0	25.2	101	73 - 126	
1,1,2,2-Tetrachloroethane	25.0	25.7	103	76 - 120	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	23.8	95	61 - 148	
1,1,2-Trichloroethane	25.0	25.2	101	76 - 122	
1,1-Dichloroethane	25.0	24.5	98	77 - 120	
1,1-Dichloroethene	25.0	25.1	101	66 - 127	
1,1-Dichloropropene	25.0	25.6	102	72 - 122	
1,2,3-Trichlorobenzene	25.0	25.6	102	75 - 123	
1,2,3-Trichloropropane	25.0	23.7	95	68 - 122	
1,2,4-Trichlorobenzene	25.0	25.3	101	79 - 122	
1,2,4-Trimethylbenzene	25.0	26.0	104	76 - 121	
1,2-Dibromo-3-Chloropropane	25.0	26.9	107	56 - 134	
1,2-Dibromoethane (EDB)	25.0	24.9	99	77 - 120	
1,2-Dichlorobenzene	25.0	26.1	104	80 - 124	
1,2-Dichloroethane	25.0	23.5	94	75 - 120	
1,2-Dichloropropane	25.0	24.8	99	76 - 120	
1,3,5-Trimethylbenzene	25.0	25.5	102	77 - 121	
1,3-Dichlorobenzene	25.0	25.8	103	77 - 120	
1,3-Dichloropropane	25.0	24.7	99	75 - 120	
1,4-Dichlorobenzene	25.0	25.1	100	80 - 120	
1,4-Dioxane	500	432	86	50 - 150	
2,2-Dichloropropane	25.0	27.1	108	63 - 136	
2-Butanone (MEK)	125	108	86	57 - 140	
2-Chloroethyl vinyl ether	25.0	23.3	93	70 - 129	
2-Hexanone	125	110	88	65 - 127	
4-Methyl-2-pentanone (MIBK)	125	112	89	71 - 125	
Acetone	125	100	80	56 - 142	
Acrolein	125	105	84	52 - 143	
Acrylonitrile	250	231	92	63 - 125	
Benzene	25.0	24.7	99	71 - 124	
Bromobenzene	25.0	24.0	96	78 - 120	
Bromochloromethane	25.0	24.9	99	72 - 130	
Bromodichloromethane	25.0	24.7	99	80 - 122	
Bromoform	25.0	26.6	107	61 - 132	
Bromomethane	25.0	24.0	96	55 - 144	
Butyl alcohol, tert-	250	198	79	75 - 125	
Carbon disulfide	25.0	21.3	85	59 - 134	
Carbon tetrachloride	25.0	26.1	104	72 - 134	
Chlorobenzene	25.0	24.7	99	80 - 120	
Chloroethane	25.0	29.1	116	69 - 136	
Chloroform	25.0	24.4	98	73 - 127	
Chloromethane	25.0	27.5	110	68 - 124	
cis-1,2-Dichloroethene	25.0	24.5	98	74 - 124	
cis-1,3-Dichloropropene	25.0	24.5	98	74 - 124	
Cyclohexane	25.0	25.2	101	59 - 135	

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

Lab Control Sample - Batch: 480-333416

Method: 8260C
Preparation: 5030C

Lab Sample ID: LCS 480-333416/5	Analysis Batch: 480-333416	Instrument ID: HP5973S
Client Matrix: Water	Prep Batch: N/A	Lab File ID: S9887.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/25/2016 0906	Units: ug/L	Final Weight/Volume: 5 mL
Prep Date: 11/25/2016 0906		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Dibromochloromethane	25.0	26.0	104	75 - 125	
Dibromomethane	25.0	25.0	100	76 - 127	
Dichlorodifluoromethane	25.0	28.7	115	59 - 135	
Dichlorofluoromethane	25.0	25.3	101	76 - 127	
Ethyl ether	25.0	24.4	98	76 - 123	
Ethylbenzene	25.0	24.5	98	77 - 123	
Hexachlorobutadiene	25.0	25.0	100	68 - 131	
Hexane	25.0	23.7	95	54 - 146	
Iodomethane	25.0	22.7	91	78 - 123	
Isobutanol	625	546	87	51 - 150	
Isopropylbenzene	25.0	24.9	100	77 - 122	
Methyl acetate	125	108	86	74 - 133	
Methyl tert-butyl ether	25.0	23.5	94	77 - 120	
Methylcyclohexane	25.0	24.7	99	68 - 134	
Methylene Chloride	25.0	22.5	90	75 - 124	
m-Xylene & p-Xylene	25.0	24.2	97	76 - 122	
Naphthalene	25.0	24.4	98	66 - 125	
n-Butylbenzene	25.0	26.7	107	71 - 128	
N-Propylbenzene	25.0	25.2	101	75 - 127	
o-Chlorotoluene	25.0	24.7	99	76 - 121	
o-Xylene	25.0	24.9	100	76 - 122	
p-Chlorotoluene	25.0	25.3	101	77 - 121	
p-Cymene	25.0	25.5	102	73 - 120	
sec-Butylbenzene	25.0	25.5	102	74 - 127	
Styrene	25.0	25.0	100	80 - 120	
tert-Butylbenzene	25.0	26.1	104	75 - 123	
Tetrachloroethene	25.0	24.9	100	74 - 122	
Tetrahydrofuran	50.0	42.0	84	62 - 132	
Toluene	25.0	24.9	100	80 - 122	
trans-1,2-Dichloroethene	25.0	24.4	98	73 - 127	
trans-1,3-Dichloropropene	25.0	25.5	102	80 - 120	
trans-1,4-Dichloro-2-butene	25.0	21.3	85	41 - 131	
Trichloroethene	25.0	24.2	97	74 - 123	
Trichlorofluoromethane	25.0	25.4	102	62 - 150	
Vinyl acetate	50.0	47.9	96	50 - 144	
Vinyl chloride	25.0	29.6	118	65 - 133	
Surrogate		% Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		100		77 - 120	
4-Bromofluorobenzene (Surr)		98		73 - 120	
Toluene-d8 (Surr)		103		80 - 120	

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 480-333416**

**Method: 8260C
Preparation: 5030C**

MS Lab Sample ID: 280-91051-R-1 MS	Analysis Batch: 480-333416	Instrument ID: HP5973S
Client Matrix: Water	Prep Batch: N/A	Lab File ID: S9915.D
Dilution: 50	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/25/2016 1757		Final Weight/Volume: 5 mL
Prep Date: 11/25/2016 1757		5 mL
Leach Date: N/A		

MSD Lab Sample ID: 280-91051-S-1 MSD	Analysis Batch: 480-333416	Instrument ID: HP5973S
Client Matrix: Water	Prep Batch: N/A	Lab File ID: S9916.D
Dilution: 50	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/25/2016 1820		Final Weight/Volume: 5 mL
Prep Date: 11/25/2016 1820		5 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
1,1,1,2-Tetrachloroethane	107	112	80 - 120	5	20		
1,1,1-Trichloroethane	108	112	73 - 126	4	15		
1,1,2,2-Tetrachloroethane	106	104	76 - 120	2	15		
1,1,2-Trichloroethane	101	105	76 - 122	3	15		
1,1-Dichloroethane	106	106	77 - 120	0	20		
1,1-Dichloroethene	113	112	66 - 127	1	16		
1,2-Dichloroethane	98	96	75 - 120	2	20		
1,3-Dichlorobenzene	104	106	77 - 120	2	20		
1,4-Dioxane	77	92	50 - 150	19	20		
2-Butanone (MEK)	87	88	57 - 140	1	20		
2-Hexanone	85	86	65 - 127	2	15		
4-Methyl-2-pentanone (MIBK)	89	89	71 - 125	0	35		
Acetone	84	83	56 - 142	1	15		
Benzene	106	108	71 - 124	2	13		
Bromodichloromethane	102	103	80 - 122	1	15		
Bromoform	101	105	61 - 132	3	15		
Bromomethane	102	96	55 - 144	6	15		
Carbon disulfide	103	104	59 - 134	1	15		
Carbon tetrachloride	114	115	72 - 134	1	15		
Chlorobenzene	100	103	80 - 120	2	25		
Chloroethane	45	51	69 - 136	3	15	F1	F1
Chloroform	103	103	73 - 127	0	20		
Chloromethane	110	110	68 - 124	0	15		
cis-1,2-Dichloroethene	106	109	74 - 124	3	15		
Dibromochloromethane	106	106	75 - 125	1	15		
Ethylbenzene	98	101	77 - 123	3	15		
Methylene Chloride	99	97	75 - 124	3	15		
m-Xylene & p-Xylene	100	102	76 - 122	2	16		
Naphthalene	95	96	66 - 125	1	20		
o-Xylene	101	100	76 - 122	0	16		
Styrene	100	101	80 - 120	1	20		
Tetrachloroethene	104	105	74 - 122	1	20		
Toluene	103	105	80 - 122	3	15		

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 480-333416**

**Method: 8260C
Preparation: 5030C**

MS Lab Sample ID: 280-91051-R-1 MS	Analysis Batch: 480-333416	Instrument ID: HP5973S
Client Matrix: Water	Prep Batch: N/A	Lab File ID: S9915.D
Dilution: 50	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/25/2016 1757		Final Weight/Volume: 5 mL
Prep Date: 11/25/2016 1757		5 mL
Leach Date: N/A		

MSD Lab Sample ID: 280-91051-S-1 MSD	Analysis Batch: 480-333416	Instrument ID: HP5973S
Client Matrix: Water	Prep Batch: N/A	Lab File ID: S9916.D
Dilution: 50	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/25/2016 1820		Final Weight/Volume: 5 mL
Prep Date: 11/25/2016 1820		5 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
trans-1,2-Dichloroethene	110	109	73 - 127	1	20		
Trichloroethene	105	104	74 - 123	1	16		
Vinyl acetate	97	98	50 - 144	1	23		
Vinyl chloride	123	125	65 - 133	2	15		
Surrogate		MS % Rec	MSD % Rec		Acceptance Limits		
1,2-Dichloroethane-d4 (Surr)		101	101		77 - 120		
4-Bromofluorobenzene (Surr)		95	96		73 - 120		
Toluene-d8 (Surr)		102	103		80 - 120		

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 480-333416**

**Method: 8260C
Preparation: 5030C**

MS Lab Sample ID: 280-91051-R-1 MS Units: ug/L
 Client Matrix: Water
 Dilution: 50
 Analysis Date: 11/25/2016 1757
 Prep Date: 11/25/2016 1757
 Leach Date: N/A

MSD Lab Sample ID: 280-91051-S-1 MSD
 Client Matrix: Water
 Dilution: 50
 Analysis Date: 11/25/2016 1820
 Prep Date: 11/25/2016 1820
 Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual	
1,1,1,2-Tetrachloroethane	ND	1250	1250	1330	1400	
1,1,1-Trichloroethane	ND	1250	1250	1350	1400	
1,1,2,2-Tetrachloroethane	ND	1250	1250	1320	1300	
1,1,2-Trichloroethane	ND	1250	1250	1270	1310	
1,1-Dichloroethane	ND	1250	1250	1320	1330	
1,1-Dichloroethene	ND	1250	1250	1420	1400	
1,2-Dichloroethane	ND	1250	1250	1230	1200	
1,3-Dichlorobenzene	ND	1250	1250	1300	1320	
1,4-Dioxane	ND	25000	25000	19100	23000	
2-Butanone (MEK)	ND	6250	6250	5470	5510	
2-Hexanone	ND	6250	6250	5290	5390	
4-Methyl-2-pentanone (MIBK)	ND	6250	6250	5570	5590	
Acetone	ND	6250	6250	5220	5160	
Benzene	ND	1250	1250	1320	1350	
Bromodichloromethane	ND	1250	1250	1280	1290	
Bromoform	ND	1250	1250	1270	1310	
Bromomethane	ND	1250	1250	1270	1200	
Carbon disulfide	ND	1250	1250	1290	1300	
Carbon tetrachloride	ND	1250	1250	1420	1440	
Chlorobenzene	ND	1250	1250	1250	1280	
Chloroethane	1600	1250	1250	2150	F1 2220	F1
Chloroform	ND	1250	1250	1290	1280	
Chloromethane	ND	1250	1250	1380	1370	
cis-1,2-Dichloroethene	ND	1250	1250	1320	1360	
Dibromochloromethane	ND	1250	1250	1320	1330	
Ethylbenzene	ND	1250	1250	1230	1270	
Methylene Chloride	ND	1250	1250	1240	1210	
m-Xylene & p-Xylene	ND	1250	1250	1250	1270	
Naphthalene	ND	1250	1250	1180	1190	
o-Xylene	ND	1250	1250	1260	1250	
Styrene	ND	1250	1250	1250	1270	
Tetrachloroethene	ND	1250	1250	1300	1310	
Toluene	ND	1250	1250	1280	1310	
trans-1,2-Dichloroethene	ND	1250	1250	1370	1360	
Trichloroethene	ND	1250	1250	1310	1300	
Vinyl acetate	ND	2500	2500	2430	2440	
Vinyl chloride	ND	1250	1250	1530	1560	

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

Method Blank - Batch: 480-332322

**Method: 8260C SIM
Preparation: 5030C**

Lab Sample ID: MB 480-332322/7	Analysis Batch: 480-332322	Instrument ID: HP5973J
Client Matrix: Water	Prep Batch: N/A	Lab File ID: J1464.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 25 mL
Analysis Date: 11/17/2016 2154	Units: ug/L	Final Weight/Volume: 25 mL
Prep Date: 11/17/2016 2154		
Leach Date: N/A		

Analyte	Result	Qual	MDL	RL
Vinyl chloride	0.00534	J	0.0040	0.020
Surrogate	% Rec		Acceptance Limits	
Dibromofluoromethane (Surr)	97		50 - 150	
TBA-d9 (Surr)	122		50 - 150	

Lab Control Sample/

**Method: 8260C SIM
Preparation: 5030C**

Lab Control Sample Duplicate Recovery Report - Batch: 480-332322

LCS Lab Sample ID: LCS 480-332322/4	Analysis Batch: 480-332322	Instrument ID: HP5973J
Client Matrix: Water	Prep Batch: N/A	Lab File ID: J1461.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 25 mL
Analysis Date: 11/17/2016 2041	Units: ug/L	Final Weight/Volume: 25 mL
Prep Date: 11/17/2016 2041		25 mL
Leach Date: N/A		

LCSD Lab Sample ID: LCSD 480-332322/5	Analysis Batch: 480-332322	Instrument ID: HP5973J
Client Matrix: Water	Prep Batch: N/A	Lab File ID: J1462.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 25 mL
Analysis Date: 11/17/2016 2105	Units: ug/L	Final Weight/Volume: 25 mL
Prep Date: 11/17/2016 2105		25 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Vinyl chloride	115	123	50 - 150	7	20		
Surrogate	LCS % Rec		LCSD % Rec		Acceptance Limits		
Dibromofluoromethane (Surr)	99		104		50 - 150		
TBA-d9 (Surr)	104		117		50 - 150		

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

**Laboratory Control/
Laboratory Duplicate Data Report - Batch: 480-332322**

**Method: 8260C SIM
Preparation: 5030C**

LCS Lab Sample ID: LCS 480-332322/4 Units: ug/L
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/17/2016 2041
 Prep Date: 11/17/2016 2041
 Leach Date: N/A

LCSD Lab Sample ID: LCSD 480-332322/5
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/17/2016 2105
 Prep Date: 11/17/2016 2105
 Leach Date: N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Vinyl chloride	0.200	0.200	0.230	0.246

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 480-332322**

**Method: 8260C SIM
Preparation: 5030C**

MS Lab Sample ID: 280-91030-2
 Client Matrix: Water
 Dilution: 4.0
 Analysis Date: 11/18/2016 0327
 Prep Date: 11/18/2016 0327
 Leach Date: N/A

Analysis Batch: 480-332322
 Prep Batch: N/A
 Leach Batch: N/A

Instrument ID: HP5973J
 Lab File ID: J1476.D
 Initial Weight/Volume: 25 mL
 Final Weight/Volume: 25 mL
 25 mL

MSD Lab Sample ID: 280-91030-2
 Client Matrix: Water
 Dilution: 4.0
 Analysis Date: 11/18/2016 0351
 Prep Date: 11/18/2016 0351
 Leach Date: N/A

Analysis Batch: 480-332322
 Prep Batch: N/A
 Leach Batch: N/A

Instrument ID: HP5973J
 Lab File ID: J1477.D
 Initial Weight/Volume: 25 mL
 Final Weight/Volume: 25 mL
 25 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Vinyl chloride	138	137	50 - 150	1	20		
Surrogate		MS % Rec	MSD % Rec			Acceptance Limits	
Dibromofluoromethane (Surr)		104	104			50 - 150	
TBA-d9 (Surr)		142	138			50 - 150	

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 480-332322**

**Method: 8260C SIM
Preparation: 5030C**

MS Lab Sample ID: 280-91030-2 Units: ug/L
Client Matrix: Water
Dilution: 4.0
Analysis Date: 11/18/2016 0327
Prep Date: 11/18/2016 0327
Leach Date: N/A

MSD Lab Sample ID: 280-91030-2
Client Matrix: Water
Dilution: 4.0
Analysis Date: 11/18/2016 0351
Prep Date: 11/18/2016 0351
Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Vinyl chloride	0.046 J	0.800	0.800	1.15	1.15

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

Method Blank - Batch: 280-352694

Lab Sample ID: MB 280-352694/1-A
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/02/2016 2310
Prep Date: 11/25/2016 1545
Leach Date: N/A

Analysis Batch: 280-354109
Prep Batch: 280-352694
Leach Batch: N/A
Units: mg/L

Method: 6010B Preparation: 3005A Total Recoverable

Instrument ID: MT_025
Lab File ID: 25a120216BB.asc
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL	RL
Calcium, Dissolved	ND		0.040	0.040
Cobalt, Dissolved	ND		0.0030	0.0030
Iron, Dissolved	ND		0.060	0.060
Magnesium, Dissolved	ND		0.050	0.050
Potassium, Dissolved	ND		1.0	1.0

Method Blank - Batch: 280-352694

Lab Sample ID: MB 280-352694/1-A
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/06/2016 1614
Prep Date: 11/25/2016 1545
Leach Date: N/A

Analysis Batch: 280-354577
Prep Batch: 280-352694
Leach Batch: N/A
Units: mg/L

Method: 6010B Preparation: 3005A Total Recoverable

Instrument ID: MT_025
Lab File ID: 25B120616.asc
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL	RL
Sodium, Dissolved	ND	^	1.0	1.0

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

Lab Control Sample - Batch: 280-352694

Method: 6010B
Preparation: 3005A
Total Recoverable

Lab Sample ID:	LCS 280-352694/2-A	Analysis Batch:	280-354109	Instrument ID:	MT_025
Client Matrix:	Water	Prep Batch:	280-352694	Lab File ID:	25a120216BB.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	12/02/2016 2313	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	11/25/2016 1545				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Calcium, Dissolved	50.0	51.8	104	90 - 111	
Cobalt, Dissolved	0.500	0.502	100	89 - 111	
Iron, Dissolved	1.00	0.979	98	89 - 115	
Magnesium, Dissolved	50.0	54.8	110	90 - 113	
Potassium, Dissolved	50.0	53.3	107	89 - 114	

Lab Control Sample - Batch: 280-352694

Method: 6010B
Preparation: 3005A
Total Recoverable

Lab Sample ID:	LCS 280-352694/2-A	Analysis Batch:	280-354577	Instrument ID:	MT_025
Client Matrix:	Water	Prep Batch:	280-352694	Lab File ID:	25B120616.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	12/06/2016 1617	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	11/25/2016 1545				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Sodium, Dissolved	50.0	51.8	104	90 - 115	

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-352694**

**Method: 6010B
Preparation: 3005A
Dissolved**

MS Lab Sample ID: 280-90984-E-1-E MS
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/02/2016 2320
Prep Date: 11/25/2016 1545
Leach Date: N/A

Analysis Batch: 280-354109
Prep Batch: 280-352694
Leach Batch: N/A

Instrument ID: MT_025
Lab File ID: 25a120216BB.asc
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

MSD Lab Sample ID: 280-90984-E-1-F MSD
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/02/2016 2323
Prep Date: 11/25/2016 1545
Leach Date: N/A

Analysis Batch: 280-354109
Prep Batch: 280-352694
Leach Batch: N/A

Instrument ID: MT_025
Lab File ID: 25a120216BB.asc
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Calcium, Dissolved	86	105	48 - 153	3	20	4	4
Cobalt, Dissolved	91	99	82 - 119	9	20		
Iron, Dissolved	90	97	52 - 155	1	20	4	4
Magnesium, Dissolved	104	113	62 - 146	2	20		
Potassium, Dissolved	101	111	76 - 132	9	20		

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-352694**

**Method: 6010B
Preparation: 3005A
Dissolved**

MS Lab Sample ID: 280-90984-E-1-E MS
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/06/2016 1624
Prep Date: 11/25/2016 1545
Leach Date: N/A

Analysis Batch: 280-354577
Prep Batch: 280-352694
Leach Batch: N/A

Instrument ID: MT_025
Lab File ID: 25B120616.asc
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

MSD Lab Sample ID: 280-90984-E-1-F MSD
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/06/2016 1626
Prep Date: 11/25/2016 1545
Leach Date: N/A

Analysis Batch: 280-354577
Prep Batch: 280-352694
Leach Batch: N/A

Instrument ID: MT_025
Lab File ID: 25B120616.asc
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Sodium, Dissolved	95	105	70 - 203	7	20		

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-352694**

**Method: 6010B
Preparation: 3005A
Dissolved**

MS Lab Sample ID: 280-90984-E-1-E MS Units: mg/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/02/2016 2320
Prep Date: 11/25/2016 1545
Leach Date: N/A

MSD Lab Sample ID: 280-90984-E-1-F MSD
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/02/2016 2323
Prep Date: 11/25/2016 1545
Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Calcium, Dissolved	310	50.0	50.0	358 4	367 4
Cobalt, Dissolved	ND	0.500	0.500	0.453	0.497
Iron, Dissolved	5.5	1.00	1.00	6.38 4	6.45 4
Magnesium, Dissolved	140	50.0	50.0	191	195
Potassium, Dissolved	3.3	50.0	50.0	53.7	59.0

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-352694**

**Method: 6010B
Preparation: 3005A
Dissolved**

MS Lab Sample ID: 280-90984-E-1-E MS Units: mg/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/06/2016 1624
Prep Date: 11/25/2016 1545
Leach Date: N/A

MSD Lab Sample ID: 280-90984-E-1-F MSD
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/06/2016 1626
Prep Date: 11/25/2016 1545
Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Sodium, Dissolved	16	50.0	50.0	63.2	68.1

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

Method Blank - Batch: 280-352489

Lab Sample ID: MB 280-352489/1-A
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/23/2016 2315
 Prep Date: 11/23/2016 1445
 Leach Date: N/A

Analysis Batch: 280-353028
 Prep Batch: 280-352489
 Leach Batch: N/A
 Units: mg/L

**Method: 6020
 Preparation: 3005A
 Total Recoverable**

Instrument ID: MT_077
 Lab File ID: 175_BLK.d
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL	RL
Antimony, Dissolved	ND		0.0010	0.0010
Barium, Dissolved	ND		0.0010	0.0010
Beryllium, Dissolved	ND		0.0010	0.0010
Cadmium, Dissolved	ND		0.00020	0.00020
Chromium, Dissolved	ND		0.0030	0.0030
Copper, Dissolved	ND		0.0020	0.0020
Lead, Dissolved	ND		0.0010	0.0010
Manganese, Dissolved	ND		0.0010	0.0010
Nickel, Dissolved	ND		0.0040	0.0040
Selenium, Dissolved	ND		0.0010	0.0010
Silver, Dissolved	ND		0.0020	0.0020
Thallium, Dissolved	ND		0.0010	0.0010
Vanadium, Dissolved	ND		0.0020	0.0020
Zinc, Dissolved	ND		0.0050	0.0050

Lab Control Sample - Batch: 280-352489

Lab Sample ID: LCS 280-352489/2-A
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/23/2016 2319
 Prep Date: 11/23/2016 1445
 Leach Date: N/A

Analysis Batch: 280-353028
 Prep Batch: 280-352489
 Leach Batch: N/A
 Units: mg/L

**Method: 6020
 Preparation: 3005A
 Total Recoverable**

Instrument ID: MT_077
 Lab File ID: 176_LCS.d
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Antimony, Dissolved	0.0400	0.0406	102	85 - 115	
Barium, Dissolved	0.0400	0.0388	97	85 - 118	
Beryllium, Dissolved	0.0400	0.0392	98	80 - 125	
Cadmium, Dissolved	0.0400	0.0421	105	85 - 115	
Chromium, Dissolved	0.0400	0.0390	98	84 - 121	
Copper, Dissolved	0.0400	0.0439	110	85 - 119	
Lead, Dissolved	0.0400	0.0414	104	85 - 118	
Manganese, Dissolved	0.0400	0.0402	101	85 - 117	
Nickel, Dissolved	0.0400	0.0400	100	85 - 119	
Selenium, Dissolved	0.0400	0.0399	100	77 - 122	
Silver, Dissolved	0.0400	0.0409	102	85 - 115	
Thallium, Dissolved	0.0400	0.0414	104	85 - 118	
Vanadium, Dissolved	0.0400	0.0388	97	85 - 120	
Zinc, Dissolved	0.0400	0.0432	108	83 - 122	

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-352489**

**Method: 6020
Preparation: 3005A
Dissolved**

MS Lab Sample ID: 280-91030-2
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/23/2016 2334
Prep Date: 11/23/2016 1445
Leach Date: N/A

Analysis Batch: 280-353028
Prep Batch: 280-352489
Leach Batch: N/A

Instrument ID: MT_077
Lab File ID: 180SMPL.d
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

MSD Lab Sample ID: 280-91030-2
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/23/2016 2338
Prep Date: 11/23/2016 1445
Leach Date: N/A

Analysis Batch: 280-353028
Prep Batch: 280-352489
Leach Batch: N/A

Instrument ID: MT_077
Lab File ID: 181SMPL.d
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Antimony, Dissolved	109	107	85 - 115	2	20		
Barium, Dissolved	98	124	85 - 118	4	20	4	4
Beryllium, Dissolved	109	110	80 - 125	1	20		
Cadmium, Dissolved	95	97	85 - 115	2	20		
Chromium, Dissolved	99	100	84 - 121	1	20		
Copper, Dissolved	95	96	85 - 119	0	20		
Lead, Dissolved	98	97	85 - 118	1	20		
Manganese, Dissolved	307	388	85 - 117	1	20	4	4
Nickel, Dissolved	99	99	85 - 119	0	20		
Selenium, Dissolved	99	98	77 - 122	1	20		
Silver, Dissolved	93	97	85 - 115	4	20		
Thallium, Dissolved	98	97	85 - 118	2	20		
Vanadium, Dissolved	103	105	85 - 120	2	20		
Zinc, Dissolved	111	109	83 - 122	2	20		

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-352489**

**Method: 6020
Preparation: 3005A
Dissolved**

MS Lab Sample ID: 280-91030-2 Units: mg/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/23/2016 2334
Prep Date: 11/23/2016 1445
Leach Date: N/A

MSD Lab Sample ID: 280-91030-2
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/23/2016 2338
Prep Date: 11/23/2016 1445
Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Antimony, Dissolved	ND	0.0400	0.0400	0.0437	0.0429
Barium, Dissolved	0.19	0.0400	0.0400	0.230 4	0.240 4
Beryllium, Dissolved	ND	0.0400	0.0400	0.0437	0.0439
Cadmium, Dissolved	ND	0.0400	0.0400	0.0380	0.0387
Chromium, Dissolved	0.0068	0.0400	0.0400	0.0464	0.0469
Copper, Dissolved	ND	0.0400	0.0400	0.0382	0.0382
Lead, Dissolved	ND	0.0400	0.0400	0.0392	0.0387
Manganese, Dissolved	2.7	0.0400	0.0400	2.84 4	2.88 4
Nickel, Dissolved	0.061	0.0400	0.0400	0.101	0.101
Selenium, Dissolved	ND	0.0400	0.0400	0.0396	0.0393
Silver, Dissolved	ND	0.0400	0.0400	0.0371	0.0387
Thallium, Dissolved	ND	0.0400	0.0400	0.0393	0.0387
Vanadium, Dissolved	0.0069	0.0400	0.0400	0.0479	0.0490
Zinc, Dissolved	ND	0.0400	0.0400	0.0443	0.0435

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

Method Blank - Batch: 280-353988

Method: 300.0
Preparation: N/A

Lab Sample ID: MB 280-353988/6	Analysis Batch: 280-353988	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: 12/02/2016 1052	Units: mg/L	Final Weight/Volume: 5 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	Result	Qual	RL	RL
Chloride	ND		1.0	1.0
Sulfate	ND		1.0	1.0

Method Reporting Limit Check - Batch: 280-353988

Method: 300.0
Preparation: N/A

Lab Sample ID: MRL 280-353988/3	Analysis Batch: 280-353988	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: 12/02/2016 0959	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	103	50 - 150	
Sulfate	2.50	ND	103	50 - 150	

Lab Control Sample/

Method: 300.0
Preparation: N/A

Lab Control Sample Duplicate Recovery Report - Batch: 280-353988

LCS Lab Sample ID: LCS 280-353988/4	Analysis Batch: 280-353988	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: 12/02/2016 1016	Units: mg/L	Final Weight/Volume: 5 mL
Prep Date: N/A		25 uL
Leach Date: N/A		

LCSD Lab Sample ID: LCSD 280-353988/5	Analysis Batch: 280-353988	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: 12/02/2016 1034	Units: mg/L	Final Weight/Volume: 5 mL
Prep Date: N/A		25 uL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Chloride	101	101	90 - 110	0	10		
Sulfate	101	100	90 - 110	0	10		

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

**Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-353988**

**Method: 300.0
Preparation: N/A**

LCS Lab Sample ID: LCS 280-353988/4 Units: mg/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/02/2016 1016
Prep Date: N/A
Leach Date: N/A

LCSD Lab Sample ID: LCSD 280-353988/5
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/02/2016 1034
Prep Date: N/A
Leach Date: N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Chloride	100	100	101	101
Sulfate	100	100	101	100

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-353988**

**Method: 300.0
Preparation: N/A**

MS Lab Sample ID: 280-90914-A-1 MS	Analysis Batch: 280-353988	Instrument ID: WC_IonChrom7
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 09.0000.d
Dilution: 5.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 12/02/2016 1311		Final Weight/Volume: 5 mL
Prep Date: N/A		25 uL
Leach Date: N/A		

MSD Lab Sample ID: 280-90914-A-1 MSD	Analysis Batch: 280-353988	Instrument ID: WC_IonChrom7
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 10.0000.d
Dilution: 5.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 12/02/2016 1329		Final Weight/Volume: 5 mL
Prep Date: N/A		25 uL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Chloride	102	102	80 - 120	0	20		
Sulfate	99	101	80 - 120	0	20		

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-353988**

**Method: 300.0
Preparation: N/A**

MS Lab Sample ID: 280-91667-F-11 MS	Analysis Batch: 280-353988	Instrument ID: WC_IonChrom7
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 26.0000.d
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 12/02/2016 2030		Final Weight/Volume: 5 mL
Prep Date: N/A		25 uL
Leach Date: N/A		

MSD Lab Sample ID: 280-91667-E-11 MSD	Analysis Batch: 280-353988	Instrument ID: WC_IonChrom7
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 27.0000.d
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 12/02/2016 2048		Final Weight/Volume: 5 mL
Prep Date: N/A		25 uL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Chloride	114	140	80 - 120	6	20		F1
Sulfate	114	116	80 - 120	2	20		

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-353988**

**Method: 300.0
Preparation: N/A**

MS Lab Sample ID: 280-90914-A-1 MS Units: mg/L
 Client Matrix: Water
 Dilution: 5.0
 Analysis Date: 12/02/2016 1311
 Prep Date: N/A
 Leach Date: N/A

MSD Lab Sample ID: 280-90914-A-1 MSD
 Client Matrix: Water
 Dilution: 5.0
 Analysis Date: 12/02/2016 1329
 Prep Date: N/A
 Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Chloride	360	125	125	485	485
Sulfate	420	125	125	549	552

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-353988**

**Method: 300.0
Preparation: N/A**

MS Lab Sample ID: 280-91667-F-11 MS Units: mg/L
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/02/2016 2030
 Prep Date: N/A
 Leach Date: N/A

MSD Lab Sample ID: 280-91667-E-11 MSD
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/02/2016 2048
 Prep Date: N/A
 Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Chloride	72	25.0	25.0	100	107 F1
Sulfate	3.6	25.0	25.0	32.0	32.7

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

Duplicate - Batch: 280-353988

Method: 300.0
Preparation: N/A

Lab Sample ID: 280-90914-A-1 DU	Analysis Batch: 280-353988	Instrument ID: WC_IonChrom7
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 08.0000.d
Dilution: 5.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 12/02/2016 1253	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	360	358	0	15	
Sulfate	420	425	0.1	15	

Duplicate - Batch: 280-353988

Method: 300.0
Preparation: N/A

Lab Sample ID: 280-91667-D-11 DU	Analysis Batch: 280-353988	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: 12/02/2016 2012	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	72	72.0	0.5	15	
Sulfate	3.6	3.44	4	15	

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

Method Blank - Batch: 280-352943

**Method: 350.1
Preparation: N/A**

Lab Sample ID: MB 280-352943/20	Analysis Batch: 280-352943	Instrument ID: WC_Alp 3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: C:\FLOW_4\112316.RS
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 11/23/2016 1448	Units: mg/L	Final Weight/Volume:
Prep Date: N/A		
Leach Date: N/A		

Analyte	Result	Qual	RL	RL
Ammonia (as N)	ND		0.030	0.030

**Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-352943**

**Method: 350.1
Preparation: N/A**

LCS Lab Sample ID: LCS 280-352943/18	Analysis Batch: 280-352943	Instrument ID: WC_Alp 3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: C:\FLOW_4\112316.RS
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 100 mL
Analysis Date: 11/23/2016 1444	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

LCSD Lab Sample ID: LCSD 280-352943/19	Analysis Batch: 280-352943	Instrument ID: WC_Alp 3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: C:\FLOW_4\112316.RS
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 100 mL
Analysis Date: 11/23/2016 1446	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Ammonia (as N)	100	101	90 - 110	1	10		

**Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-352943**

**Method: 350.1
Preparation: N/A**

LCS Lab Sample ID: LCS 280-352943/18	Units: mg/L	LCSD Lab Sample ID: LCSD 280-352943/19
Client Matrix: Water		Client Matrix: Water
Dilution: 1.0		Dilution: 1.0
Analysis Date: 11/23/2016 1444		Analysis Date: 11/23/2016 1446
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	2.51	2.52

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-352943**

**Method: 350.1
Preparation: N/A**

MS Lab Sample ID: 280-91030-1
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/23/2016 1500
Prep Date: N/A
Leach Date: N/A

Analysis Batch: 280-352943
Prep Batch: N/A
Leach Batch: N/A

Instrument ID: WC_Alp 3
Lab File ID: C:\FLOW_4\112316.RS
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

MSD Lab Sample ID: 280-91030-1
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/23/2016 1502
Prep Date: N/A
Leach Date: N/A

Analysis Batch: 280-352943
Prep Batch: N/A
Leach Batch: N/A

Instrument ID: WC_Alp 3
Lab File ID: C:\FLOW_4\112316.RS
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Ammonia (as N)	106	105	90 - 110	0	10		

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-352943**

**Method: 350.1
Preparation: N/A**

MS Lab Sample ID: 280-91030-1
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/23/2016 1500
Prep Date: N/A
Leach Date: N/A

Units: mg/L

MSD Lab Sample ID: 280-91030-1
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/23/2016 1502
Prep 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	1.06	1.05

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

Method Blank - Batch: 280-353099

Method: 350.1
Preparation: N/A

Lab Sample ID: MB 280-353099/112	Analysis Batch: 280-353099	Instrument ID: WC_Alp 3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: C:\FLOW_4\112516.RS
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 11/25/2016 1329	Units: mg/L	Final Weight/Volume:
Prep Date: N/A		
Leach Date: N/A		

Analyte	Result	Qual	RL	RL
Ammonia (as N)	ND		0.030	0.030

**Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-353099**

Method: 350.1
Preparation: N/A

LCS Lab Sample ID: LCS 280-353099/110	Analysis Batch: 280-353099	Instrument ID: WC_Alp 3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: C:\FLOW_4\112516.RS
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 100 mL
Analysis Date: 11/25/2016 1325	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

LCSD Lab Sample ID: LCSD 280-353099/111	Analysis Batch: 280-353099	Instrument ID: WC_Alp 3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: C:\FLOW_4\112516.RS
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 100 mL
Analysis Date: 11/25/2016 1327	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Ammonia (as N)	96	91	90 - 110	5	10		

**Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-353099**

Method: 350.1
Preparation: N/A

LCS Lab Sample ID: LCS 280-353099/110	Units: mg/L	LCSD Lab Sample ID: LCSD 280-353099/111
Client Matrix: Water		Client Matrix: Water
Dilution: 1.0		Dilution: 1.0
Analysis Date: 11/25/2016 1325		Analysis Date: 11/25/2016 1327
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	2.39	2.27

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

Method Blank - Batch: 280-353604

Method: 353.2
Preparation: N/A

Lab Sample ID:	MB 280-353604/23	Analysis Batch:	280-353604	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\112916.RS
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	11/29/2016 1632	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	RL	RL
Nitrate/Nitrite	ND		0.050	0.050

Method Blank - Batch: 280-353604

Method: 353.2
Preparation: N/A

Lab Sample ID:	MB 280-353604/67	Analysis Batch:	280-353604	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\112916.RS
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	11/29/2016 1800	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	RL	RL
Nitrate/Nitrite	ND		0.050	0.050

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

Method Reporting Limit Check - Batch: 280-353604

Method: 353.2
Preparation: N/A

Lab Sample ID: MRL 280-353604/21	Analysis Batch: 280-353604	Instrument ID: WC_Alp 2
Client Matrix: Water	Prep Batch: N/A	Lab File ID: C:\FLOW_4\112916.RS
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 100 mL
Analysis Date: 11/29/2016 1628	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate/Nitrite	0.100	0.115	115	50 - 150	

Lab Control Sample - Batch: 280-353604

Method: 353.2
Preparation: N/A

Lab Sample ID: LCS 280-353604/22	Analysis Batch: 280-353604	Instrument ID: WC_Alp 2
Client Matrix: Water	Prep Batch: N/A	Lab File ID: C:\FLOW_4\112916.RS
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 100 mL
Analysis Date: 11/29/2016 1630	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate/Nitrite	5.00	5.05	101	90 - 110	

Lab Control Sample - Batch: 280-353604

Method: 353.2
Preparation: N/A

Lab Sample ID: LCS 280-353604/66	Analysis Batch: 280-353604	Instrument ID: WC_Alp 2
Client Matrix: Water	Prep Batch: N/A	Lab File ID: C:\FLOW_4\112916.RS
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 100 mL
Analysis Date: 11/29/2016 1758	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate/Nitrite	5.00	5.11	102	90 - 110	

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-353604**

**Method: 353.2
Preparation: N/A**

MS Lab Sample ID: 280-90973-B-12 MS	Analysis Batch: 280-353604	Instrument ID: WC_Alp 2
Client Matrix: Water	Prep Batch: N/A	Lab File ID: C:\FLOW_4\112916.RS
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/29/2016 1712		Final Weight/Volume: 5 mL
Prep Date: N/A		
Leach Date: N/A		

MSD Lab Sample ID: 280-90973-B-12 MSD	Analysis Batch: 280-353604	Instrument ID: WC_Alp 2
Client Matrix: Water	Prep Batch: N/A	Lab File ID: C:\FLOW_4\112916.RS
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/29/2016 1714		Final Weight/Volume: 5 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Nitrate/Nitrite	101	100	90 - 110	1	10		

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-353604**

**Method: 353.2
Preparation: N/A**

MS Lab Sample ID: 280-90973-B-12 MS	Units: mg/L	MSD Lab Sample ID: 280-90973-B-12 MSD
Client Matrix: Water		Client Matrix: Water
Dilution: 1.0		Dilution: 1.0
Analysis Date: 11/29/2016 1712		Analysis Date: 11/29/2016 1714
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/Nitrite	ND	4.00	4.00	4.05	4.02

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

Method Blank - Batch: 280-353505

Method: 410.4
Preparation: N/A

Lab Sample ID: MB 280-353505/5	Analysis Batch: 280-353505	Instrument ID: WC_Genesys20
Client Matrix: Water	Prep Batch: N/A	Lab File ID: N/A
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 2 mL
Analysis Date: 11/29/2016 0923	Units: mg/L	Final Weight/Volume: 2 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	Result	Qual	RL	RL
Chemical Oxygen Demand (COD)	ND		10	10

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-353505

Method: 410.4
Preparation: N/A

LCS Lab Sample ID: LCS 280-353505/3	Analysis Batch: 280-353505	Instrument ID: WC_Genesys20
Client Matrix: Water	Prep Batch: N/A	Lab File ID: N/A
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 100 mL
Analysis Date: 11/29/2016 0923	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

LCSD Lab Sample ID: LCSD 280-353505/4	Analysis Batch: 280-353505	Instrument ID: WC_Genesys20
Client Matrix: Water	Prep Batch: N/A	Lab File ID: N/A
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 100 mL
Analysis Date: 11/29/2016 0923	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Chemical Oxygen Demand (COD)	98	100	90 - 110	2	11		

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-353505

Method: 410.4
Preparation: N/A

LCS Lab Sample ID: LCS 280-353505/3	Units: mg/L	LCSD Lab Sample ID: LCSD 280-353505/4
Client Matrix: Water		Client Matrix: Water
Dilution: 1.0		Dilution: 1.0
Analysis Date: 11/29/2016 0923		Analysis Date: 11/29/2016 0923
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
Chemical Oxygen Demand (COD)	100	100	98.1	99.8

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-353505**

**Method: 410.4
Preparation: N/A**

MS Lab Sample ID: 280-91030-1
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/29/2016 0923
Prep Date: N/A
Leach Date: N/A

Analysis Batch: 280-353505
Prep Batch: N/A
Leach Batch: N/A

Instrument ID: WC_Genesys20
Lab File ID: N/A
Initial Weight/Volume: 100 mL
Final Weight/Volume: 100 mL

MSD Lab Sample ID: 280-91030-1
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/29/2016 0923
Prep Date: N/A
Leach Date: N/A

Analysis Batch: 280-353505
Prep Batch: N/A
Leach Batch: N/A

Instrument ID: WC_Genesys20
Lab File ID: N/A
Initial Weight/Volume: 100 mL
Final Weight/Volume: 100 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Chemical Oxygen Demand (COD)	93	90	90 - 110	2	11		

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-353505**

**Method: 410.4
Preparation: N/A**

MS Lab Sample ID: 280-91030-1
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/29/2016 0923
Prep Date: N/A
Leach Date: N/A

Units: mg/L

MSD Lab Sample ID: 280-91030-1
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/29/2016 0923
Prep Date: N/A
Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Chemical Oxygen Demand (COD)	14	50.0	50.0	60.1	58.8

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

Method Blank - Batch: 280-352383

**Method: SM 2320B
Preparation: N/A**

Lab Sample ID: MB 280-352383/5	Analysis Batch: 280-352383	Instrument ID: WC-AT3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 112016 alk.TXT
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 11/20/2016 1257	Units: mg/L	Final Weight/Volume:
Prep Date: N/A		
Leach Date: N/A		

Analyte	Result	Qual	RL	RL
Alkalinity, Total (As CaCO3)	ND		5.0	5.0
Alkalinity, Bicarbonate (As CaCO3)	ND		5.0	5.0

Lab Control Sample - Batch: 280-352383

**Method: SM 2320B
Preparation: N/A**

Lab Sample ID: LCS 280-352383/4	Analysis Batch: 280-352383	Instrument ID: WC-AT3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 112016 alk.TXT
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 11/20/2016 1253	Units: mg/L	Final Weight/Volume:
Prep Date: N/A		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Alkalinity, Total (As CaCO3)	200	200	100	90 - 110	

Duplicate - Batch: 280-352383

**Method: SM 2320B
Preparation: N/A**

Lab Sample ID: 280-90999-A-1 DU	Analysis Batch: 280-352383	Instrument ID: WC-AT3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 112016 alk.TXT
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 11/20/2016 1305	Units: mg/L	Final Weight/Volume:
Prep Date: N/A		
Leach Date: N/A		

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Alkalinity, Total (As CaCO3)	55	57.8	5	10	

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

Method Blank - Batch: 280-352831

Method: SM 2320B
Preparation: N/A

Lab Sample ID: MB 280-352831/31	Analysis Batch: 280-352831	Instrument ID: WC-AT3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 112216 alk.TXT
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 11/22/2016 1516	Units: mg/L	Final Weight/Volume:
Prep Date: N/A		
Leach Date: N/A		

Analyte	Result	Qual	RL	RL
Alkalinity, Total (As CaCO3)	ND		5.0	5.0
Alkalinity, Bicarbonate (As CaCO3)	ND		5.0	5.0

Lab Control Sample - Batch: 280-352831

Method: SM 2320B
Preparation: N/A

Lab Sample ID: LCS 280-352831/30	Analysis Batch: 280-352831	Instrument ID: WC-AT3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 112216 alk.TXT
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 11/22/2016 1511	Units: mg/L	Final Weight/Volume:
Prep Date: N/A		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Alkalinity, Total (As CaCO3)	200	194	97	90 - 110	

Duplicate - Batch: 280-352831

Method: SM 2320B
Preparation: N/A

Lab Sample ID: 280-91153-A-1 DU	Analysis Batch: 280-352831	Instrument ID: WC-AT3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 112216 alk.TXT
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 11/22/2016 1555	Units: mg/L	Final Weight/Volume:
Prep Date: N/A		
Leach Date: N/A		

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Alkalinity, Total (As CaCO3)	150	152	2	10	

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

Method Blank - Batch: 280-352410

Method: SM 2540C
Preparation: N/A

Lab Sample ID: MB 280-352410/1	Analysis Batch: 280-352410	Instrument ID: No Equipment Assigned
Client Matrix: Water	Prep Batch: N/A	Lab File ID: N/A
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 100 mL
Analysis Date: 11/21/2016 1012	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	Result	Qual	RL	RL
Total Dissolved Solids (TDS)	ND		5.0	5.0

Lab Control Sample - Batch: 280-352410

Method: SM 2540C
Preparation: N/A

Lab Sample ID: LCS 280-352410/2	Analysis Batch: 280-352410	Instrument ID: No Equipment Assigned
Client Matrix: Water	Prep Batch: N/A	Lab File ID: N/A
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 100 mL
Analysis Date: 11/21/2016 1012	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Total Dissolved Solids (TDS)	500	494	99	86 - 110	

Duplicate - Batch: 280-352410

Method: SM 2540C
Preparation: N/A

Lab Sample ID: 280-91030-1	Analysis Batch: 280-352410	Instrument ID: No Equipment Assigned
Client Matrix: Water	Prep Batch: N/A	Lab File ID: N/A
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 100 mL
Analysis Date: 11/21/2016 1012	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Total Dissolved Solids (TDS)	140	115	22	10	F3

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

Method Blank - Batch: 280-353712

Method: SM 5310B

Preparation: N/A

Lab Sample ID: MB 280-353712/5	Analysis Batch: 280-353712	Instrument ID: WC_SHI3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 112916.txt
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 11/29/2016 1831	Units: mg/L	Final Weight/Volume:
Prep Date: N/A		
Leach Date: N/A		

Analyte	Result	Qual	RL	RL
Total Organic Carbon - Average	ND		1.0	1.0

Lab Control Sample/

Method: SM 5310B

Lab Control Sample Duplicate Recovery Report - Batch: 280-353712

Preparation: N/A

LCS Lab Sample ID: LCS 280-353712/3	Analysis Batch: 280-353712	Instrument ID: WC_SHI3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 112916.txt
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 11/29/2016 1759	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

LCSD Lab Sample ID: LCSD 280-353712/4	Analysis Batch: 280-353712	Instrument ID: WC_SHI3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 112916.txt
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 11/29/2016 1814	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Total Organic Carbon - Average	98	98	88 - 112	0	15		

Laboratory Control/

Method: SM 5310B

Laboratory Duplicate Data Report - Batch: 280-353712

Preparation: N/A

LCS Lab Sample ID: LCS 280-353712/3	Units: mg/L	LCSD Lab Sample ID: LCSD 280-353712/4
Client Matrix: Water		Client Matrix: Water
Dilution: 1.0		Dilution: 1.0
Analysis Date: 11/29/2016 1759		Analysis Date: 11/29/2016 1814
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
Total Organic Carbon - Average	25.0	25.0	24.6	24.5

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-353712**

**Method: SM 5310B
Preparation: N/A**

MS Lab Sample ID: 280-90918-F-1 MS	Analysis Batch: 280-353712	Instrument ID: WC_SHI3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 112916.txt
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 11/29/2016 2327		Final Weight/Volume: 50 mL
Prep Date: N/A		
Leach Date: N/A		

MSD Lab Sample ID: 280-90918-F-1 MSD	Analysis Batch: 280-353712	Instrument ID: WC_SHI3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 112916.txt
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 11/29/2016 2343		Final Weight/Volume: 50 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Total Organic Carbon - Average	100	101	88 - 112	1	15		

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-353712**

**Method: SM 5310B
Preparation: N/A**

MS Lab Sample ID: 280-90918-F-1 MS	Units: mg/L
Client Matrix: Water	
Dilution: 1.0	
Analysis Date: 11/29/2016 2327	
Prep Date: N/A	
Leach Date: N/A	

MSD Lab Sample ID: 280-90918-F-1 MSD
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/29/2016 2343
Prep 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	ND	25.0	25.0	24.9	25.1

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

Laboratory Chronicle

Lab ID: 280-91030-1

Client ID: OBWL-TD

Sample Date/Time: 11/14/2016 10:25 Received Date/Time: 11/15/2016 08:50

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	280-91030-F-1		480-333416		11/25/2016 11:22	1	TAL BUF	SMY
A:8260C	280-91030-F-1		480-333416		11/25/2016 11:22	1	TAL BUF	SMY
P:5030C	280-91030-J-1		480-332322		11/17/2016 23:23	1	TAL BUF	NMD1
A:8260C SIM	280-91030-J-1		480-332322		11/17/2016 23:23	1	TAL BUF	NMD1
P:3005A	280-91030-D-1-B		280-354109	280-352694	11/25/2016 15:45	1	TAL DEN	MLS
A:6010B	280-91030-D-1-B		280-354109	280-352694	12/03/2016 00:20	1	TAL DEN	LLB
P:3005A	280-91030-D-1-B		280-354656	280-352694	11/25/2016 15:45	1	TAL DEN	MLS
A:6010B	280-91030-D-1-B		280-354656	280-352694	12/07/2016 11:27	1	TAL DEN	SJS
P:3005A	280-91030-D-1-A		280-353028	280-352489	11/23/2016 14:45	1	TAL DEN	SEJ
A:6020	280-91030-D-1-A		280-353028	280-352489	11/23/2016 23:23	1	TAL DEN	LMT
A:300.0	280-91030-A-1		280-353988		12/02/2016 14:22	1	TAL DEN	AFB
A:350.1	280-91030-C-1		280-352943		11/23/2016 14:58	1	TAL DEN	MAS
A:353.2	280-91030-B-1		280-353604		11/29/2016 19:06	1	TAL DEN	SVC
A:410.4	280-91030-C-1		280-353505		11/29/2016 09:23	1	TAL DEN	CCJ
A:SM 2320B	280-91030-A-1		280-352383		11/20/2016 13:10	1	TAL DEN	MMC
A:SM 2540C	280-91030-A-1		280-352410		11/21/2016 10:12	1	TAL DEN	JAP
A:SM 5310B	280-91030-C-1		280-353712		11/30/2016 00:34	1	TAL DEN	CCJ
A:Field Sampling	280-91030-A-1		280-352756		11/14/2016 11:25	1	TAL DEN	C1K

Lab ID: 280-91030-1 MS

Client ID: OBWL-TD

Sample Date/Time: 11/14/2016 10:25 Received Date/Time: 11/15/2016 08:50

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:350.1	280-91030-C-1 MS		280-352943		11/23/2016 15:00	1	TAL DEN	MAS
A:410.4	280-91030-C-1 MS		280-353505		11/29/2016 09:23	1	TAL DEN	CCJ

Lab ID: 280-91030-1 MSD

Client ID: OBWL-TD

Sample Date/Time: 11/14/2016 10:25 Received Date/Time: 11/15/2016 08:50

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:350.1	280-91030-C-1 MSD		280-352943		11/23/2016 15:02	1	TAL DEN	MAS
A:410.4	280-91030-C-1 MSD		280-353505		11/29/2016 09:23	1	TAL DEN	CCJ

Lab ID: 280-91030-1 DU

Client ID: OBWL-TD

Sample Date/Time: 11/14/2016 10:25 Received Date/Time: 11/15/2016 08:50

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:SM 2540C	280-91030-A-1 DU		280-352410		11/21/2016 10:12	1	TAL DEN	JAP

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

Laboratory Chronicle

Lab ID: 280-91030-2

Client ID: L-INF

Sample Date/Time: 11/14/2016 11:00 Received Date/Time: 11/15/2016 08:50

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	280-91030-E-2		480-333215		11/23/2016 16:44	5	TAL BUF	NEA
A:8260C	280-91030-E-2		480-333215		11/23/2016 16:44	5	TAL BUF	NEA
P:5030C	280-91030-J-2		480-332322		11/17/2016 23:48	4	TAL BUF	NMD1
A:8260C SIM	280-91030-J-2		480-332322		11/17/2016 23:48	4	TAL BUF	NMD1
P:3005A	280-91030-D-2-D		280-354109	280-352694	11/25/2016 15:45	1	TAL DEN	MLS
A:6010B	280-91030-D-2-D		280-354109	280-352694	12/03/2016 00:23	1	TAL DEN	LLB
P:3005A	280-91030-D-2-D		280-354577	280-352694	11/25/2016 15:45	1	TAL DEN	MLS
A:6010B	280-91030-D-2-D		280-354577	280-352694	12/06/2016 16:31	1	TAL DEN	CML
P:3005A	280-91030-D-2-A		280-353028	280-352489	11/23/2016 14:45	1	TAL DEN	SEJ
A:6020	280-91030-D-2-A		280-353028	280-352489	11/23/2016 23:27	1	TAL DEN	LMT
A:300.0	280-91030-A-2		280-353988		12/02/2016 14:58	10	TAL DEN	AFB
A:350.1	280-91030-C-2		280-352943		11/23/2016 15:04	50	TAL DEN	MAS
A:353.2	280-91030-B-2		280-353604		11/29/2016 19:08	1	TAL DEN	SVC
A:410.4	280-91030-C-2		280-353505		11/29/2016 09:23	5	TAL DEN	CCJ
A:SM 2320B	280-91030-A-2		280-352383		11/20/2016 13:17	1	TAL DEN	MMC
A:SM 2540C	280-91030-A-2		280-352410		11/21/2016 10:12	1	TAL DEN	JAP
A:SM 5310B	280-91030-C-2		280-353712		11/30/2016 01:24	5	TAL DEN	CCJ
A:Field Sampling	280-91030-A-2		280-352756		11/14/2016 12:00	1	TAL DEN	C1K

Lab ID: 280-91030-2 MS

Client ID: L-INF

Sample Date/Time: 11/14/2016 11:00 Received Date/Time: 11/15/2016 08:50

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	280-91030-E-2 MS		480-333215		11/23/2016 19:02	5	TAL BUF	NEA
A:8260C	280-91030-E-2 MS		480-333215		11/23/2016 19:02	5	TAL BUF	NEA
P:5030C	280-91030-J-2 MS		480-332322		11/18/2016 03:27	4	TAL BUF	NMD1
A:8260C SIM	280-91030-J-2 MS		480-332322		11/18/2016 03:27	4	TAL BUF	NMD1
P:3005A	280-91030-D-2-B MS		280-353028	280-352489	11/23/2016 14:45	1	TAL DEN	SEJ
A:6020	280-91030-D-2-B MS		280-353028	280-352489	11/23/2016 23:34	1	TAL DEN	LMT

Lab ID: 280-91030-2 MSD

Client ID: L-INF

Sample Date/Time: 11/14/2016 11:00 Received Date/Time: 11/15/2016 08:50

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	280-91030-E-2 MSD		480-333215		11/23/2016 19:25	5	TAL BUF	NEA
A:8260C	280-91030-E-2 MSD		480-333215		11/23/2016 19:25	5	TAL BUF	NEA
P:5030C	280-91030-J-2 MSD		480-332322		11/18/2016 03:51	4	TAL BUF	NMD1
A:8260C SIM	280-91030-J-2 MSD		480-332322		11/18/2016 03:51	4	TAL BUF	NMD1
P:3005A	280-91030-D-2-C MSD		280-353028	280-352489	11/23/2016 14:45	1	TAL DEN	SEJ
A:6020	280-91030-D-2-C MSD		280-353028	280-352489	11/23/2016 23:38	1	TAL DEN	LMT

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

Laboratory Chronicle

Lab ID: 280-91030-3

Client ID: TRIP BLANK

Sample Date/Time: 11/14/2016 00:00 Received Date/Time: 11/15/2016 08:50

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	280-91030-A-3		480-333219		11/23/2016 11:56	1	TAL BUF	SMY
A:8260C	280-91030-A-3		480-333219		11/23/2016 11:56	1	TAL BUF	SMY
P:5030C	280-91030-B-3		480-332322		11/18/2016 00:12	1	TAL BUF	NMD1
A:8260C SIM	280-91030-B-3		480-332322		11/18/2016 00:12	1	TAL BUF	NMD1

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 480-333215/6		480-333215		11/23/2016 10:43	1	TAL BUF	NEA
A:8260C	MB 480-333215/6		480-333215		11/23/2016 10:43	1	TAL BUF	NEA
P:5030C	MB 480-333219/9		480-333219		11/23/2016 11:12	1	TAL BUF	SMY
A:8260C	MB 480-333219/9		480-333219		11/23/2016 11:12	1	TAL BUF	SMY
P:5030C	MB 480-333416/30		480-333416		11/25/2016 10:38	1	TAL BUF	SMY
A:8260C	MB 480-333416/30		480-333416		11/25/2016 10:38	1	TAL BUF	SMY
P:5030C	MB 480-332322/7		480-332322		11/17/2016 21:54	1	TAL BUF	NMD1
A:8260C SIM	MB 480-332322/7		480-332322		11/17/2016 21:54	1	TAL BUF	NMD1
P:3005A	MB 280-352694/1-A		280-354109	280-352694	11/25/2016 15:45	1	TAL DEN	MLS
A:6010B	MB 280-352694/1-A		280-354109	280-352694	12/02/2016 23:10	1	TAL DEN	LLB
P:3005A	MB 280-352694/1-A		280-354577	280-352694	11/25/2016 15:45	1	TAL DEN	MLS
A:6010B	MB 280-352694/1-A		280-354577	280-352694	12/06/2016 16:14	1	TAL DEN	CML
P:3005A	MB 280-352489/1-A		280-353028	280-352489	11/23/2016 14:45	1	TAL DEN	SEJ
A:6020	MB 280-352489/1-A		280-353028	280-352489	11/23/2016 23:15	1	TAL DEN	LMT
A:300.0	MB 280-353988/6		280-353988		12/02/2016 10:52	1	TAL DEN	AFB
A:350.1	MB 280-352943/20		280-352943		11/23/2016 14:48	1	TAL DEN	MAS
A:350.1	MB 280-353099/112		280-353099		11/25/2016 13:29	1	TAL DEN	MAS
A:353.2	MB 280-353604/23		280-353604		11/29/2016 16:32	1	TAL DEN	SVC
A:353.2	MB 280-353604/67		280-353604		11/29/2016 18:00	1	TAL DEN	SVC
A:410.4	MB 280-353505/5		280-353505		11/29/2016 09:23	1	TAL DEN	CCJ
A:SM 2320B	MB 280-352383/5		280-352383		11/20/2016 12:57	1	TAL DEN	MMC
A:SM 2320B	MB 280-352831/31		280-352831		11/22/2016 15:16	1	TAL DEN	MMC
A:SM 2540C	MB 280-352410/1		280-352410		11/21/2016 10:12	1	TAL DEN	JAP
A:SM 5310B	MB 280-353712/5		280-353712		11/29/2016 18:31	1	TAL DEN	CCJ

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

Laboratory Chronicle

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 480-333215/4		480-333215		11/23/2016 09:50	1	TAL BUF	NEA
A:8260C	LCS 480-333215/4		480-333215		11/23/2016 09:50	1	TAL BUF	NEA
P:5030C	LCS 480-333219/7		480-333219		11/23/2016 10:17	1	TAL BUF	SMY
A:8260C	LCS 480-333219/7		480-333219		11/23/2016 10:17	1	TAL BUF	SMY
P:5030C	LCS 480-333416/5		480-333416		11/25/2016 09:06	1	TAL BUF	SMY
A:8260C	LCS 480-333416/5		480-333416		11/25/2016 09:06	1	TAL BUF	SMY
P:5030C	LCS 480-332322/4		480-332322		11/17/2016 20:41	1	TAL BUF	NMD1
A:8260C SIM	LCS 480-332322/4		480-332322		11/17/2016 20:41	1	TAL BUF	NMD1
P:3005A	LCS 280-352694/2-A		280-354109	280-352694	11/25/2016 15:45	1	TAL DEN	MLS
A:6010B	LCS 280-352694/2-A		280-354109	280-352694	12/02/2016 23:13	1	TAL DEN	LLB
P:3005A	LCS 280-352694/2-A		280-354577	280-352694	11/25/2016 15:45	1	TAL DEN	MLS
A:6010B	LCS 280-352694/2-A		280-354577	280-352694	12/06/2016 16:17	1	TAL DEN	CML
P:3005A	LCS 280-352489/2-A		280-353028	280-352489	11/23/2016 14:45	1	TAL DEN	SEJ
A:6020	LCS 280-352489/2-A		280-353028	280-352489	11/23/2016 23:19	1	TAL DEN	LMT
A:300.0	LCS 280-353988/4		280-353988		12/02/2016 10:16	1	TAL DEN	AFB
A:350.1	LCS 280-352943/18		280-352943		11/23/2016 14:44	1	TAL DEN	MAS
A:350.1	LCS 280-353099/110		280-353099		11/25/2016 13:25	1	TAL DEN	MAS
A:353.2	LCS 280-353604/22		280-353604		11/29/2016 16:30	1	TAL DEN	SVC
A:353.2	LCS 280-353604/66		280-353604		11/29/2016 17:58	1	TAL DEN	SVC
A:410.4	LCS 280-353505/3		280-353505		11/29/2016 09:23	1	TAL DEN	CCJ
A:SM 2320B	LCS 280-352383/4		280-352383		11/20/2016 12:53	1	TAL DEN	MMC
A:SM 2320B	LCS 280-352831/30		280-352831		11/22/2016 15:11	1	TAL DEN	MMC
A:SM 2540C	LCS 280-352410/2		280-352410		11/21/2016 10:12	1	TAL DEN	JAP
A:SM 5310B	LCS 280-353712/3		280-353712		11/29/2016 17:59	1	TAL DEN	CCJ

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 480-332322/5		480-332322		11/17/2016 21:05	1	TAL BUF	NMD1
A:8260C SIM	LCSD 480-332322/5		480-332322		11/17/2016 21:05	1	TAL BUF	NMD1
A:300.0	LCSD 280-353988/5		280-353988		12/02/2016 10:34	1	TAL DEN	AFB
A:350.1	LCSD 280-352943/19		280-352943		11/23/2016 14:46	1	TAL DEN	MAS
A:350.1	LCSD 280-353099/111		280-353099		11/25/2016 13:27	1	TAL DEN	MAS
A:410.4	LCSD 280-353505/4		280-353505		11/29/2016 09:23	1	TAL DEN	CCJ
A:SM 5310B	LCSD 280-353712/4		280-353712		11/29/2016 18:14	1	TAL DEN	CCJ

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

Laboratory Chronicle

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 280-353988/3		280-353988		12/02/2016 09:59	1	TAL DEN	AFB
A:353.2	MRL 280-353604/21		280-353604		11/29/2016 16:28	1	TAL DEN	SVC

Lab ID: MS

Client ID: N/A

Sample Date/Time: 11/14/2016 13:53

Received Date/Time: 11/15/2016 00:05

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	480-109585-K-8 MS		480-333219		11/23/2016 19:12	1	TAL BUF	SMY
A:8260C	480-109585-K-8 MS		480-333219		11/23/2016 19:12	1	TAL BUF	SMY
P:5030C	280-91051-R-1 MS		480-333416		11/25/2016 17:57	50	TAL BUF	SMY
A:8260C	280-91051-R-1 MS		480-333416		11/25/2016 17:57	50	TAL BUF	SMY
P:3005A	280-90984-E-1-E MS		280-354109	280-352694	11/25/2016 15:45	1	TAL DEN	MLS
A:6010B	280-90984-E-1-E MS		280-354109	280-352694	12/02/2016 23:20	1	TAL DEN	LLB
P:3005A	280-90984-E-1-E MS		280-354577	280-352694	11/25/2016 15:45	1	TAL DEN	MLS
A:6010B	280-90984-E-1-E MS		280-354577	280-352694	12/06/2016 16:24	1	TAL DEN	CML
A:300.0	280-90914-A-1 MS		280-353988		12/02/2016 13:11	5	TAL DEN	AFB
A:300.0	280-91667-F-11 MS		280-353988		12/02/2016 20:30	1	TAL DEN	AFB
A:353.2	280-90973-B-12 MS		280-353604		11/29/2016 17:12	1	TAL DEN	SVC
A:SM 5310B	280-90918-F-1 MS		280-353712		11/29/2016 23:27	1	TAL DEN	CCJ

Lab ID: MSD

Client ID: N/A

Sample Date/Time: 11/14/2016 13:53

Received Date/Time: 11/15/2016 00:05

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	480-109585-K-8 MSD		480-333219		11/23/2016 19:40	1	TAL BUF	SMY
A:8260C	480-109585-K-8 MSD		480-333219		11/23/2016 19:40	1	TAL BUF	SMY
P:5030C	280-91051-S-1 MSD		480-333416		11/25/2016 18:20	50	TAL BUF	SMY
A:8260C	280-91051-S-1 MSD		480-333416		11/25/2016 18:20	50	TAL BUF	SMY
P:3005A	280-90984-E-1-F MSD		280-354109	280-352694	11/25/2016 15:45	1	TAL DEN	MLS
A:6010B	280-90984-E-1-F MSD		280-354109	280-352694	12/02/2016 23:23	1	TAL DEN	LLB
P:3005A	280-90984-E-1-F MSD		280-354577	280-352694	11/25/2016 15:45	1	TAL DEN	MLS
A:6010B	280-90984-E-1-F MSD		280-354577	280-352694	12/06/2016 16:26	1	TAL DEN	CML
A:300.0	280-90914-A-1 MSD		280-353988		12/02/2016 13:29	5	TAL DEN	AFB
A:300.0	280-91667-E-11 MSD		280-353988		12/02/2016 20:48	1	TAL DEN	AFB
A:353.2	280-90973-B-12 MSD		280-353604		11/29/2016 17:14	1	TAL DEN	SVC
A:SM 5310B	280-90918-F-1 MSD		280-353712		11/29/2016 23:43	1	TAL DEN	CCJ

Quality Control Results

Client: Waste Management

Job Number: 280-91030-1

Laboratory Chronicle

Lab ID: DU

Client ID: N/A

Sample Date/Time: 11/11/2016 13:42 Received Date/Time: 11/11/2016 14:58

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:300.0	280-90914-A-1 DU		280-353988		12/02/2016 12:53	5	TAL DEN	AFB
A:300.0	280-91667-D-11 DU		280-353988		12/02/2016 20:12	1	TAL DEN	AFB
A:SM 2320B	280-90999-A-1 DU		280-352383		11/20/2016 13:05	1	TAL DEN	MMC
A:SM 2320B	280-91153-A-1 DU		280-352831		11/22/2016 15:55	1	TAL DEN	MMC

Lab References:

TAL BUF = TestAmerica Buffalo

TAL DEN = TestAmerica Denver

Chain of Custody Record

Client Information
 Client Contact: **SAM ADLINGTON**
 Mr. Charles Leake **40 DAN VENCHIARUTE**
 Company: **5LS ENGINEERS**
 Address: **9900 Southwest Barney White Road 2405 140th AVENUE**
 City: **BREMEN**
 State: **WA** Zip: **98052**
 Phone: **(425) 289-5445**
 Email:

Sampler: **SAM ADLINGTON**
 Lab PM: **Sara, Betsy A**
 Phone: **(425) 495-0818**
 E-Mail: **betsy.sara@testamericainc.com**

Carrier Tracking No(s):
 COC No: **280-29114-4071.1**
 Page: **Page 1 of 1**
 Job #:

Due Date Requested: **STANDARD**
TAT Requested (days):
PO #:
WO #:
Project #: **28002692-Annual OBW-TB/L-INF App I/II -Dec**
SSOW#:

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastewater, B=soil, A=air)	Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		8260B - SIM - Vinyl chloride			8260B - SIM - Alkyls/TDS			Dissolved Metals			Ammonia/NOX/TOC			
					A	N	D	S	A	N	D	A	N	D	A	N	D	A	N	D	A
OBWL-TD	11/14/16	1025	G	W	Y	N	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L-INF	11/14/16	1100	G	W	Y	N	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
TRIP BLANK							X														

Special Instructions/Note:

Preservation Codes:
 A - HCL
 B - NaOH
 C - Zn Acetate
 D - Nitric Acid
 E - NaHSO4
 F - MeOH
 G - Archlor
 H - Ascorbic Acid
 I - Ice
 J - DI Water
 K - EDTA
 L - EDA
 Other:

Preservation Codes:
 M - Hexane
 N - None
 O - AsNaO2
 P - Na2OAS
 Q - Na2SO3
 R - Na2S2O3
 S - H2SO4
 T - TSP Dodecahydrate
 U - Acetone
 V - MCAA
 W - ph 4-5
 X - EDTA
 Y - EDA
 Z - other (specify)

Analysis Requested

Special Instructions/Note:

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:
 Relinquished by: **SAM ADLINGTON**
 Date/Time: **11/14/2016 16:00**
 Company: **5LS**

Received by:
 Received by: **[Signature]**
 Date/Time: **11/15/16 0850**
 Company: **TAO**

Relinquished by:
 Relinquished by: _____
 Date/Time: _____
 Company: _____

Custody Seals Intact:
 Custody Seal No.: **876311**

Other Remarks:
0.4 + 0.0 IR# 5 transferred by 35 11/15/16

Barcode:
 280-91030 Chain of Custody

90 91030

FIELD INFORMATION FORM



Site Name: OVSL

This Waste Management Field Information Form is Required.
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID: _____

Site No.: _____
 Sample Point: OBWL-TD
 Sample ID

PURGE INFO	<u>11/14/16</u>	<u>00:10</u>				
	PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs:min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)	WELL VOLs PURGED

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

Purging and Sampling Equipment...Dedicated: Y or N

Purging Device: B A-Submersible Pump D-Bailer
 B-Peristaltic Pump E-Piston Pump
 Sampling Device: B C-QED Bladder Pump F-Dipper/Bottle

Filter Device: Y or N 0.45 μ or _____ μ (circle or fill in)
 Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other _____

X-Other: _____ Sample Tube Type: D A-Teflon C-PVC X-Other: _____
 B-Stainless Steel D-Polypropylene

Well Elevation (at TOC) _____ (ft/mal) Depth to Water (DTW) _____ (ft) Groundwater Elevation (site datum, from TOC) _____ (ft/mal)

Total Well Depth (from TOC) _____ (ft) Stick Up (from ground elevation) _____ (ft) Casing ID _____ (in) Casing Material _____

Note: Total Well Depth, Stick Up, Casing Id. etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)	Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (μ mhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
		<u>10:20</u>		<u>7.04</u>	<u>1176</u>	<u>12.52</u>	<u>3260</u>	<u>9.05</u>	<u>1160</u>
	<u>10:25</u>		<u>6.98</u>	<u>145</u>	<u>13.29</u>	<u>2577</u>	<u>8.53</u>	<u>1293</u>	

Suggested ranges for 3 consec. readings or note Permit/State requirements:
 pH: +/- 0.2 Conductance: +/- 3% D.O.: +/- 10% eH/ORP: +/- 25 mV DTW: Stabilize

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (μ mhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: <u>TIME</u> Units
<u>11/14/16</u>	<u>6.98</u>	<u>145</u>	<u>13.29</u>	<u>2577</u>	<u>8.53</u>	<u>1293</u>	<u>10:25</u>

Sample Appearance: CLEAR Odor: — Color: — Other: —

Weather Conditions (required daily, or as conditions change): _____ Direction/Speed: _____ Outlook: OVERCAST Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required): _____

FIELD COMMENTS

STANDING WATER IN SUMP, NOT FLOWING - INSERTED TO COLLECT SAMPLE. PERISTALTIC SPEED = 7 \approx 300 ml/min
DTW = 7.03 ϕ = 4" ID
DTB = 11.95
1x 1000ml Poly, 2x 500ml H₂SO₄ AMBER, 1x 500ml HNO₃ Poly, 6x VOA

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

11/14/16 JAM ADLINGTON [Signature] SCS ENG.

Date Name Signature Company

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM



Site Name: OVSL
 Site No.:
 Sample Point: L-INF
 Sample ID:

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO
 PURGE DATE (MM DD YY): 11/14/16
 PURGE TIME (2400 Hr Clock):
 ELAPSED HRS (hrs:min):
 WATER VOL IN CASING (Gallons):
 ACTUAL VOL PURGED (Gallons):
 WELL VOL PURGED:

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: Y or N
 Filter Device: Y or N 0.45 µ or µ (circle or fill in)
 Purging Device: B A-Submersible Pump D-Bailer
 B-Peristaltic Pump E-Piston Pump
 Sampling Device: B C-QBD Bladder Pump F-Dipper/Bottle
 X-Other:
 Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other:
 Sample Tube Type: D A-Teflon C-PVC X-Other:
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC): (ft) Depth to Water (DTW) (from TOC): (ft) Groundwater Elevation (site datum, from TOC): (ft)
 Total Well Depth (from TOC): (ft) Stick Up (from ground elevation): (ft) Casing ID: (in) Casing Material:

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)	Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (µmhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
	1 st	<u>111416</u>		<u>7.83</u>	<u>4383</u>	<u>11.24</u>	<u>3138</u>	<u>6.16</u>	<u>1040</u>
2 nd									
3 rd									
4 th									

Suggested range for 3 concave readings or none Permit/State requirements:
 pH: ± 0.2 Conductance: $\pm 3\%$ Turbidity: $-$ D.O.: $\pm 10\%$ eH/ORP: ± 25 mV DTW: Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA
 SAMPLE DATE (MM DD YY): 111416 pH (std): 7.83 CONDUCTANCE (µmhos/cm @ 25°C): 4383 TEMP. (°C):
 TURBIDITY (ntu): 3138 DO (mg/L - ppm): 6.16 eH/ORP (mV): 1040 Other: Time
 Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site.)

Sample Appearance: CLEAR Odor: Color: Other:

Weather Conditions (required daily, or as conditions change): Direction/Speed: Outlook: OVERCAST Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required):

FIELD COMMENTS
SAMPLE COLLECTED FROM POND COVER HATCH ON NORTH SIDE OF POND, FROM THE 6" Ø WELVENT PIPE.
1x 1000mL Poly, 2x 500mL H2SO4 AMBER, 1x 500mL HNO3 Poly, 6x VOA

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
11/14/16 SAM ADLINGTON [Signature] SCS ENG.
 Date Name Signature Company

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

Chain of Custody Record



Client Information (Sub Contract Lab)		Sampler:		Lab PM:		Carrier Tracking No(s):		COC No:	
Client Contact: Shipping/Receiving		Phone:		Sara, Betsy A		State of Origin: Washington		280-378005.1	
Company: TestAmerica Laboratories, Inc.		E-Mail: betsy.sara@testamericainc.com		betsy.sara@testamericainc.com		Page: Page 1 of 1		Job #: 280-91030-1	
Address: 10 Hazelwood Drive, Amherst State, Zip: NY, 14228-2298		Due Date Requested: 12/2/2016		TAT Requested (days):		Accreditations Required (See note): NELAP - Oregon		Preservation Codes: M - Hexane N - None O - AsNaO2 P - Na2OAS Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - PH 4-6 X - EDTA L - EDA Other:	
PO #:		WO #:		Project #: 28002692		SSOW#:		Analysis Requested	
Project Name: WA02(Olympic View Sanitary LF		Site: WA02(Olympic View Sanitary LF		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)	
Sample Identification - Client ID (Lab ID)		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=waste/oi), BT=Tissue, AC=Air	
OBWL-TD (280-91030-1)		11/14/16		10:25 Pacific		Water		Preservation Code	
L-INF (280-91030-2)		11/14/16		11:00 Pacific		Water		Field Filtered Sample (Yes or No)	
TRIP BLANK (280-91030-3)		11/14/16		Pacific		Water		Perform MS/MSD (Yes or No)	
								8260C/5030C (MOD) Appendix II Volatiles	
								8260C SIM/5030C (MOD) Local Method	
								Total Number of Containers	
								Special Instructions/Note:	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyze & accreditation compliance upon our 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/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 compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification
 Unconfirmed
 Deliverable Requested: I, II, III, IV, Other (specify) _____ Primary Deliverable Rank: 2
 Empty Kit Relinquished by: _____ Date: _____ Method of Shipment: _____
 Relinquished by: *See* Date: 11-16-16 1510 Company: TAD
 Relinquished by: _____ Date/Time: _____ Received by: *[Signature]* Date/Time: 11/17/16 0945 Company: TA Buf.
 Relinquished by: _____ Date/Time: _____ Received by: _____ Date/Time: _____ Company: _____
 Custody Seals Intact: _____ Custody Seal No.: _____
 Δ Yes Δ No Cooler Temperature(s) °C and Other Remarks: # 1 3.5°C

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-91030-1

Login Number: 91030
List Number: 1
Creator: True, Joshua A

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.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	False	No: Headspace larger than 1/4" in 1 or more vial; at least one vial w/o headspace.
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: Waste Management

Job Number: 280-91030-1

Login Number: 91030
List Number: 2
Creator: Wallace, Cameron

List Source: TestAmerica Buffalo
List Creation: 11/17/16 04:36 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	3.5 #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	

ANALYTICAL REPORT

Job Number: 280-90968-1

Job Description: WA02|Olympic View Sanitary LF

For:

Waste Management
Sun Valley Hauling
9081 Tujunga Avenue
Sun Valley, CA 91352

Attention: Mr. Phil Perley



Approved for release.
Betsy A Sara
Project Manager II
12/11/2016 12:38 PM

Betsy A Sara, Project Manager II
4955 Yarrow Street, Arvada, CO, 80002
(303)736-0189
betsy.sara@testamericainc.com
12/11/2016

cc: Mr. Dan Venchiarutti

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.

TestAmerica Laboratories, Inc.

TestAmerica Denver 4955 Yarrow Street, Arvada, CO 80002
Tel (303) 736-0100 Fax (303) 431-7171 www.testamericainc.com



Table of Contents

Cover Title Page	1
Report Narrative	3
Executive Summary	5
Method Summary	15
Method / Analyst Summary	16
Sample Summary	17
Sample Results	18
Sample Datasheets	19
Data Qualifiers	113
QC Results	114
Qc Association Summary	115
Surrogate Recovery Report	125
Qc Reports	127
Laboratory Chronicle	168
Client Chain of Custody	182
Sample Receipt Checklist	194

CASE NARRATIVE

Client: Waste Management

Project: WA02|Olympic View Sanitary LF

Report Number: 280-90968-1

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

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

Sample Receiving

The samples were received on 11/15/2016; the samples arrived in good condition, properly preserved and on ice. The temperatures of the coolers at receipt were 0.1° C, 0.1° C, 0.4° C and 0.4° C.

Holding Times

All holding times were within established control limits.

Method Blanks

Vinyl chloride Method 8260C SIM was detected in the Method Blanks below the project established reporting limits. No corrective action is taken for any values in Method Blanks that are below the requested reporting limits.

All other Method Blank recoveries 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)

The percent recoveries and/or relative percent difference of the MS/MSD performed on sample L-INF (91030) were outside control limits for Dissolved Manganese Method 6020 because the sample concentration was greater than four times the spike amount. Because the corresponding Laboratory Control Sample and the Method Blank sample were within control limits, no corrective action was taken.

Sample MW-16 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. 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.

Sample Duplicate

The RPD results for Total Dissolved Solids (TDS) Method 2540C performed on samples MW-4 and DUP2 were outside control limits. Because all other QC and calibration criteria were met no corrective action was needed.

Organics

The analytes Acrolein, Acrylonitrile and 2-chloroethyl vinyl ether cannot be reliably quantitated in acid preserved samples, therefore, the reporting limits for the analytes Acrolein, Acrylonitrile and 2-chloroethyl vinyl ether is not reliable or defensible.

General Comments

The analyses for Volatile Organics by Method 8260C and Volatile Organics by Method 8260C SIM were performed by TestAmerica Buffalo. Their address and phone number are:

TestAmerica Buffalo
10 Hazelwood Drive, Suite 106
Amherst, NY 14228
716-691-2600

EXECUTIVE SUMMARY - Detections

Client: Waste Management

Job Number: 280-90968-1

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-90968-1	MW-13A					
Vinyl chloride		0.0080	J B	0.020	ug/L	8260C SIM
Depth to water		45.76			ft	Field Sampling
Specific Conductivity		169			umhos/cm	Field Sampling
Dissolved Oxygen		6.54			mg/L	Field Sampling
eH		113.0			millivolts	Field Sampling
Turbidity		0.84			NTU	Field Sampling
Temperature		9.57			Degrees C	Field Sampling
pH		6.50			SU	Field Sampling
Chloride		1.8		1.0	mg/L	300.0
Sulfate		2.0		1.0	mg/L	300.0
Nitrate as N		0.48		0.050	mg/L	353.2
Alkalinity, Total (As CaCO3)		92		5.0	mg/L	SM 2320B
Alkalinity, Bicarbonate (As CaCO3)		92		5.0	mg/L	SM 2320B
Total Dissolved Solids (TDS)		110		5.0	mg/L	SM 2540C
<i>Dissolved</i>						
Calcium, Dissolved		16		0.040	mg/L	6010B
Magnesium, Dissolved		10		0.050	mg/L	6010B
Sodium, Dissolved		5.4		1.0	mg/L	6010B
<i>Total Recoverable</i>						
Iron, Total		0.073		0.060	mg/L	6010B
Barium, Total		0.0028		0.0010	mg/L	6020
Copper, Total		0.0021		0.0020	mg/L	6020
Vanadium, Total		0.0039		0.0020	mg/L	6020

EXECUTIVE SUMMARY - Detections

Client: Waste Management

Job Number: 280-90968-1

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-90968-2	MW-13B					
Depth to water		59.30			ft	Field Sampling
Specific Conductivity		171			umhos/cm	Field Sampling
Dissolved Oxygen		6.94			mg/L	Field Sampling
eH		84.0			millivolts	Field Sampling
Turbidity		0.89			NTU	Field Sampling
Temperature		10.41			Degrees C	Field Sampling
pH		7.17			SU	Field Sampling
Chloride		1.9		1.0	mg/L	300.0
Sulfate		3.0		1.0	mg/L	300.0
Nitrate as N		0.64		0.050	mg/L	353.2
Alkalinity, Total (As CaCO3)		80		5.0	mg/L	SM 2320B
Alkalinity, Bicarbonate (As CaCO3)		80		5.0	mg/L	SM 2320B
Total Dissolved Solids (TDS)		100		5.0	mg/L	SM 2540C
<i>Dissolved</i>						
Calcium, Dissolved		17		0.040	mg/L	6010B
Magnesium, Dissolved		9.3		0.050	mg/L	6010B
Sodium, Dissolved		5.1		1.0	mg/L	6010B
Manganese, Dissolved		0.0012		0.0010	mg/L	6020
<i>Total Recoverable</i>						
Barium, Total		0.0029		0.0010	mg/L	6020
Chromium, Total		0.0036		0.0030	mg/L	6020
Vanadium, Total		0.0061		0.0020	mg/L	6020

EXECUTIVE SUMMARY - Detections

Client: Waste Management

Job Number: 280-90968-1

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-90968-3	MW-16					
Depth to water		59.30			ft	Field Sampling
Specific Conductivity		110			umhos/cm	Field Sampling
Dissolved Oxygen		6.91			mg/L	Field Sampling
eH		135.0			millivolts	Field Sampling
Turbidity		2.51			NTU	Field Sampling
Temperature		9.81			Degrees C	Field Sampling
pH		5.89			SU	Field Sampling
Chloride		1.0		1.0	mg/L	300.0
Sulfate		1.6		1.0	mg/L	300.0
Nitrate as N		0.24		0.050	mg/L	353.2
Alkalinity, Total (As CaCO3)		56		5.0	mg/L	SM 2320B
Alkalinity, Bicarbonate (As CaCO3)		56		5.0	mg/L	SM 2320B
Total Dissolved Solids (TDS)		86		5.0	mg/L	SM 2540C
<i>Dissolved</i>						
Calcium, Dissolved		9.6		0.040	mg/L	6010B
Magnesium, Dissolved		5.9		0.050	mg/L	6010B
Sodium, Dissolved		5.0		1.0	mg/L	6010B
Manganese, Dissolved		0.0027		0.0010	mg/L	6020
<i>Total Recoverable</i>						
Iron, Total		0.12		0.060	mg/L	6010B
Barium, Total		0.0045		0.0010	mg/L	6020
Chromium, Total		0.0085		0.0030	mg/L	6020
Manganese, Total		0.017		0.0010	mg/L	6020
Vanadium, Total		0.0049		0.0020	mg/L	6020
Zinc, Total		0.0056		0.0050	mg/L	6020

EXECUTIVE SUMMARY - Detections

Client: Waste Management

Job Number: 280-90968-1

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-90968-4	MW-39					
Depth to water		17.16			ft	Field Sampling
Specific Conductivity		130			umhos/cm	Field Sampling
Dissolved Oxygen		1.28			mg/L	Field Sampling
eH		47.0			millivolts	Field Sampling
Turbidity		4.53			NTU	Field Sampling
Temperature		12.89			Degrees C	Field Sampling
pH		5.27			SU	Field Sampling
Sulfate		1.4		1.0	mg/L	300.0
Nitrate as N		1.6		0.050	mg/L	353.2
Alkalinity, Total (As CaCO3)		57		5.0	mg/L	SM 2320B
Alkalinity, Bicarbonate (As CaCO3)		57		5.0	mg/L	SM 2320B
Total Dissolved Solids (TDS)		76		5.0	mg/L	SM 2540C
<i>Dissolved</i>						
Calcium, Dissolved		13		0.040	mg/L	6010B
Iron, Dissolved		0.37		0.060	mg/L	6010B
Magnesium, Dissolved		6.1		0.050	mg/L	6010B
Sodium, Dissolved		4.8		1.0	mg/L	6010B
Manganese, Dissolved		0.020		0.0010	mg/L	6020
<i>Total Recoverable</i>						
Iron, Total		0.80		0.060	mg/L	6010B
Barium, Total		0.0086		0.0010	mg/L	6020
Manganese, Total		0.017		0.0010	mg/L	6020

EXECUTIVE SUMMARY - Detections

Client: Waste Management

Job Number: 280-90968-1

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-90968-5	MW-4					
Vinyl chloride		0.0095	J B	0.020	ug/L	8260C SIM
Depth to water		11.79			ft	Field Sampling
Specific Conductivity		50			umhos/cm	Field Sampling
Dissolved Oxygen		4.07			mg/L	Field Sampling
eH		142.0			millivolts	Field Sampling
Turbidity		1.06			NTU	Field Sampling
Temperature		11.49			Degrees C	Field Sampling
pH		5.06			SU	Field Sampling
Chloride		1.4		1.0	mg/L	300.0
Sulfate		2.0		1.0	mg/L	300.0
Nitrate as N		0.33		0.050	mg/L	353.2
Alkalinity, Total (As CaCO3)		42		5.0	mg/L	SM 2320B
Alkalinity, Bicarbonate (As CaCO3)		42		5.0	mg/L	SM 2320B
Total Dissolved Solids (TDS)		36		5.0	mg/L	SM 2540C
<i>Dissolved</i>						
Calcium, Dissolved		4.3		0.040	mg/L	6010B
Magnesium, Dissolved		2.0		0.050	mg/L	6010B
Sodium, Dissolved		3.0		1.0	mg/L	6010B
Manganese, Dissolved		0.021		0.0010	mg/L	6020
<i>Total Recoverable</i>						
Barium, Total		0.0019		0.0010	mg/L	6020
Manganese, Total		0.21		0.0010	mg/L	6020

EXECUTIVE SUMMARY - Detections

Client: Waste Management

Job Number: 280-90968-1

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-90968-6	MW-43					
Specific Conductivity		34			umhos/cm	Field Sampling
Dissolved Oxygen		2.73			mg/L	Field Sampling
eH		156.8			millivolts	Field Sampling
Turbidity		17.19			NTU	Field Sampling
Temperature		12.63			Degrees C	Field Sampling
pH		6.38			SU	Field Sampling
Sulfate		1.7		1.0	mg/L	300.0
Ammonia (as N)		0.030		0.030	mg/L	350.1
Nitrate as N		0.52		0.050	mg/L	353.2
Alkalinity, Total (As CaCO3)		13		5.0	mg/L	SM 2320B
Alkalinity, Bicarbonate (As CaCO3)		13		5.0	mg/L	SM 2320B
Total Dissolved Solids (TDS)		28		5.0	mg/L	SM 2540C
Total Organic Carbon - Average		1.2		1.0	mg/L	SM 5310B
<i>Dissolved</i>						
Calcium, Dissolved		3.2		0.040	mg/L	6010B
Magnesium, Dissolved		1.4		0.050	mg/L	6010B
Sodium, Dissolved		2.3		1.0	mg/L	6010B
Manganese, Dissolved		0.033		0.0010	mg/L	6020
<i>Total Recoverable</i>						
Iron, Total		0.24		0.060	mg/L	6010B
Barium, Total		0.0034		0.0010	mg/L	6020
Manganese, Total		0.036		0.0010	mg/L	6020

EXECUTIVE SUMMARY - Detections

Client: Waste Management

Job Number: 280-90968-1

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-90968-7	MW-20					
Depth to water		35.01			ft	Field Sampling
Specific Conductivity		200			umhos/cm	Field Sampling
Dissolved Oxygen		6.39			mg/L	Field Sampling
eH		121.8			millivolts	Field Sampling
Turbidity		12.91			NTU	Field Sampling
Temperature		14.37			Degrees C	Field Sampling
pH		6.94			SU	Field Sampling
Chloride		8.3		1.0	mg/L	300.0
Sulfate		4.2		1.0	mg/L	300.0
Nitrate as N		6.0		0.050	mg/L	353.2
Alkalinity, Total (As CaCO3)		75		5.0	mg/L	SM 2320B
Alkalinity, Bicarbonate (As CaCO3)		75		5.0	mg/L	SM 2320B
Total Dissolved Solids (TDS)		160		5.0	mg/L	SM 2540C
Total Suspended Solids		4.0		4.0	mg/L	SM 2540D
<i>Dissolved</i>						
Calcium, Dissolved		19		0.040	mg/L	6010B
Magnesium, Dissolved		11		0.050	mg/L	6010B
Potassium, Dissolved		3.1		1.0	mg/L	6010B
Sodium, Dissolved		9.3		1.0	mg/L	6010B
<i>Total Recoverable</i>						
Iron, Total		0.18		0.060	mg/L	6010B
Barium, Total		0.016		0.0010	mg/L	6020
Manganese, Total		0.45		0.0010	mg/L	6020
Nickel, Total		0.0048		0.0040	mg/L	6020

EXECUTIVE SUMMARY - Detections

Client: Waste Management

Job Number: 280-90968-1

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-90968-8FD	DUP2					
Chloride		8.4		1.0	mg/L	300.0
Sulfate		4.3		1.0	mg/L	300.0
Nitrate as N		5.9		0.050	mg/L	353.2
Alkalinity, Total (As CaCO ₃)		75		5.0	mg/L	SM 2320B
Alkalinity, Bicarbonate (As CaCO ₃)		75		5.0	mg/L	SM 2320B
Total Dissolved Solids (TDS)		150		5.0	mg/L	SM 2540C
Total Suspended Solids		5.6		4.0	mg/L	SM 2540D
<i>Dissolved</i>						
Calcium, Dissolved		19		0.040	mg/L	6010B
Magnesium, Dissolved		11		0.050	mg/L	6010B
Potassium, Dissolved		3.1		1.0	mg/L	6010B
Sodium, Dissolved		9.3		1.0	mg/L	6010B
<i>Total Recoverable</i>						
Iron, Total		0.15		0.060	mg/L	6010B
Barium, Total		0.016		0.0010	mg/L	6020
Manganese, Total		0.44		0.0010	mg/L	6020
Nickel, Total		0.0058		0.0040	mg/L	6020
Vanadium, Total		0.0022		0.0020	mg/L	6020

EXECUTIVE SUMMARY - Detections

Client: Waste Management

Job Number: 280-90968-1

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-90968-9	MW-19C					
Trichloroethene		0.99	J	1.0	ug/L	8260C
Vinyl chloride		0.029	B	0.020	ug/L	8260C SIM
Depth to water		32.96			ft	Field Sampling
Specific Conductivity		154			umhos/cm	Field Sampling
Dissolved Oxygen		0.33			mg/L	Field Sampling
eH		63.1			millivolts	Field Sampling
Turbidity		5.85			NTU	Field Sampling
Temperature		10.56			Degrees C	Field Sampling
pH		7.41			SU	Field Sampling
Chloride		5.7		1.0	mg/L	300.0
Sulfate		3.7		1.0	mg/L	300.0
Ammonia (as N)		0.67		0.030	mg/L	350.1
Alkalinity, Total (As CaCO3)		74		5.0	mg/L	SM 2320B
Alkalinity, Bicarbonate (As CaCO3)		74		5.0	mg/L	SM 2320B
Total Dissolved Solids (TDS)		110		5.0	mg/L	SM 2540C
<i>Dissolved</i>						
Calcium, Dissolved		16		0.040	mg/L	6010B
Iron, Dissolved		0.064		0.060	mg/L	6010B
Magnesium, Dissolved		8.8		0.050	mg/L	6010B
Potassium, Dissolved		1.5		1.0	mg/L	6010B
Sodium, Dissolved		6.1		1.0	mg/L	6010B
Manganese, Dissolved		1.2		0.0010	mg/L	6020
<i>Total Recoverable</i>						
Iron, Total		0.12		0.060	mg/L	6010B
Barium, Total		0.0035		0.0010	mg/L	6020
Manganese, Total		1.2		0.0010	mg/L	6020

EXECUTIVE SUMMARY - Detections

Client: Waste Management

Job Number: 280-90968-1

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-90968-11	MW-29A					
Depth to water		14.68			ft	Field Sampling
Specific Conductivity		87			umhos/cm	Field Sampling
Dissolved Oxygen		0.23			mg/L	Field Sampling
eH		45.6			millivolts	Field Sampling
Turbidity		8.87			NTU	Field Sampling
Temperature		11.34			Degrees C	Field Sampling
pH		6.96			SU	Field Sampling
Chloride		1.7		1.0	mg/L	300.0
Ammonia (as N)		0.075		0.030	mg/L	350.1
Alkalinity, Total (As CaCO3)		47		5.0	mg/L	SM 2320B
Alkalinity, Bicarbonate (As CaCO3)		47		5.0	mg/L	SM 2320B
Total Dissolved Solids (TDS)		58		5.0	mg/L	SM 2540C
Total Suspended Solids		4.0		4.0	mg/L	SM 2540D
Total Organic Carbon - Average		1.7		1.0	mg/L	SM 5310B
<i>Dissolved</i>						
Calcium, Dissolved		7.4		0.040	mg/L	6010B
Iron, Dissolved		4.1		0.060	mg/L	6010B
Magnesium, Dissolved		4.5		0.050	mg/L	6010B
Sodium, Dissolved		3.6		1.0	mg/L	6010B
Manganese, Dissolved		1.4		0.0010	mg/L	6020
<i>Total Recoverable</i>						
Iron, Total		4.6		0.060	mg/L	6010B
Barium, Total		0.010		0.0010	mg/L	6020
Manganese, Total		1.4		0.0010	mg/L	6020

METHOD SUMMARY

Client: Waste Management

Job Number: 280-90968-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Metals (ICP)	TAL DEN	SW846 6010B	
Preparation, Total Recoverable or Dissolved Metals	TAL DEN		SW846 3005A
Metals (ICP)	TAL DEN	SW846 6010B	
Preparation, Total Recoverable or Dissolved Metals	TAL DEN		SW846 3005A
Sample Filtration, Field			FIELD_FLTRD
Metals (ICP/MS)	TAL DEN	SW846 6020	
Preparation, Total Recoverable or Dissolved Metals	TAL DEN		SW846 3005A
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	
Nitrogen, Ammonia	TAL DEN	MCAWW 350.1	
Nitrate	TAL DEN	EPA 353.2	
Alkalinity	TAL DEN	SM SM 2320B	
Solids, Total Dissolved (TDS)	TAL DEN	SM SM 2540C	
Solids, Total Suspended (TSS)	TAL DEN	SM SM 2540D	
Organic Carbon, Total (TOC)	TAL DEN	SM SM 5310B	
Field Sampling	TAL DEN	EPA Field Sampling	
Volatile Organic Compounds by GC/MS	TAL BUF	SW846 8260C	
Purge and Trap	TAL BUF		SW846 5030C
Volatile Organic Compounds (GC/MS)	TAL BUF	SW846 8260C SIM	
Purge and Trap	TAL BUF		SW846 5030C

Lab References:

TAL BUF = TestAmerica Buffalo

TAL DEN = TestAmerica Denver

Method References:

EPA = US Environmental Protection Agency

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: Waste Management

Job Number: 280-90968-1

Method	Analyst	Analyst ID
SW846 8260C	Archer, Nicholas E	NEA
SW846 8260C SIM	Dias, Nicole M	NMD1
SW846 6010B	Diaz, Luis R	LRD
SW846 6010B	Lackey, Cara M	CML
SW846 6020	Trudell, Lynn-Anne M	LMT
EPA Field Sampling	Krisorn, Chamaiporn 1	C1K
MCAWW 300.0	Benson, Alex F	AFB
MCAWW 350.1	Spedale, Morgan A	MAS
EPA 353.2	Allen, Andrew J	AJA
SM SM 2320B	Carter, Melynda M	MMC
SM SM 2540C	Pedrick, Joshua A	JAP
SM SM 2540D	Cherry, Scott V	SVC
SM SM 5310B	Jewell, Connie C	CCJ

SAMPLE SUMMARY

Client: Waste Management

Job Number: 280-90968-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-90968-1	MW-13A	Water	11/14/2016 1004	11/15/2016 1217
280-90968-2	MW-13B	Water	11/14/2016 1135	11/15/2016 1217
280-90968-3	MW-16	Water	11/14/2016 1248	11/15/2016 1217
280-90968-4	MW-39	Water	11/14/2016 1354	11/15/2016 1217
280-90968-5	MW-4	Water	11/14/2016 1500	11/15/2016 1217
280-90968-6	MW-43	Water	11/14/2016 1158	11/15/2016 1217
280-90968-7	MW-20	Water	11/14/2016 1329	11/15/2016 1217
280-90968-8FD	DUP2	Water	11/14/2016 1339	11/15/2016 1217
280-90968-9	MW-19C	Water	11/14/2016 1428	11/15/2016 1217
280-90968-10TB	TRIP BLANK	Water	11/14/2016 0000	11/15/2016 1217
280-90968-11	MW-29A	Water	11/14/2016 1244	11/15/2016 1217

SAMPLE RESULTS

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-13A

Lab Sample ID: 280-90968-1

Date Sampled: 11/14/2016 1004

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333215	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S9806.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 1144		Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 1144		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	ND		0.35	1.0
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,1-Dichloropropene	ND		0.72	1.0
1,2,3-Trichlorobenzene	ND		0.41	1.0
1,2,3-Trichloropropane	ND		0.89	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2,4-Trimethylbenzene	ND		0.75	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane (EDB)	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloroethene, Total	ND		0.81	2.0
1,2-Dichloropropane	ND		0.72	1.0
1,3,5-Trichlorobenzene	ND		0.23	1.0
1,3,5-Trimethylbenzene	ND		0.77	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,3-Dichloropropane	ND		0.75	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
1,4-Dioxane	ND		9.3	40
2,2-Dichloropropane	ND		0.40	1.0
2-Butanone (MEK)	ND		1.3	10
2-Chloroethyl vinyl ether	ND		0.96	5.0
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Acetonitrile	ND		4.9	15
Acrolein	ND		0.91	20
Acrylonitrile	ND		0.83	5.0
Benzene	ND		0.41	1.0
Bromobenzene	ND		0.80	1.0
Bromochloromethane	ND		0.87	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Butyl alcohol, n-	ND		8.9	40
Butyl alcohol, tert-	ND		3.3	10
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Chlorodifluoromethane	ND		0.26	1.0
Chloroethane	ND		0.32	1.0

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-13A

Lab Sample ID: 280-90968-1

Date Sampled: 11/14/2016 1004

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333215	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S9806.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 1144		Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 1144		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dibromochloromethane	ND		0.32	1.0
Dibromomethane	ND		0.41	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Dichlorofluoromethane	ND		0.34	1.0
Ethyl acetate	ND		0.66	1.0
Ethyl ether	ND		0.72	1.0
Ethyl tert-butyl ether	ND		0.29	1.0
Ethylbenzene	ND		0.74	1.0
Hexachlorobutadiene	ND		0.28	1.0
Hexane	ND		0.40	10
Iodomethane	ND		0.30	1.0
Isobutanol	ND		4.8	25
Isopropyl ether	ND		0.59	1.0
Isopropylbenzene	ND		0.79	1.0
Methacrylonitrile	ND		0.69	5.0
Methyl acetate	ND		1.3	2.5
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
Naphthalene	ND		0.43	1.0
n-Butylbenzene	ND		0.64	1.0
N-Propylbenzene	ND		0.69	1.0
o-Chlorotoluene	ND		0.86	1.0
o-Xylene	ND		0.76	1.0
p-Chlorotoluene	ND		0.84	1.0
p-Cymene	ND		0.31	1.0
sec-Butylbenzene	ND		0.75	1.0
Styrene	ND		0.73	1.0
Tert-amyl methyl ether	ND		0.27	1.0
tert-Butylbenzene	ND		0.81	1.0
Tetrachloroethene	ND		0.36	1.0
Tetrahydrofuran	ND		1.3	5.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
trans-1,4-Dichloro-2-butene	ND		0.22	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0
Vinyl acetate	ND		0.85	5.0
Vinyl chloride	ND		0.90	1.0

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-13A

Lab Sample ID: 280-90968-1

Date Sampled: 11/14/2016 1004

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333215	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S9806.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 1144		Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 1144		

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	103		77 - 120
4-Bromofluorobenzene (Surr)	99		73 - 120
Toluene-d8 (Surr)	101		80 - 120

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-13A

Lab Sample ID: 280-90968-1

Date Sampled: 11/14/2016 1004

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-333215	Instrument ID:	HP5973S
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	S9806.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	11/23/2016 1144			Final Weight/Volume:	5 mL
Prep Date:	11/23/2016 1144				

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
67-72-1	Hexachloroethane TIC	ND	

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-13B

Lab Sample ID: 280-90968-2

Date Sampled: 11/14/2016 1135

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333215	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S9807.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 1207		Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 1207		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	ND		0.35	1.0
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,1-Dichloropropene	ND		0.72	1.0
1,2,3-Trichlorobenzene	ND		0.41	1.0
1,2,3-Trichloropropane	ND		0.89	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2,4-Trimethylbenzene	ND		0.75	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane (EDB)	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloroethene, Total	ND		0.81	2.0
1,2-Dichloropropane	ND		0.72	1.0
1,3,5-Trichlorobenzene	ND		0.23	1.0
1,3,5-Trimethylbenzene	ND		0.77	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,3-Dichloropropane	ND		0.75	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
1,4-Dioxane	ND		9.3	40
2,2-Dichloropropane	ND		0.40	1.0
2-Butanone (MEK)	ND		1.3	10
2-Chloroethyl vinyl ether	ND		0.96	5.0
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Acetonitrile	ND		4.9	15
Acrolein	ND		0.91	20
Acrylonitrile	ND		0.83	5.0
Benzene	ND		0.41	1.0
Bromobenzene	ND		0.80	1.0
Bromochloromethane	ND		0.87	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Butyl alcohol, n-	ND		8.9	40
Butyl alcohol, tert-	ND		3.3	10
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Chlorodifluoromethane	ND		0.26	1.0
Chloroethane	ND		0.32	1.0

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-13B

Lab Sample ID: 280-90968-2

Date Sampled: 11/14/2016 1135

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C Analysis Batch: 480-333215 Instrument ID: HP5973S
Prep Method: 5030C Prep Batch: N/A Lab File ID: S9807.D
Dilution: 1.0 Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 1207 Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 1207

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dibromochloromethane	ND		0.32	1.0
Dibromomethane	ND		0.41	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Dichlorofluoromethane	ND		0.34	1.0
Ethyl acetate	ND		0.66	1.0
Ethyl ether	ND		0.72	1.0
Ethyl tert-butyl ether	ND		0.29	1.0
Ethylbenzene	ND		0.74	1.0
Hexachlorobutadiene	ND		0.28	1.0
Hexane	ND		0.40	10
Iodomethane	ND		0.30	1.0
Isobutanol	ND		4.8	25
Isopropyl ether	ND		0.59	1.0
Isopropylbenzene	ND		0.79	1.0
Methacrylonitrile	ND		0.69	5.0
Methyl acetate	ND		1.3	2.5
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
Naphthalene	ND		0.43	1.0
n-Butylbenzene	ND		0.64	1.0
N-Propylbenzene	ND		0.69	1.0
o-Chlorotoluene	ND		0.86	1.0
o-Xylene	ND		0.76	1.0
p-Chlorotoluene	ND		0.84	1.0
p-Cymene	ND		0.31	1.0
sec-Butylbenzene	ND		0.75	1.0
Styrene	ND		0.73	1.0
Tert-amyl methyl ether	ND		0.27	1.0
tert-Butylbenzene	ND		0.81	1.0
Tetrachloroethene	ND		0.36	1.0
Tetrahydrofuran	ND		1.3	5.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
trans-1,4-Dichloro-2-butene	ND		0.22	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0
Vinyl acetate	ND		0.85	5.0
Vinyl chloride	ND		0.90	1.0

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-13B

Lab Sample ID: 280-90968-2

Date Sampled: 11/14/2016 1135

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333215	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S9807.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 1207		Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 1207		

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	104		77 - 120
4-Bromofluorobenzene (Surr)	100		73 - 120
Toluene-d8 (Surr)	102		80 - 120

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-13B

Lab Sample ID: 280-90968-2

Date Sampled: 11/14/2016 1135

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-333215	Instrument ID:	HP5973S
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	S9807.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	11/23/2016 1207			Final Weight/Volume:	5 mL
Prep Date:	11/23/2016 1207				

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
67-72-1	Hexachloroethane TIC	ND	

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-16

Lab Sample ID: 280-90968-3

Date Sampled: 11/14/2016 1248

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333215	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S9808.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 1230		Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 1230		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	ND		0.35	1.0
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,1-Dichloropropene	ND		0.72	1.0
1,2,3-Trichlorobenzene	ND		0.41	1.0
1,2,3-Trichloropropane	ND		0.89	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2,4-Trimethylbenzene	ND		0.75	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane (EDB)	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloroethene, Total	ND		0.81	2.0
1,2-Dichloropropane	ND		0.72	1.0
1,3,5-Trichlorobenzene	ND		0.23	1.0
1,3,5-Trimethylbenzene	ND		0.77	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,3-Dichloropropane	ND		0.75	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
1,4-Dioxane	ND		9.3	40
2,2-Dichloropropane	ND		0.40	1.0
2-Butanone (MEK)	ND		1.3	10
2-Chloroethyl vinyl ether	ND		0.96	5.0
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Acetonitrile	ND		4.9	15
Acrolein	ND		0.91	20
Acrylonitrile	ND		0.83	5.0
Benzene	ND		0.41	1.0
Bromobenzene	ND		0.80	1.0
Bromochloromethane	ND		0.87	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Butyl alcohol, n-	ND		8.9	40
Butyl alcohol, tert-	ND		3.3	10
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Chlorodifluoromethane	ND		0.26	1.0
Chloroethane	ND		0.32	1.0

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-16

Lab Sample ID: 280-90968-3

Date Sampled: 11/14/2016 1248

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-333215	Instrument ID:	HP5973S
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	S9808.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	11/23/2016 1230			Final Weight/Volume:	5 mL
Prep Date:	11/23/2016 1230				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dibromochloromethane	ND		0.32	1.0
Dibromomethane	ND		0.41	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Dichlorofluoromethane	ND		0.34	1.0
Ethyl acetate	ND		0.66	1.0
Ethyl ether	ND		0.72	1.0
Ethyl tert-butyl ether	ND		0.29	1.0
Ethylbenzene	ND		0.74	1.0
Hexachlorobutadiene	ND		0.28	1.0
Hexane	ND		0.40	10
Iodomethane	ND		0.30	1.0
Isobutanol	ND		4.8	25
Isopropyl ether	ND		0.59	1.0
Isopropylbenzene	ND		0.79	1.0
Methacrylonitrile	ND		0.69	5.0
Methyl acetate	ND		1.3	2.5
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
Naphthalene	ND		0.43	1.0
n-Butylbenzene	ND		0.64	1.0
N-Propylbenzene	ND		0.69	1.0
o-Chlorotoluene	ND		0.86	1.0
o-Xylene	ND		0.76	1.0
p-Chlorotoluene	ND		0.84	1.0
p-Cymene	ND		0.31	1.0
sec-Butylbenzene	ND		0.75	1.0
Styrene	ND		0.73	1.0
Tert-amyl methyl ether	ND		0.27	1.0
tert-Butylbenzene	ND		0.81	1.0
Tetrachloroethene	ND		0.36	1.0
Tetrahydrofuran	ND		1.3	5.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
trans-1,4-Dichloro-2-butene	ND		0.22	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0
Vinyl acetate	ND		0.85	5.0
Vinyl chloride	ND		0.90	1.0

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-16

Lab Sample ID: 280-90968-3

Date Sampled: 11/14/2016 1248

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333215	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S9808.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 1230		Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 1230		

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	106		77 - 120
4-Bromofluorobenzene (Surr)	99		73 - 120
Toluene-d8 (Surr)	103		80 - 120

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-16

Lab Sample ID: 280-90968-3

Date Sampled: 11/14/2016 1248

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analysis Batch: 480-333215

Instrument ID: HP5973S

Prep Method: 5030C

Prep Batch: N/A

Lab File ID: S9808.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Analysis Date: 11/23/2016 1230

Final Weight/Volume: 5 mL

Prep Date: 11/23/2016 1230

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
67-72-1	Hexachloroethane TIC	ND	

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-39

Lab Sample ID: 280-90968-4

Date Sampled: 11/14/2016 1354

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333215	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S9809.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 1253		Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 1253		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	ND		0.35	1.0
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,1-Dichloropropene	ND		0.72	1.0
1,2,3-Trichlorobenzene	ND		0.41	1.0
1,2,3-Trichloropropane	ND		0.89	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2,4-Trimethylbenzene	ND		0.75	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane (EDB)	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloroethene, Total	ND		0.81	2.0
1,2-Dichloropropane	ND		0.72	1.0
1,3,5-Trichlorobenzene	ND		0.23	1.0
1,3,5-Trimethylbenzene	ND		0.77	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,3-Dichloropropane	ND		0.75	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
1,4-Dioxane	ND		9.3	40
2,2-Dichloropropane	ND		0.40	1.0
2-Butanone (MEK)	ND		1.3	10
2-Chloroethyl vinyl ether	ND		0.96	5.0
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Acetonitrile	ND		4.9	15
Acrolein	ND		0.91	20
Acrylonitrile	ND		0.83	5.0
Benzene	ND		0.41	1.0
Bromobenzene	ND		0.80	1.0
Bromochloromethane	ND		0.87	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Butyl alcohol, n-	ND		8.9	40
Butyl alcohol, tert-	ND		3.3	10
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Chlorodifluoromethane	ND		0.26	1.0
Chloroethane	ND		0.32	1.0

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-39

Lab Sample ID: 280-90968-4

Date Sampled: 11/14/2016 1354

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C Analysis Batch: 480-333215 Instrument ID: HP5973S
Prep Method: 5030C Prep Batch: N/A Lab File ID: S9809.D
Dilution: 1.0 Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 1253 Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 1253

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dibromochloromethane	ND		0.32	1.0
Dibromomethane	ND		0.41	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Dichlorofluoromethane	ND		0.34	1.0
Ethyl acetate	ND		0.66	1.0
Ethyl ether	ND		0.72	1.0
Ethyl tert-butyl ether	ND		0.29	1.0
Ethylbenzene	ND		0.74	1.0
Hexachlorobutadiene	ND		0.28	1.0
Hexane	ND		0.40	10
Iodomethane	ND		0.30	1.0
Isobutanol	ND		4.8	25
Isopropyl ether	ND		0.59	1.0
Isopropylbenzene	ND		0.79	1.0
Methacrylonitrile	ND		0.69	5.0
Methyl acetate	ND		1.3	2.5
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
Naphthalene	ND		0.43	1.0
n-Butylbenzene	ND		0.64	1.0
N-Propylbenzene	ND		0.69	1.0
o-Chlorotoluene	ND		0.86	1.0
o-Xylene	ND		0.76	1.0
p-Chlorotoluene	ND		0.84	1.0
p-Cymene	ND		0.31	1.0
sec-Butylbenzene	ND		0.75	1.0
Styrene	ND		0.73	1.0
Tert-amyl methyl ether	ND		0.27	1.0
tert-Butylbenzene	ND		0.81	1.0
Tetrachloroethene	ND		0.36	1.0
Tetrahydrofuran	ND		1.3	5.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
trans-1,4-Dichloro-2-butene	ND		0.22	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0
Vinyl acetate	ND		0.85	5.0
Vinyl chloride	ND		0.90	1.0

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-39

Lab Sample ID: 280-90968-4

Date Sampled: 11/14/2016 1354

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333215	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S9809.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 1253		Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 1253		

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	102		77 - 120
4-Bromofluorobenzene (Surr)	100		73 - 120
Toluene-d8 (Surr)	102		80 - 120

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-39

Lab Sample ID: 280-90968-4

Date Sampled: 11/14/2016 1354

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-333215	Instrument ID:	HP5973S
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	S9809.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	11/23/2016 1253			Final Weight/Volume:	5 mL
Prep Date:	11/23/2016 1253				

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
67-72-1	Hexachloroethane TIC	ND	

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-4

Lab Sample ID: 280-90968-5

Date Sampled: 11/14/2016 1500

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333215	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S9812.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 1402		Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 1402		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	ND		0.35	1.0
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,1-Dichloropropene	ND		0.72	1.0
1,2,3-Trichlorobenzene	ND		0.41	1.0
1,2,3-Trichloropropane	ND		0.89	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2,4-Trimethylbenzene	ND		0.75	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane (EDB)	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloroethene, Total	ND		0.81	2.0
1,2-Dichloropropane	ND		0.72	1.0
1,3,5-Trichlorobenzene	ND		0.23	1.0
1,3,5-Trimethylbenzene	ND		0.77	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,3-Dichloropropane	ND		0.75	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
1,4-Dioxane	ND		9.3	40
2,2-Dichloropropane	ND		0.40	1.0
2-Butanone (MEK)	ND		1.3	10
2-Chloroethyl vinyl ether	ND		0.96	5.0
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Acetonitrile	ND		4.9	15
Acrolein	ND		0.91	20
Acrylonitrile	ND		0.83	5.0
Benzene	ND		0.41	1.0
Bromobenzene	ND		0.80	1.0
Bromochloromethane	ND		0.87	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Butyl alcohol, n-	ND		8.9	40
Butyl alcohol, tert-	ND		3.3	10
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Chlorodifluoromethane	ND		0.26	1.0
Chloroethane	ND		0.32	1.0

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-4

Lab Sample ID: 280-90968-5

Date Sampled: 11/14/2016 1500

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-333215	Instrument ID:	HP5973S
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	S9812.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	11/23/2016 1402			Final Weight/Volume:	5 mL
Prep Date:	11/23/2016 1402				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dibromochloromethane	ND		0.32	1.0
Dibromomethane	ND		0.41	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Dichlorofluoromethane	ND		0.34	1.0
Ethyl acetate	ND		0.66	1.0
Ethyl ether	ND		0.72	1.0
Ethyl tert-butyl ether	ND		0.29	1.0
Ethylbenzene	ND		0.74	1.0
Hexachlorobutadiene	ND		0.28	1.0
Hexane	ND		0.40	10
Iodomethane	ND		0.30	1.0
Isobutanol	ND		4.8	25
Isopropyl ether	ND		0.59	1.0
Isopropylbenzene	ND		0.79	1.0
Methacrylonitrile	ND		0.69	5.0
Methyl acetate	ND		1.3	2.5
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
Naphthalene	ND		0.43	1.0
n-Butylbenzene	ND		0.64	1.0
N-Propylbenzene	ND		0.69	1.0
o-Chlorotoluene	ND		0.86	1.0
o-Xylene	ND		0.76	1.0
p-Chlorotoluene	ND		0.84	1.0
p-Cymene	ND		0.31	1.0
sec-Butylbenzene	ND		0.75	1.0
Styrene	ND		0.73	1.0
Tert-amyl methyl ether	ND		0.27	1.0
tert-Butylbenzene	ND		0.81	1.0
Tetrachloroethene	ND		0.36	1.0
Tetrahydrofuran	ND		1.3	5.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
trans-1,4-Dichloro-2-butene	ND		0.22	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0
Vinyl acetate	ND		0.85	5.0
Vinyl chloride	ND		0.90	1.0

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-4

Lab Sample ID: 280-90968-5

Date Sampled: 11/14/2016 1500

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333215	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S9812.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 1402		Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 1402		

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	106		77 - 120
4-Bromofluorobenzene (Surr)	98		73 - 120
Toluene-d8 (Surr)	101		80 - 120

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-4

Lab Sample ID: 280-90968-5

Date Sampled: 11/14/2016 1500

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analysis Batch: 480-333215

Instrument ID: HP5973S

Prep Method: 5030C

Prep Batch: N/A

Lab File ID: S9812.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Analysis Date: 11/23/2016 1402

Final Weight/Volume: 5 mL

Prep Date: 11/23/2016 1402

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
67-72-1	Hexachloroethane TIC	ND	

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-43

Lab Sample ID: 280-90968-6

Date Sampled: 11/14/2016 1158

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333215	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S9813.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 1425		Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 1425		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	ND		0.35	1.0
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,1-Dichloropropene	ND		0.72	1.0
1,2,3-Trichlorobenzene	ND		0.41	1.0
1,2,3-Trichloropropane	ND		0.89	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2,4-Trimethylbenzene	ND		0.75	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane (EDB)	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloroethene, Total	ND		0.81	2.0
1,2-Dichloropropane	ND		0.72	1.0
1,3,5-Trichlorobenzene	ND		0.23	1.0
1,3,5-Trimethylbenzene	ND		0.77	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,3-Dichloropropane	ND		0.75	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
1,4-Dioxane	ND		9.3	40
2,2-Dichloropropane	ND		0.40	1.0
2-Butanone (MEK)	ND		1.3	10
2-Chloroethyl vinyl ether	ND		0.96	5.0
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Acetonitrile	ND		4.9	15
Acrolein	ND		0.91	20
Acrylonitrile	ND		0.83	5.0
Benzene	ND		0.41	1.0
Bromobenzene	ND		0.80	1.0
Bromochloromethane	ND		0.87	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Butyl alcohol, n-	ND		8.9	40
Butyl alcohol, tert-	ND		3.3	10
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Chlorodifluoromethane	ND		0.26	1.0
Chloroethane	ND		0.32	1.0

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-43

Lab Sample ID: 280-90968-6

Date Sampled: 11/14/2016 1158

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333215	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S9813.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 1425		Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 1425		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dibromochloromethane	ND		0.32	1.0
Dibromomethane	ND		0.41	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Dichlorofluoromethane	ND		0.34	1.0
Ethyl acetate	ND		0.66	1.0
Ethyl ether	ND		0.72	1.0
Ethyl tert-butyl ether	ND		0.29	1.0
Ethylbenzene	ND		0.74	1.0
Hexachlorobutadiene	ND		0.28	1.0
Hexane	ND		0.40	10
Iodomethane	ND		0.30	1.0
Isobutanol	ND		4.8	25
Isopropyl ether	ND		0.59	1.0
Isopropylbenzene	ND		0.79	1.0
Methacrylonitrile	ND		0.69	5.0
Methyl acetate	ND		1.3	2.5
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
Naphthalene	ND		0.43	1.0
n-Butylbenzene	ND		0.64	1.0
N-Propylbenzene	ND		0.69	1.0
o-Chlorotoluene	ND		0.86	1.0
o-Xylene	ND		0.76	1.0
p-Chlorotoluene	ND		0.84	1.0
p-Cymene	ND		0.31	1.0
sec-Butylbenzene	ND		0.75	1.0
Styrene	ND		0.73	1.0
Tert-amyl methyl ether	ND		0.27	1.0
tert-Butylbenzene	ND		0.81	1.0
Tetrachloroethene	ND		0.36	1.0
Tetrahydrofuran	ND		1.3	5.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
trans-1,4-Dichloro-2-butene	ND		0.22	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0
Vinyl acetate	ND		0.85	5.0
Vinyl chloride	ND		0.90	1.0

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-43

Lab Sample ID: 280-90968-6

Date Sampled: 11/14/2016 1158

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333215	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S9813.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 1425		Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 1425		

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	104		77 - 120
4-Bromofluorobenzene (Surr)	95		73 - 120
Toluene-d8 (Surr)	99		80 - 120

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-43

Lab Sample ID: 280-90968-6

Date Sampled: 11/14/2016 1158

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analysis Batch: 480-333215

Instrument ID: HP5973S

Prep Method: 5030C

Prep Batch: N/A

Lab File ID: S9813.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Analysis Date: 11/23/2016 1425

Final Weight/Volume: 5 mL

Prep Date: 11/23/2016 1425

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
67-72-1	Hexachloroethane TIC	ND	

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-20

Lab Sample ID: 280-90968-7

Date Sampled: 11/14/2016 1329

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333215	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S9814.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 1448		Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 1448		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	ND		0.35	1.0
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,1-Dichloropropene	ND		0.72	1.0
1,2,3-Trichlorobenzene	ND		0.41	1.0
1,2,3-Trichloropropane	ND		0.89	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2,4-Trimethylbenzene	ND		0.75	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane (EDB)	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloroethene, Total	ND		0.81	2.0
1,2-Dichloropropane	ND		0.72	1.0
1,3,5-Trichlorobenzene	ND		0.23	1.0
1,3,5-Trimethylbenzene	ND		0.77	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,3-Dichloropropane	ND		0.75	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
1,4-Dioxane	ND		9.3	40
2,2-Dichloropropane	ND		0.40	1.0
2-Butanone (MEK)	ND		1.3	10
2-Chloroethyl vinyl ether	ND		0.96	5.0
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Acetonitrile	ND		4.9	15
Acrolein	ND		0.91	20
Acrylonitrile	ND		0.83	5.0
Benzene	ND		0.41	1.0
Bromobenzene	ND		0.80	1.0
Bromochloromethane	ND		0.87	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Butyl alcohol, n-	ND		8.9	40
Butyl alcohol, tert-	ND		3.3	10
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Chlorodifluoromethane	ND		0.26	1.0
Chloroethane	ND		0.32	1.0

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-20

Lab Sample ID: 280-90968-7

Date Sampled: 11/14/2016 1329

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-333215	Instrument ID:	HP5973S
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	S9814.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	11/23/2016 1448			Final Weight/Volume:	5 mL
Prep Date:	11/23/2016 1448				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dibromochloromethane	ND		0.32	1.0
Dibromomethane	ND		0.41	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Dichlorofluoromethane	ND		0.34	1.0
Ethyl acetate	ND		0.66	1.0
Ethyl ether	ND		0.72	1.0
Ethyl tert-butyl ether	ND		0.29	1.0
Ethylbenzene	ND		0.74	1.0
Hexachlorobutadiene	ND		0.28	1.0
Hexane	ND		0.40	10
Iodomethane	ND		0.30	1.0
Isobutanol	ND		4.8	25
Isopropyl ether	ND		0.59	1.0
Isopropylbenzene	ND		0.79	1.0
Methacrylonitrile	ND		0.69	5.0
Methyl acetate	ND		1.3	2.5
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
Naphthalene	ND		0.43	1.0
n-Butylbenzene	ND		0.64	1.0
N-Propylbenzene	ND		0.69	1.0
o-Chlorotoluene	ND		0.86	1.0
o-Xylene	ND		0.76	1.0
p-Chlorotoluene	ND		0.84	1.0
p-Cymene	ND		0.31	1.0
sec-Butylbenzene	ND		0.75	1.0
Styrene	ND		0.73	1.0
Tert-amyl methyl ether	ND		0.27	1.0
tert-Butylbenzene	ND		0.81	1.0
Tetrachloroethene	ND		0.36	1.0
Tetrahydrofuran	ND		1.3	5.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
trans-1,4-Dichloro-2-butene	ND		0.22	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0
Vinyl acetate	ND		0.85	5.0
Vinyl chloride	ND		0.90	1.0

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-20

Lab Sample ID: 280-90968-7

Date Sampled: 11/14/2016 1329

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333215	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S9814.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 1448		Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 1448		

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	104		77 - 120
4-Bromofluorobenzene (Surr)	99		73 - 120
Toluene-d8 (Surr)	102		80 - 120

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-20

Lab Sample ID: 280-90968-7

Date Sampled: 11/14/2016 1329

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analysis Batch: 480-333215

Instrument ID: HP5973S

Prep Method: 5030C

Prep Batch: N/A

Lab File ID: S9814.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Analysis Date: 11/23/2016 1448

Final Weight/Volume: 5 mL

Prep Date: 11/23/2016 1448

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
67-72-1	Hexachloroethane TIC	ND	

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: DUP2

Lab Sample ID: 280-90968-8FD

Date Sampled: 11/14/2016 1339

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333215	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S9815.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 1511		Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 1511		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	ND		0.35	1.0
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,1-Dichloropropene	ND		0.72	1.0
1,2,3-Trichlorobenzene	ND		0.41	1.0
1,2,3-Trichloropropane	ND		0.89	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2,4-Trimethylbenzene	ND		0.75	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane (EDB)	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloroethene, Total	ND		0.81	2.0
1,2-Dichloropropane	ND		0.72	1.0
1,3,5-Trichlorobenzene	ND		0.23	1.0
1,3,5-Trimethylbenzene	ND		0.77	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,3-Dichloropropane	ND		0.75	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
1,4-Dioxane	ND		9.3	40
2,2-Dichloropropane	ND		0.40	1.0
2-Butanone (MEK)	ND		1.3	10
2-Chloroethyl vinyl ether	ND		0.96	5.0
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Acetonitrile	ND		4.9	15
Acrolein	ND		0.91	20
Acrylonitrile	ND		0.83	5.0
Benzene	ND		0.41	1.0
Bromobenzene	ND		0.80	1.0
Bromochloromethane	ND		0.87	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Butyl alcohol, n-	ND		8.9	40
Butyl alcohol, tert-	ND		3.3	10
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Chlorodifluoromethane	ND		0.26	1.0
Chloroethane	ND		0.32	1.0

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: DUP2

Lab Sample ID: 280-90968-8FD

Date Sampled: 11/14/2016 1339

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-333215	Instrument ID:	HP5973S
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	S9815.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	11/23/2016 1511			Final Weight/Volume:	5 mL
Prep Date:	11/23/2016 1511				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dibromochloromethane	ND		0.32	1.0
Dibromomethane	ND		0.41	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Dichlorofluoromethane	ND		0.34	1.0
Ethyl acetate	ND		0.66	1.0
Ethyl ether	ND		0.72	1.0
Ethyl tert-butyl ether	ND		0.29	1.0
Ethylbenzene	ND		0.74	1.0
Hexachlorobutadiene	ND		0.28	1.0
Hexane	ND		0.40	10
Iodomethane	ND		0.30	1.0
Isobutanol	ND		4.8	25
Isopropyl ether	ND		0.59	1.0
Isopropylbenzene	ND		0.79	1.0
Methacrylonitrile	ND		0.69	5.0
Methyl acetate	ND		1.3	2.5
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
Naphthalene	ND		0.43	1.0
n-Butylbenzene	ND		0.64	1.0
N-Propylbenzene	ND		0.69	1.0
o-Chlorotoluene	ND		0.86	1.0
o-Xylene	ND		0.76	1.0
p-Chlorotoluene	ND		0.84	1.0
p-Cymene	ND		0.31	1.0
sec-Butylbenzene	ND		0.75	1.0
Styrene	ND		0.73	1.0
Tert-amyl methyl ether	ND		0.27	1.0
tert-Butylbenzene	ND		0.81	1.0
Tetrachloroethene	ND		0.36	1.0
Tetrahydrofuran	ND		1.3	5.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
trans-1,4-Dichloro-2-butene	ND		0.22	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0
Vinyl acetate	ND		0.85	5.0
Vinyl chloride	ND		0.90	1.0

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: DUP2

Lab Sample ID: 280-90968-8FD

Date Sampled: 11/14/2016 1339

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333215	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S9815.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 1511		Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 1511		

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	103		77 - 120
4-Bromofluorobenzene (Surr)	97		73 - 120
Toluene-d8 (Surr)	100		80 - 120

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: DUP2

Lab Sample ID: 280-90968-8FD

Date Sampled: 11/14/2016 1339

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-333215	Instrument ID:	HP5973S
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	S9815.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	11/23/2016 1511			Final Weight/Volume:	5 mL
Prep Date:	11/23/2016 1511				

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
67-72-1	Hexachloroethane TIC	ND	

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-19C

Lab Sample ID: 280-90968-9

Date Sampled: 11/14/2016 1428

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333215	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S9816.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 1534		Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 1534		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	ND		0.35	1.0
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,1-Dichloropropene	ND		0.72	1.0
1,2,3-Trichlorobenzene	ND		0.41	1.0
1,2,3-Trichloropropane	ND		0.89	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2,4-Trimethylbenzene	ND		0.75	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane (EDB)	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloroethene, Total	ND		0.81	2.0
1,2-Dichloropropane	ND		0.72	1.0
1,3,5-Trichlorobenzene	ND		0.23	1.0
1,3,5-Trimethylbenzene	ND		0.77	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,3-Dichloropropane	ND		0.75	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
1,4-Dioxane	ND		9.3	40
2,2-Dichloropropane	ND		0.40	1.0
2-Butanone (MEK)	ND		1.3	10
2-Chloroethyl vinyl ether	ND		0.96	5.0
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Acetonitrile	ND		4.9	15
Acrolein	ND		0.91	20
Acrylonitrile	ND		0.83	5.0
Benzene	ND		0.41	1.0
Bromobenzene	ND		0.80	1.0
Bromochloromethane	ND		0.87	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Butyl alcohol, n-	ND		8.9	40
Butyl alcohol, tert-	ND		3.3	10
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Chlorodifluoromethane	ND		0.26	1.0
Chloroethane	ND		0.32	1.0

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-19C

Lab Sample ID: 280-90968-9

Date Sampled: 11/14/2016 1428

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-333215	Instrument ID:	HP5973S
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	S9816.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	11/23/2016 1534			Final Weight/Volume:	5 mL
Prep Date:	11/23/2016 1534				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dibromochloromethane	ND		0.32	1.0
Dibromomethane	ND		0.41	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Dichlorofluoromethane	ND		0.34	1.0
Ethyl acetate	ND		0.66	1.0
Ethyl ether	ND		0.72	1.0
Ethyl tert-butyl ether	ND		0.29	1.0
Ethylbenzene	ND		0.74	1.0
Hexachlorobutadiene	ND		0.28	1.0
Hexane	ND		0.40	10
Iodomethane	ND		0.30	1.0
Isobutanol	ND		4.8	25
Isopropyl ether	ND		0.59	1.0
Isopropylbenzene	ND		0.79	1.0
Methacrylonitrile	ND		0.69	5.0
Methyl acetate	ND		1.3	2.5
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
Naphthalene	ND		0.43	1.0
n-Butylbenzene	ND		0.64	1.0
N-Propylbenzene	ND		0.69	1.0
o-Chlorotoluene	ND		0.86	1.0
o-Xylene	ND		0.76	1.0
p-Chlorotoluene	ND		0.84	1.0
p-Cymene	ND		0.31	1.0
sec-Butylbenzene	ND		0.75	1.0
Styrene	ND		0.73	1.0
Tert-amyl methyl ether	ND		0.27	1.0
tert-Butylbenzene	ND		0.81	1.0
Tetrachloroethene	ND		0.36	1.0
Tetrahydrofuran	ND		1.3	5.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
trans-1,4-Dichloro-2-butene	ND		0.22	1.0
Trichloroethene	0.99	J	0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0
Vinyl acetate	ND		0.85	5.0
Vinyl chloride	ND		0.90	1.0

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-19C

Lab Sample ID: 280-90968-9

Date Sampled: 11/14/2016 1428

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333215	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S9816.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 1534		Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 1534		

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	100		77 - 120
4-Bromofluorobenzene (Surr)	98		73 - 120
Toluene-d8 (Surr)	102		80 - 120

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-19C

Lab Sample ID: 280-90968-9

Date Sampled: 11/14/2016 1428

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-333215	Instrument ID:	HP5973S
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	S9816.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	11/23/2016 1534			Final Weight/Volume:	5 mL
Prep Date:	11/23/2016 1534				

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
67-72-1	Hexachloroethane TIC	ND	

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 280-90968-10TB

Date Sampled: 11/14/2016 0000

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333215	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S9817.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 1558		Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 1558		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	ND		0.35	1.0
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,1-Dichloropropene	ND		0.72	1.0
1,2,3-Trichlorobenzene	ND		0.41	1.0
1,2,3-Trichloropropane	ND		0.89	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2,4-Trimethylbenzene	ND		0.75	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane (EDB)	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloroethene, Total	ND		0.81	2.0
1,2-Dichloropropane	ND		0.72	1.0
1,3,5-Trichlorobenzene	ND		0.23	1.0
1,3,5-Trimethylbenzene	ND		0.77	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,3-Dichloropropane	ND		0.75	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
1,4-Dioxane	ND		9.3	40
2,2-Dichloropropane	ND		0.40	1.0
2-Butanone (MEK)	ND		1.3	10
2-Chloroethyl vinyl ether	ND		0.96	5.0
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Acetonitrile	ND		4.9	15
Acrolein	ND		0.91	20
Acrylonitrile	ND		0.83	5.0
Benzene	ND		0.41	1.0
Bromobenzene	ND		0.80	1.0
Bromochloromethane	ND		0.87	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Butyl alcohol, n-	ND		8.9	40
Butyl alcohol, tert-	ND		3.3	10
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Chlorodifluoromethane	ND		0.26	1.0
Chloroethane	ND		0.32	1.0

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 280-90968-10TB

Date Sampled: 11/14/2016 0000

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-333215	Instrument ID:	HP5973S
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	S9817.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	11/23/2016 1558			Final Weight/Volume:	5 mL
Prep Date:	11/23/2016 1558				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dibromochloromethane	ND		0.32	1.0
Dibromomethane	ND		0.41	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Dichlorofluoromethane	ND		0.34	1.0
Ethyl acetate	ND		0.66	1.0
Ethyl ether	ND		0.72	1.0
Ethyl tert-butyl ether	ND		0.29	1.0
Ethylbenzene	ND		0.74	1.0
Hexachlorobutadiene	ND		0.28	1.0
Hexane	ND		0.40	10
Iodomethane	ND		0.30	1.0
Isobutanol	ND		4.8	25
Isopropyl ether	ND		0.59	1.0
Isopropylbenzene	ND		0.79	1.0
Methacrylonitrile	ND		0.69	5.0
Methyl acetate	ND		1.3	2.5
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
Naphthalene	ND		0.43	1.0
n-Butylbenzene	ND		0.64	1.0
N-Propylbenzene	ND		0.69	1.0
o-Chlorotoluene	ND		0.86	1.0
o-Xylene	ND		0.76	1.0
p-Chlorotoluene	ND		0.84	1.0
p-Cymene	ND		0.31	1.0
sec-Butylbenzene	ND		0.75	1.0
Styrene	ND		0.73	1.0
Tert-amyl methyl ether	ND		0.27	1.0
tert-Butylbenzene	ND		0.81	1.0
Tetrachloroethene	ND		0.36	1.0
Tetrahydrofuran	ND		1.3	5.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
trans-1,4-Dichloro-2-butene	ND		0.22	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0
Vinyl acetate	ND		0.85	5.0
Vinyl chloride	ND		0.90	1.0

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 280-90968-10TB

Date Sampled: 11/14/2016 0000

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333215	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S9817.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 1558		Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 1558		

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	105		77 - 120
4-Bromofluorobenzene (Surr)	98		73 - 120
Toluene-d8 (Surr)	100		80 - 120

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 280-90968-10TB

Date Sampled: 11/14/2016 0000

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-333215	Instrument ID:	HP5973S
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	S9817.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	11/23/2016 1558			Final Weight/Volume:	5 mL
Prep Date:	11/23/2016 1558				

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
67-72-1	Hexachloroethane TIC	ND	

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-29A

Lab Sample ID: 280-90968-11

Date Sampled: 11/14/2016 1244

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333215	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S9818.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 1621		Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 1621		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	ND		0.35	1.0
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,1-Dichloropropene	ND		0.72	1.0
1,2,3-Trichlorobenzene	ND		0.41	1.0
1,2,3-Trichloropropane	ND		0.89	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2,4-Trimethylbenzene	ND		0.75	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane (EDB)	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloroethene, Total	ND		0.81	2.0
1,2-Dichloropropane	ND		0.72	1.0
1,3,5-Trichlorobenzene	ND		0.23	1.0
1,3,5-Trimethylbenzene	ND		0.77	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,3-Dichloropropane	ND		0.75	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
1,4-Dioxane	ND		9.3	40
2,2-Dichloropropane	ND		0.40	1.0
2-Butanone (MEK)	ND		1.3	10
2-Chloroethyl vinyl ether	ND		0.96	5.0
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Acetonitrile	ND		4.9	15
Acrolein	ND		0.91	20
Acrylonitrile	ND		0.83	5.0
Benzene	ND		0.41	1.0
Bromobenzene	ND		0.80	1.0
Bromochloromethane	ND		0.87	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Butyl alcohol, n-	ND		8.9	40
Butyl alcohol, tert-	ND		3.3	10
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Chlorodifluoromethane	ND		0.26	1.0
Chloroethane	ND		0.32	1.0

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-29A

Lab Sample ID: 280-90968-11

Date Sampled: 11/14/2016 1244

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333215	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S9818.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 1621		Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 1621		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dibromochloromethane	ND		0.32	1.0
Dibromomethane	ND		0.41	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Dichlorofluoromethane	ND		0.34	1.0
Ethyl acetate	ND		0.66	1.0
Ethyl ether	ND		0.72	1.0
Ethyl tert-butyl ether	ND		0.29	1.0
Ethylbenzene	ND		0.74	1.0
Hexachlorobutadiene	ND		0.28	1.0
Hexane	ND		0.40	10
Iodomethane	ND		0.30	1.0
Isobutanol	ND		4.8	25
Isopropyl ether	ND		0.59	1.0
Isopropylbenzene	ND		0.79	1.0
Methacrylonitrile	ND		0.69	5.0
Methyl acetate	ND		1.3	2.5
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
Naphthalene	ND		0.43	1.0
n-Butylbenzene	ND		0.64	1.0
N-Propylbenzene	ND		0.69	1.0
o-Chlorotoluene	ND		0.86	1.0
o-Xylene	ND		0.76	1.0
p-Chlorotoluene	ND		0.84	1.0
p-Cymene	ND		0.31	1.0
sec-Butylbenzene	ND		0.75	1.0
Styrene	ND		0.73	1.0
Tert-amyl methyl ether	ND		0.27	1.0
tert-Butylbenzene	ND		0.81	1.0
Tetrachloroethene	ND		0.36	1.0
Tetrahydrofuran	ND		1.3	5.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
trans-1,4-Dichloro-2-butene	ND		0.22	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0
Vinyl acetate	ND		0.85	5.0
Vinyl chloride	ND		0.90	1.0

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-29A

Lab Sample ID: 280-90968-11

Date Sampled: 11/14/2016 1244

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333215	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S9818.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 1621		Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 1621		

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	102		77 - 120
4-Bromofluorobenzene (Surr)	96		73 - 120
Toluene-d8 (Surr)	102		80 - 120

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-29A

Lab Sample ID: 280-90968-11

Date Sampled: 11/14/2016 1244

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analysis Batch: 480-333215

Instrument ID: HP5973S

Prep Method: 5030C

Prep Batch: N/A

Lab File ID: S9818.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Analysis Date: 11/23/2016 1621

Final Weight/Volume: 5 mL

Prep Date: 11/23/2016 1621

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
67-72-1	Hexachloroethane TIC	ND	

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-13A

Lab Sample ID: 280-90968-1

Date Sampled: 11/14/2016 1004

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C SIM Volatile Organic Compounds (GC/MS)

Analysis Method: 8260C SIM	Analysis Batch: 480-332057	Instrument ID: HP5973J
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: J1437.D
Dilution: 1.0		Initial Weight/Volume: 25 mL
Analysis Date: 11/17/2016 0019		Final Weight/Volume: 25 mL
Prep Date: 11/17/2016 0019		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	0.0080	J B	0.0040	0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	97		50 - 150
TBA-d9 (Surr)	91		50 - 150

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-13B

Lab Sample ID: 280-90968-2

Date Sampled: 11/14/2016 1135

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C SIM Volatile Organic Compounds (GC/MS)

Analysis Method:	8260C SIM	Analysis Batch:	480-332057	Instrument ID:	HP5973J
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	J1438.D
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	11/17/2016 0043			Final Weight/Volume:	25 mL
Prep Date:	11/17/2016 0043				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		0.0040	0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	100		50 - 150
TBA-d9 (Surr)	96		50 - 150

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-16

Lab Sample ID: 280-90968-3

Date Sampled: 11/14/2016 1248

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C SIM Volatile Organic Compounds (GC/MS)

Analysis Method:	8260C SIM	Analysis Batch:	480-332057	Instrument ID:	HP5973J
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	J1439.D
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	11/17/2016 0107			Final Weight/Volume:	25 mL
Prep Date:	11/17/2016 0107				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		0.0040	0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	100		50 - 150
TBA-d9 (Surr)	102		50 - 150

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-39

Lab Sample ID: 280-90968-4

Date Sampled: 11/14/2016 1354

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C SIM Volatile Organic Compounds (GC/MS)

Analysis Method: 8260C SIM	Analysis Batch: 480-332057	Instrument ID: HP5973J
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: J1440.D
Dilution: 1.0		Initial Weight/Volume: 25 mL
Analysis Date: 11/17/2016 0131		Final Weight/Volume: 25 mL
Prep Date: 11/17/2016 0131		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		0.0040	0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	98		50 - 150
TBA-d9 (Surr)	117		50 - 150

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-4

Lab Sample ID: 280-90968-5

Date Sampled: 11/14/2016 1500

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C SIM Volatile Organic Compounds (GC/MS)

Analysis Method: 8260C SIM	Analysis Batch: 480-332057	Instrument ID: HP5973J
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: J1441.D
Dilution: 1.0		Initial Weight/Volume: 25 mL
Analysis Date: 11/17/2016 0155		Final Weight/Volume: 25 mL
Prep Date: 11/17/2016 0155		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	0.0095	J B	0.0040	0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	101		50 - 150
TBA-d9 (Surr)	104		50 - 150

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-43

Lab Sample ID: 280-90968-6

Date Sampled: 11/14/2016 1158

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C SIM Volatile Organic Compounds (GC/MS)

Analysis Method: 8260C SIM	Analysis Batch: 480-332057	Instrument ID: HP5973J
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: J1442.D
Dilution: 1.0		Initial Weight/Volume: 25 mL
Analysis Date: 11/17/2016 0220		Final Weight/Volume: 25 mL
Prep Date: 11/17/2016 0220		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		0.0040	0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	100		50 - 150
TBA-d9 (Surr)	111		50 - 150

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-20

Lab Sample ID: 280-90968-7

Date Sampled: 11/14/2016 1329

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C SIM Volatile Organic Compounds (GC/MS)

Analysis Method: 8260C SIM	Analysis Batch: 480-332057	Instrument ID: HP5973J
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: J1443.D
Dilution: 1.0		Initial Weight/Volume: 25 mL
Analysis Date: 11/17/2016 0244		Final Weight/Volume: 25 mL
Prep Date: 11/17/2016 0244		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		0.0040	0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	100		50 - 150
TBA-d9 (Surr)	105		50 - 150

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: DUP2

Lab Sample ID: 280-90968-8FD

Date Sampled: 11/14/2016 1339

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C SIM Volatile Organic Compounds (GC/MS)

Analysis Method:	8260C SIM	Analysis Batch:	480-332057	Instrument ID:	HP5973J
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	J1444.D
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	11/17/2016 0309			Final Weight/Volume:	25 mL
Prep Date:	11/17/2016 0309				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		0.0040	0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	98		50 - 150
TBA-d9 (Surr)	115		50 - 150

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-19C

Lab Sample ID: 280-90968-9

Date Sampled: 11/14/2016 1428

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C SIM Volatile Organic Compounds (GC/MS)

Analysis Method:	8260C SIM	Analysis Batch:	480-332057	Instrument ID:	HP5973J
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	J1445.D
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	11/17/2016 0333			Final Weight/Volume:	25 mL
Prep Date:	11/17/2016 0333				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	0.029	B	0.0040	0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	101		50 - 150
TBA-d9 (Surr)	121		50 - 150

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 280-90968-10TB

Date Sampled: 11/14/2016 0000

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C SIM Volatile Organic Compounds (GC/MS)

Analysis Method: 8260C SIM	Analysis Batch: 480-332057	Instrument ID: HP5973J
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: J1446.D
Dilution: 1.0		Initial Weight/Volume: 25 mL
Analysis Date: 11/17/2016 0357		Final Weight/Volume: 25 mL
Prep Date: 11/17/2016 0357		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		0.0040	0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	102		50 - 150
TBA-d9 (Surr)	125		50 - 150

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-29A

Lab Sample ID: 280-90968-11

Date Sampled: 11/14/2016 1244

Client Matrix: Water

Date Received: 11/15/2016 1217

8260C SIM Volatile Organic Compounds (GC/MS)

Analysis Method: 8260C SIM	Analysis Batch: 480-332057	Instrument ID: HP5973J
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: J1447.D
Dilution: 1.0		Initial Weight/Volume: 25 mL
Analysis Date: 11/17/2016 0421		Final Weight/Volume: 25 mL
Prep Date: 11/17/2016 0421		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		0.0040	0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	102		50 - 150
TBA-d9 (Surr)	110		50 - 150

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-13A

Lab Sample ID: 280-90968-1

Date Sampled: 11/14/2016 1004

Client Matrix: Water

Date Received: 11/15/2016 1217

6010B Metals (ICP)-Total Recoverable

Analysis Method: 6010B Analysis Batch: 280-353463 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-352234 Lab File ID: 25E112816.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 11/29/2016 0523 Final Weight/Volume: 50 mL
Prep Date: 11/23/2016 1445

Analyte	Result (mg/L)	Qualifier	RL	RL
Cobalt, Total	ND		0.0030	0.0030
Iron, Total	0.073		0.060	0.060

6010B Metals (ICP)-Dissolved

Analysis Method: 6010B Analysis Batch: 280-355067 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-353142 Lab File ID: 25D120916.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 12/10/2016 0252 Final Weight/Volume: 50 mL
Prep Date: 12/01/2016 1405

Analyte	Result (mg/L)	Qualifier	RL	RL
Calcium, Dissolved	16		0.040	0.040
Iron, Dissolved	ND		0.060	0.060
Magnesium, Dissolved	10		0.050	0.050
Potassium, Dissolved	ND		1.0	1.0
Sodium, Dissolved	5.4		1.0	1.0

6020 Metals (ICP/MS)-Total Recoverable

Analysis Method: 6020 Analysis Batch: 280-353261 Instrument ID: MT_077
Prep Method: 3005A Prep Batch: 280-352238 Lab File ID: 084SMPL.d
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 11/25/2016 1732 Final Weight/Volume: 50 mL
Prep Date: 11/25/2016 0725

Analyte	Result (mg/L)	Qualifier	RL	RL
Antimony, Total	ND		0.0010	0.0010
Barium, Total	0.0028		0.0010	0.0010
Beryllium, Total	ND		0.0010	0.0010
Cadmium, Total	ND		0.00020	0.00020
Chromium, Total	ND		0.0030	0.0030
Copper, Total	0.0021		0.0020	0.0020
Lead, Total	ND		0.0010	0.0010
Manganese, Total	ND		0.0010	0.0010
Nickel, Total	ND		0.0040	0.0040
Selenium, Total	ND		0.0010	0.0010
Silver, Total	ND		0.0020	0.0020
Thallium, Total	ND		0.0010	0.0010
Vanadium, Total	0.0039		0.0020	0.0020
Zinc, Total	ND		0.0050	0.0050

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-13A

Lab Sample ID: 280-90968-1

Date Sampled: 11/14/2016 1004

Client Matrix: Water

Date Received: 11/15/2016 1217

6020 Metals (ICP/MS)-Dissolved

Analysis Method: 6020

Analysis Batch: 280-353028

Instrument ID: MT_077

Prep Method: 3005A

Prep Batch: 280-352489

Lab File ID: 185SMPL.d

Dilution: 1.0

Initial Weight/Volume: 50 mL

Analysis Date: 11/23/2016 2354

Final Weight/Volume: 50 mL

Prep Date: 11/23/2016 1445

Analyte	Result (mg/L)	Qualifier	RL	RL
Manganese, Dissolved	ND		0.0010	0.0010

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-13B

Lab Sample ID: 280-90968-2

Date Sampled: 11/14/2016 1135

Client Matrix: Water

Date Received: 11/15/2016 1217

6010B Metals (ICP)-Total Recoverable

Analysis Method: 6010B	Analysis Batch: 280-353463	Instrument ID: MT_025
Prep Method: 3005A	Prep Batch: 280-352234	Lab File ID: 25E112816.asc
Dilution: 1.0		Initial Weight/Volume: 50 mL
Analysis Date: 11/29/2016 0526		Final Weight/Volume: 50 mL
Prep Date: 11/23/2016 1445		

Analyte	Result (mg/L)	Qualifier	RL	RL
Cobalt, Total	ND		0.0030	0.0030
Iron, Total	ND		0.060	0.060

6010B Metals (ICP)-Dissolved

Analysis Method: 6010B	Analysis Batch: 280-355067	Instrument ID: MT_025
Prep Method: 3005A	Prep Batch: 280-353142	Lab File ID: 25D120916.asc
Dilution: 1.0		Initial Weight/Volume: 50 mL
Analysis Date: 12/10/2016 0255		Final Weight/Volume: 50 mL
Prep Date: 12/01/2016 1405		

Analyte	Result (mg/L)	Qualifier	RL	RL
Calcium, Dissolved	17		0.040	0.040
Iron, Dissolved	ND		0.060	0.060
Magnesium, Dissolved	9.3		0.050	0.050
Potassium, Dissolved	ND		1.0	1.0
Sodium, Dissolved	5.1		1.0	1.0

6020 Metals (ICP/MS)-Total Recoverable

Analysis Method: 6020	Analysis Batch: 280-353261	Instrument ID: MT_077
Prep Method: 3005A	Prep Batch: 280-352238	Lab File ID: 092SMPL.d
Dilution: 1.0		Initial Weight/Volume: 50 mL
Analysis Date: 11/25/2016 1802		Final Weight/Volume: 50 mL
Prep Date: 11/25/2016 0725		

Analyte	Result (mg/L)	Qualifier	RL	RL
Antimony, Total	ND		0.0010	0.0010
Barium, Total	0.0029		0.0010	0.0010
Beryllium, Total	ND		0.0010	0.0010
Cadmium, Total	ND		0.00020	0.00020
Chromium, Total	0.0036		0.0030	0.0030
Copper, Total	ND		0.0020	0.0020
Lead, Total	ND		0.0010	0.0010
Manganese, Total	ND		0.0010	0.0010
Nickel, Total	ND		0.0040	0.0040
Selenium, Total	ND		0.0010	0.0010
Silver, Total	ND		0.0020	0.0020
Thallium, Total	ND		0.0010	0.0010
Vanadium, Total	0.0061		0.0020	0.0020
Zinc, Total	ND		0.0050	0.0050

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-13B

Lab Sample ID: 280-90968-2

Date Sampled: 11/14/2016 1135

Client Matrix: Water

Date Received: 11/15/2016 1217

6020 Metals (ICP/MS)-Dissolved

Analysis Method: 6020

Analysis Batch: 280-353028

Instrument ID: MT_077

Prep Method: 3005A

Prep Batch: 280-352489

Lab File ID: 186SMPL.d

Dilution: 1.0

Initial Weight/Volume: 50 mL

Analysis Date: 11/23/2016 2357

Final Weight/Volume: 50 mL

Prep Date: 11/23/2016 1445

Analyte	Result (mg/L)	Qualifier	RL	RL
Manganese, Dissolved	0.0012		0.0010	0.0010

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-16

Lab Sample ID: 280-90968-3

Date Sampled: 11/14/2016 1248

Client Matrix: Water

Date Received: 11/15/2016 1217

6010B Metals (ICP)-Total Recoverable

Analysis Method: 6010B Analysis Batch: 280-353463 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-352234 Lab File ID: 25E112816.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 11/29/2016 0538 Final Weight/Volume: 50 mL
Prep Date: 11/23/2016 1445

Analyte	Result (mg/L)	Qualifier	RL	RL
Cobalt, Total	ND		0.0030	0.0030
Iron, Total	0.12		0.060	0.060

6010B Metals (ICP)-Dissolved

Analysis Method: 6010B Analysis Batch: 280-355067 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-353142 Lab File ID: 25D120916.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 12/10/2016 0257 Final Weight/Volume: 50 mL
Prep Date: 12/01/2016 1405

Analyte	Result (mg/L)	Qualifier	RL	RL
Calcium, Dissolved	9.6		0.040	0.040
Iron, Dissolved	ND		0.060	0.060
Magnesium, Dissolved	5.9		0.050	0.050
Potassium, Dissolved	ND		1.0	1.0
Sodium, Dissolved	5.0		1.0	1.0

6020 Metals (ICP/MS)-Total Recoverable

Analysis Method: 6020 Analysis Batch: 280-353261 Instrument ID: MT_077
Prep Method: 3005A Prep Batch: 280-352238 Lab File ID: 093SMPL.d
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 11/25/2016 1806 Final Weight/Volume: 50 mL
Prep Date: 11/25/2016 0725

Analyte	Result (mg/L)	Qualifier	RL	RL
Antimony, Total	ND		0.0010	0.0010
Barium, Total	0.0045		0.0010	0.0010
Beryllium, Total	ND		0.0010	0.0010
Cadmium, Total	ND		0.00020	0.00020
Chromium, Total	0.0085		0.0030	0.0030
Copper, Total	ND		0.0020	0.0020
Lead, Total	ND		0.0010	0.0010
Manganese, Total	0.017		0.0010	0.0010
Nickel, Total	ND		0.0040	0.0040
Selenium, Total	ND		0.0010	0.0010
Silver, Total	ND		0.0020	0.0020
Thallium, Total	ND		0.0010	0.0010
Vanadium, Total	0.0049		0.0020	0.0020
Zinc, Total	0.0056		0.0050	0.0050

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-16

Lab Sample ID: 280-90968-3

Date Sampled: 11/14/2016 1248

Client Matrix: Water

Date Received: 11/15/2016 1217

6020 Metals (ICP/MS)-Dissolved

Analysis Method: 6020

Analysis Batch: 280-353028

Instrument ID: MT_077

Prep Method: 3005A

Prep Batch: 280-352489

Lab File ID: 187SMPL.d

Dilution: 1.0

Initial Weight/Volume: 50 mL

Analysis Date: 11/24/2016 0001

Final Weight/Volume: 50 mL

Prep Date: 11/23/2016 1445

Analyte	Result (mg/L)	Qualifier	RL	RL
Manganese, Dissolved	0.0027		0.0010	0.0010

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-39

Lab Sample ID: 280-90968-4

Date Sampled: 11/14/2016 1354

Client Matrix: Water

Date Received: 11/15/2016 1217

6010B Metals (ICP)-Total Recoverable

Analysis Method: 6010B Analysis Batch: 280-353463 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-352234 Lab File ID: 25E112816.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 11/29/2016 0541 Final Weight/Volume: 50 mL
Prep Date: 11/23/2016 1445

Analyte	Result (mg/L)	Qualifier	RL	RL
Cobalt, Total	ND		0.0030	0.0030
Iron, Total	0.80		0.060	0.060

6010B Metals (ICP)-Dissolved

Analysis Method: 6010B Analysis Batch: 280-355067 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-353142 Lab File ID: 25D120916.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 12/10/2016 0300 Final Weight/Volume: 50 mL
Prep Date: 12/01/2016 1405

Analyte	Result (mg/L)	Qualifier	RL	RL
Calcium, Dissolved	13		0.040	0.040
Iron, Dissolved	0.37		0.060	0.060
Magnesium, Dissolved	6.1		0.050	0.050
Potassium, Dissolved	ND		1.0	1.0
Sodium, Dissolved	4.8		1.0	1.0

6020 Metals (ICP/MS)-Total Recoverable

Analysis Method: 6020 Analysis Batch: 280-353261 Instrument ID: MT_077
Prep Method: 3005A Prep Batch: 280-352238 Lab File ID: 094SMPL.d
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 11/25/2016 1810 Final Weight/Volume: 50 mL
Prep Date: 11/25/2016 0725

Analyte	Result (mg/L)	Qualifier	RL	RL
Antimony, Total	ND		0.0010	0.0010
Barium, Total	0.0086		0.0010	0.0010
Beryllium, Total	ND		0.0010	0.0010
Cadmium, Total	ND		0.00020	0.00020
Chromium, Total	ND		0.0030	0.0030
Copper, Total	ND		0.0020	0.0020
Lead, Total	ND		0.0010	0.0010
Manganese, Total	0.017		0.0010	0.0010
Nickel, Total	ND		0.0040	0.0040
Selenium, Total	ND		0.0010	0.0010
Silver, Total	ND		0.0020	0.0020
Thallium, Total	ND		0.0010	0.0010
Vanadium, Total	ND		0.0020	0.0020
Zinc, Total	ND		0.0050	0.0050

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-39

Lab Sample ID: 280-90968-4

Date Sampled: 11/14/2016 1354

Client Matrix: Water

Date Received: 11/15/2016 1217

6020 Metals (ICP/MS)-Dissolved

Analysis Method: 6020

Analysis Batch: 280-353028

Instrument ID: MT_077

Prep Method: 3005A

Prep Batch: 280-352489

Lab File ID: 188SMPL.d

Dilution: 1.0

Initial Weight/Volume: 50 mL

Analysis Date: 11/24/2016 0005

Final Weight/Volume: 50 mL

Prep Date: 11/23/2016 1445

Analyte	Result (mg/L)	Qualifier	RL	RL
Manganese, Dissolved	0.020		0.0010	0.0010

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-4

Lab Sample ID: 280-90968-5

Date Sampled: 11/14/2016 1500

Client Matrix: Water

Date Received: 11/15/2016 1217

6010B Metals (ICP)-Total Recoverable

Analysis Method: 6010B Analysis Batch: 280-353463 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-352234 Lab File ID: 25E112816.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 11/29/2016 0543 Final Weight/Volume: 50 mL
Prep Date: 11/23/2016 1445

Analyte	Result (mg/L)	Qualifier	RL	RL
Cobalt, Total	ND		0.0030	0.0030
Iron, Total	ND		0.060	0.060

6010B Metals (ICP)-Dissolved

Analysis Method: 6010B Analysis Batch: 280-355067 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-353142 Lab File ID: 25D120916.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 12/10/2016 0302 Final Weight/Volume: 50 mL
Prep Date: 12/01/2016 1405

Analyte	Result (mg/L)	Qualifier	RL	RL
Calcium, Dissolved	4.3		0.040	0.040
Iron, Dissolved	ND		0.060	0.060
Magnesium, Dissolved	2.0		0.050	0.050
Potassium, Dissolved	ND		1.0	1.0
Sodium, Dissolved	3.0		1.0	1.0

6020 Metals (ICP/MS)-Total Recoverable

Analysis Method: 6020 Analysis Batch: 280-353261 Instrument ID: MT_077
Prep Method: 3005A Prep Batch: 280-352238 Lab File ID: 095SMPL.d
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 11/25/2016 1813 Final Weight/Volume: 50 mL
Prep Date: 11/25/2016 0725

Analyte	Result (mg/L)	Qualifier	RL	RL
Antimony, Total	ND		0.0010	0.0010
Barium, Total	0.0019		0.0010	0.0010
Beryllium, Total	ND		0.0010	0.0010
Cadmium, Total	ND		0.00020	0.00020
Chromium, Total	ND		0.0030	0.0030
Copper, Total	ND		0.0020	0.0020
Lead, Total	ND		0.0010	0.0010
Manganese, Total	0.21		0.0010	0.0010
Nickel, Total	ND		0.0040	0.0040
Selenium, Total	ND		0.0010	0.0010
Silver, Total	ND		0.0020	0.0020
Thallium, Total	ND		0.0010	0.0010
Vanadium, Total	ND		0.0020	0.0020
Zinc, Total	ND		0.0050	0.0050

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-4

Lab Sample ID: 280-90968-5

Date Sampled: 11/14/2016 1500

Client Matrix: Water

Date Received: 11/15/2016 1217

6020 Metals (ICP/MS)-Dissolved

Analysis Method: 6020

Analysis Batch: 280-353028

Instrument ID: MT_077

Prep Method: 3005A

Prep Batch: 280-352489

Lab File ID: 189SMPL.d

Dilution: 1.0

Initial Weight/Volume: 50 mL

Analysis Date: 11/24/2016 0009

Final Weight/Volume: 50 mL

Prep Date: 11/23/2016 1445

Analyte	Result (mg/L)	Qualifier	RL	RL
Manganese, Dissolved	0.021		0.0010	0.0010

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-43

Lab Sample ID: 280-90968-6

Date Sampled: 11/14/2016 1158

Client Matrix: Water

Date Received: 11/15/2016 1217

6010B Metals (ICP)-Total Recoverable

Analysis Method: 6010B Analysis Batch: 280-353463 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-352234 Lab File ID: 25E112816.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 11/29/2016 0546 Final Weight/Volume: 50 mL
Prep Date: 11/23/2016 1445

Analyte	Result (mg/L)	Qualifier	RL	RL
Cobalt, Total	ND		0.0030	0.0030
Iron, Total	0.24		0.060	0.060

6010B Metals (ICP)-Dissolved

Analysis Method: 6010B Analysis Batch: 280-355067 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-353142 Lab File ID: 25D120916.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 12/10/2016 0305 Final Weight/Volume: 50 mL
Prep Date: 12/01/2016 1405

Analyte	Result (mg/L)	Qualifier	RL	RL
Calcium, Dissolved	3.2		0.040	0.040
Iron, Dissolved	ND		0.060	0.060
Magnesium, Dissolved	1.4		0.050	0.050
Potassium, Dissolved	ND		1.0	1.0
Sodium, Dissolved	2.3		1.0	1.0

6020 Metals (ICP/MS)-Total Recoverable

Analysis Method: 6020 Analysis Batch: 280-353261 Instrument ID: MT_077
Prep Method: 3005A Prep Batch: 280-352238 Lab File ID: 096SMPL.d
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 11/25/2016 1817 Final Weight/Volume: 50 mL
Prep Date: 11/25/2016 0725

Analyte	Result (mg/L)	Qualifier	RL	RL
Antimony, Total	ND		0.0010	0.0010
Barium, Total	0.0034		0.0010	0.0010
Beryllium, Total	ND		0.0010	0.0010
Cadmium, Total	ND		0.00020	0.00020
Chromium, Total	ND		0.0030	0.0030
Copper, Total	ND		0.0020	0.0020
Lead, Total	ND		0.0010	0.0010
Manganese, Total	0.036		0.0010	0.0010
Nickel, Total	ND		0.0040	0.0040
Selenium, Total	ND		0.0010	0.0010
Silver, Total	ND		0.0020	0.0020
Thallium, Total	ND		0.0010	0.0010
Vanadium, Total	ND		0.0020	0.0020
Zinc, Total	ND		0.0050	0.0050

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-43

Lab Sample ID: 280-90968-6

Date Sampled: 11/14/2016 1158

Client Matrix: Water

Date Received: 11/15/2016 1217

6020 Metals (ICP/MS)-Dissolved

Analysis Method: 6020

Analysis Batch: 280-353028

Instrument ID: MT_077

Prep Method: 3005A

Prep Batch: 280-352489

Lab File ID: 190SMPL.d

Dilution: 1.0

Initial Weight/Volume: 50 mL

Analysis Date: 11/24/2016 0012

Final Weight/Volume: 50 mL

Prep Date: 11/23/2016 1445

Analyte	Result (mg/L)	Qualifier	RL	RL
Manganese, Dissolved	0.033		0.0010	0.0010

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-20

Lab Sample ID: 280-90968-7

Date Sampled: 11/14/2016 1329

Client Matrix: Water

Date Received: 11/15/2016 1217

6010B Metals (ICP)-Total Recoverable

Analysis Method: 6010B Analysis Batch: 280-353463 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-352234 Lab File ID: 25E112816.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 11/29/2016 0548 Final Weight/Volume: 50 mL
Prep Date: 11/23/2016 1445

Analyte	Result (mg/L)	Qualifier	RL	RL
Cobalt, Total	ND		0.0030	0.0030
Iron, Total	0.18		0.060	0.060

6010B Metals (ICP)-Dissolved

Analysis Method: 6010B Analysis Batch: 280-355067 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-353142 Lab File ID: 25D120916.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 12/10/2016 0307 Final Weight/Volume: 50 mL
Prep Date: 12/01/2016 1405

Analyte	Result (mg/L)	Qualifier	RL	RL
Calcium, Dissolved	19		0.040	0.040
Iron, Dissolved	ND		0.060	0.060
Magnesium, Dissolved	11		0.050	0.050
Potassium, Dissolved	3.1		1.0	1.0
Sodium, Dissolved	9.3		1.0	1.0

6020 Metals (ICP/MS)-Total Recoverable

Analysis Method: 6020 Analysis Batch: 280-353261 Instrument ID: MT_077
Prep Method: 3005A Prep Batch: 280-352238 Lab File ID: 097SMPL.d
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 11/25/2016 1821 Final Weight/Volume: 50 mL
Prep Date: 11/25/2016 0725

Analyte	Result (mg/L)	Qualifier	RL	RL
Antimony, Total	ND		0.0010	0.0010
Barium, Total	0.016		0.0010	0.0010
Beryllium, Total	ND		0.0010	0.0010
Cadmium, Total	ND		0.00020	0.00020
Chromium, Total	ND		0.0030	0.0030
Copper, Total	ND		0.0020	0.0020
Lead, Total	ND		0.0010	0.0010
Manganese, Total	0.45		0.0010	0.0010
Nickel, Total	0.0048		0.0040	0.0040
Selenium, Total	ND		0.0010	0.0010
Silver, Total	ND		0.0020	0.0020
Thallium, Total	ND		0.0010	0.0010
Vanadium, Total	ND		0.0020	0.0020
Zinc, Total	ND		0.0050	0.0050

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-20

Lab Sample ID: 280-90968-7

Date Sampled: 11/14/2016 1329

Client Matrix: Water

Date Received: 11/15/2016 1217

6020 Metals (ICP/MS)-Dissolved

Analysis Method: 6020

Analysis Batch: 280-353028

Instrument ID: MT_077

Prep Method: 3005A

Prep Batch: 280-352489

Lab File ID: 191SMPL.d

Dilution: 1.0

Initial Weight/Volume: 50 mL

Analysis Date: 11/24/2016 0016

Final Weight/Volume: 50 mL

Prep Date: 11/23/2016 1445

Analyte	Result (mg/L)	Qualifier	RL	RL
Manganese, Dissolved	ND		0.0010	0.0010

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: DUP2

Lab Sample ID: 280-90968-8FD
Client Matrix: Water

Date Sampled: 11/14/2016 1339
Date Received: 11/15/2016 1217

6010B Metals (ICP)-Total Recoverable

Analysis Method: 6010B Analysis Batch: 280-353463 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-352234 Lab File ID: 25E112816.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 11/29/2016 0551 Final Weight/Volume: 50 mL
Prep Date: 11/23/2016 1445

Analyte	Result (mg/L)	Qualifier	RL	RL
Cobalt, Total	ND		0.0030	0.0030
Iron, Total	0.15		0.060	0.060

6010B Metals (ICP)-Dissolved

Analysis Method: 6010B Analysis Batch: 280-355067 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-353142 Lab File ID: 25D120916.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 12/10/2016 0310 Final Weight/Volume: 50 mL
Prep Date: 12/01/2016 1405

Analyte	Result (mg/L)	Qualifier	RL	RL
Calcium, Dissolved	19		0.040	0.040
Iron, Dissolved	ND		0.060	0.060
Magnesium, Dissolved	11		0.050	0.050
Potassium, Dissolved	3.1		1.0	1.0
Sodium, Dissolved	9.3		1.0	1.0

6020 Metals (ICP/MS)-Total Recoverable

Analysis Method: 6020 Analysis Batch: 280-353261 Instrument ID: MT_077
Prep Method: 3005A Prep Batch: 280-352238 Lab File ID: 098SMPL.d
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 11/25/2016 1825 Final Weight/Volume: 50 mL
Prep Date: 11/25/2016 0725

Analyte	Result (mg/L)	Qualifier	RL	RL
Antimony, Total	ND		0.0010	0.0010
Barium, Total	0.016		0.0010	0.0010
Beryllium, Total	ND		0.0010	0.0010
Cadmium, Total	ND		0.00020	0.00020
Chromium, Total	ND		0.0030	0.0030
Copper, Total	ND		0.0020	0.0020
Lead, Total	ND		0.0010	0.0010
Manganese, Total	0.44		0.0010	0.0010
Nickel, Total	0.0058		0.0040	0.0040
Selenium, Total	ND		0.0010	0.0010
Silver, Total	ND		0.0020	0.0020
Thallium, Total	ND		0.0010	0.0010
Vanadium, Total	0.0022		0.0020	0.0020
Zinc, Total	ND		0.0050	0.0050

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: DUP2

Lab Sample ID: 280-90968-8FD

Date Sampled: 11/14/2016 1339

Client Matrix: Water

Date Received: 11/15/2016 1217

6020 Metals (ICP/MS)-Dissolved

Analysis Method: 6020

Analysis Batch: 280-353028

Instrument ID: MT_077

Prep Method: 3005A

Prep Batch: 280-352489

Lab File ID: 192SMPL.d

Dilution: 1.0

Initial Weight/Volume: 50 mL

Analysis Date: 11/24/2016 0020

Final Weight/Volume: 50 mL

Prep Date: 11/23/2016 1445

Analyte	Result (mg/L)	Qualifier	RL	RL
Manganese, Dissolved	ND		0.0010	0.0010

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-19C

Lab Sample ID: 280-90968-9

Date Sampled: 11/14/2016 1428

Client Matrix: Water

Date Received: 11/15/2016 1217

6010B Metals (ICP)-Total Recoverable

Analysis Method: 6010B Analysis Batch: 280-353463 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-352234 Lab File ID: 25E112816.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 11/29/2016 0554 Final Weight/Volume: 50 mL
Prep Date: 11/23/2016 1445

Analyte	Result (mg/L)	Qualifier	RL	RL
Cobalt, Total	ND		0.0030	0.0030
Iron, Total	0.12		0.060	0.060

6010B Metals (ICP)-Dissolved

Analysis Method: 6010B Analysis Batch: 280-355067 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-353142 Lab File ID: 25D120916.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 12/10/2016 0313 Final Weight/Volume: 50 mL
Prep Date: 12/01/2016 1405

Analyte	Result (mg/L)	Qualifier	RL	RL
Calcium, Dissolved	16		0.040	0.040
Iron, Dissolved	0.064		0.060	0.060
Magnesium, Dissolved	8.8		0.050	0.050
Potassium, Dissolved	1.5		1.0	1.0
Sodium, Dissolved	6.1		1.0	1.0

6020 Metals (ICP/MS)-Total Recoverable

Analysis Method: 6020 Analysis Batch: 280-353261 Instrument ID: MT_077
Prep Method: 3005A Prep Batch: 280-352238 Lab File ID: 099SMPL.d
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 11/25/2016 1828 Final Weight/Volume: 50 mL
Prep Date: 11/25/2016 0725

Analyte	Result (mg/L)	Qualifier	RL	RL
Antimony, Total	ND		0.0010	0.0010
Barium, Total	0.0035		0.0010	0.0010
Beryllium, Total	ND		0.0010	0.0010
Cadmium, Total	ND		0.00020	0.00020
Chromium, Total	ND		0.0030	0.0030
Copper, Total	ND		0.0020	0.0020
Lead, Total	ND		0.0010	0.0010
Manganese, Total	1.2		0.0010	0.0010
Nickel, Total	ND		0.0040	0.0040
Selenium, Total	ND		0.0010	0.0010
Silver, Total	ND		0.0020	0.0020
Thallium, Total	ND		0.0010	0.0010
Vanadium, Total	ND		0.0020	0.0020
Zinc, Total	ND		0.0050	0.0050

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-19C

Lab Sample ID: 280-90968-9

Date Sampled: 11/14/2016 1428

Client Matrix: Water

Date Received: 11/15/2016 1217

6020 Metals (ICP/MS)-Dissolved

Analysis Method: 6020

Analysis Batch: 280-353028

Instrument ID: MT_077

Prep Method: 3005A

Prep Batch: 280-352489

Lab File ID: 193SMPL.d

Dilution: 1.0

Initial Weight/Volume: 50 mL

Analysis Date: 11/24/2016 0024

Final Weight/Volume: 50 mL

Prep Date: 11/23/2016 1445

Analyte	Result (mg/L)	Qualifier	RL	RL
Manganese, Dissolved	1.2		0.0010	0.0010

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-29A

Lab Sample ID: 280-90968-11

Date Sampled: 11/14/2016 1244

Client Matrix: Water

Date Received: 11/15/2016 1217

6010B Metals (ICP)-Total Recoverable

Analysis Method: 6010B Analysis Batch: 280-353463 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-352234 Lab File ID: 25E112816.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 11/29/2016 0556 Final Weight/Volume: 50 mL
Prep Date: 11/23/2016 1445

Analyte	Result (mg/L)	Qualifier	RL	RL
Cobalt, Total	ND		0.0030	0.0030
Iron, Total	4.6		0.060	0.060

6010B Metals (ICP)-Dissolved

Analysis Method: 6010B Analysis Batch: 280-355067 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-353142 Lab File ID: 25D120916.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 12/10/2016 0315 Final Weight/Volume: 50 mL
Prep Date: 12/01/2016 1405

Analyte	Result (mg/L)	Qualifier	RL	RL
Calcium, Dissolved	7.4		0.040	0.040
Iron, Dissolved	4.1		0.060	0.060
Magnesium, Dissolved	4.5		0.050	0.050
Potassium, Dissolved	ND		1.0	1.0
Sodium, Dissolved	3.6		1.0	1.0

6020 Metals (ICP/MS)-Total Recoverable

Analysis Method: 6020 Analysis Batch: 280-353261 Instrument ID: MT_077
Prep Method: 3005A Prep Batch: 280-352238 Lab File ID: 100SMPL.d
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 11/25/2016 1832 Final Weight/Volume: 50 mL
Prep Date: 11/25/2016 0725

Analyte	Result (mg/L)	Qualifier	RL	RL
Antimony, Total	ND		0.0010	0.0010
Barium, Total	0.010		0.0010	0.0010
Beryllium, Total	ND		0.0010	0.0010
Cadmium, Total	ND		0.00020	0.00020
Chromium, Total	ND		0.0030	0.0030
Copper, Total	ND		0.0020	0.0020
Lead, Total	ND		0.0010	0.0010
Manganese, Total	1.4		0.0010	0.0010
Nickel, Total	ND		0.0040	0.0040
Selenium, Total	ND		0.0010	0.0010
Silver, Total	ND		0.0020	0.0020
Thallium, Total	ND		0.0010	0.0010
Vanadium, Total	ND		0.0020	0.0020
Zinc, Total	ND		0.0050	0.0050

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Client Sample ID: MW-29A

Lab Sample ID: 280-90968-11

Date Sampled: 11/14/2016 1244

Client Matrix: Water

Date Received: 11/15/2016 1217

6020 Metals (ICP/MS)-Dissolved

Analysis Method: 6020

Analysis Batch: 280-353028

Instrument ID: MT_077

Prep Method: 3005A

Prep Batch: 280-352489

Lab File ID: 194SMPL.d

Dilution: 1.0

Initial Weight/Volume: 50 mL

Analysis Date: 11/24/2016 0027

Final Weight/Volume: 50 mL

Prep Date: 11/23/2016 1445

Analyte	Result (mg/L)	Qualifier	RL	RL
Manganese, Dissolved	1.4		0.0010	0.0010

Client: Waste Management

Job Number: 280-90968-1

General Chemistry

Client Sample ID: MW-13A

Lab Sample ID: 280-90968-1

Date Sampled: 11/14/2016 1004

Client Matrix: Water

Date Received: 11/15/2016 1217

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Chloride	1.8		mg/L	1.0	1.0	1.0	300.0
	Analysis Batch: 280-354768		Analysis Date: 12/08/2016 1227				
Sulfate	2.0		mg/L	1.0	1.0	1.0	300.0
	Analysis Batch: 280-354768		Analysis Date: 12/08/2016 1227				
Ammonia (as N)	ND		mg/L	0.030	0.030	1.0	350.1
	Analysis Batch: 280-352527		Analysis Date: 11/21/2016 1611				
Nitrate as N	0.48		mg/L	0.050	0.050	1.0	353.2
	Analysis Batch: 280-355103		Analysis Date: 12/11/2016 0914				
Alkalinity, Total (As CaCO3)	92		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-352383		Analysis Date: 11/20/2016 1441				
Alkalinity, Bicarbonate (As CaCO3)	92		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-352383		Analysis Date: 11/20/2016 1441				
Total Dissolved Solids (TDS)	110		mg/L	5.0	5.0	1.0	SM 2540C
	Analysis Batch: 280-352412		Analysis Date: 11/21/2016 1013				
Total Suspended Solids	ND		mg/L	4.0	4.0	1.0	SM 2540D
	Analysis Batch: 280-352044		Analysis Date: 11/17/2016 1754				
Total Organic Carbon - Average	ND		mg/L	1.0	1.0	1.0	SM 5310B
	Analysis Batch: 280-354778		Analysis Date: 12/07/2016 1636				

Client: Waste Management

Job Number: 280-90968-1

General Chemistry

Client Sample ID: MW-13B

Lab Sample ID: 280-90968-2

Date Sampled: 11/14/2016 1135

Client Matrix: Water

Date Received: 11/15/2016 1217

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Chloride	1.9		mg/L	1.0	1.0	1.0	300.0
	Analysis Batch: 280-354768		Analysis Date: 12/08/2016 1243				
Sulfate	3.0		mg/L	1.0	1.0	1.0	300.0
	Analysis Batch: 280-354768		Analysis Date: 12/08/2016 1243				
Ammonia (as N)	ND		mg/L	0.030	0.030	1.0	350.1
	Analysis Batch: 280-352527		Analysis Date: 11/21/2016 1627				
Nitrate as N	0.64		mg/L	0.050	0.050	1.0	353.2
	Analysis Batch: 280-355103		Analysis Date: 12/11/2016 0914				
Alkalinity, Total (As CaCO3)	80		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-352383		Analysis Date: 11/20/2016 1503				
Alkalinity, Bicarbonate (As CaCO3)	80		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-352383		Analysis Date: 11/20/2016 1503				
Total Dissolved Solids (TDS)	100		mg/L	5.0	5.0	1.0	SM 2540C
	Analysis Batch: 280-352412		Analysis Date: 11/21/2016 1013				
Total Suspended Solids	ND		mg/L	4.0	4.0	1.0	SM 2540D
	Analysis Batch: 280-352044		Analysis Date: 11/17/2016 1754				
Total Organic Carbon - Average	ND		mg/L	1.0	1.0	1.0	SM 5310B
	Analysis Batch: 280-354778		Analysis Date: 12/07/2016 1651				

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

General Chemistry

Client Sample ID: MW-16

Lab Sample ID: 280-90968-3

Date Sampled: 11/14/2016 1248

Client Matrix: Water

Date Received: 11/15/2016 1217

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Chloride	1.0		mg/L	1.0	1.0	1.0	300.0
	Analysis Batch: 280-354768		Analysis Date: 12/08/2016 1258				
Sulfate	1.6		mg/L	1.0	1.0	1.0	300.0
	Analysis Batch: 280-354768		Analysis Date: 12/08/2016 1258				
Ammonia (as N)	ND	F1	mg/L	0.030	0.030	1.0	350.1
	Analysis Batch: 280-352527		Analysis Date: 11/21/2016 1635				
Nitrate as N	0.24		mg/L	0.050	0.050	1.0	353.2
	Analysis Batch: 280-355103		Analysis Date: 12/11/2016 0914				
Alkalinity, Total (As CaCO3)	56		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-352383		Analysis Date: 11/20/2016 1512				
Alkalinity, Bicarbonate (As CaCO3)	56		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-352383		Analysis Date: 11/20/2016 1512				
Total Dissolved Solids (TDS)	86		mg/L	5.0	5.0	1.0	SM 2540C
	Analysis Batch: 280-352412		Analysis Date: 11/21/2016 1013				
Total Suspended Solids	ND		mg/L	4.0	4.0	1.0	SM 2540D
	Analysis Batch: 280-352044		Analysis Date: 11/17/2016 1754				
Total Organic Carbon - Average	ND		mg/L	1.0	1.0	1.0	SM 5310B
	Analysis Batch: 280-354778		Analysis Date: 12/07/2016 1735				

Client: Waste Management

Job Number: 280-90968-1

General Chemistry

Client Sample ID: MW-39

Lab Sample ID: 280-90968-4

Client Matrix: Water

Date Sampled: 11/14/2016 1354

Date Received: 11/15/2016 1217

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Chloride	ND		mg/L	1.0	1.0	1.0	300.0
	Analysis Batch: 280-354768		Analysis Date: 12/08/2016 1314				
Sulfate	1.4		mg/L	1.0	1.0	1.0	300.0
	Analysis Batch: 280-354768		Analysis Date: 12/08/2016 1314				
Ammonia (as N)	ND		mg/L	0.030	0.030	1.0	350.1
	Analysis Batch: 280-352527		Analysis Date: 11/21/2016 1641				
Nitrate as N	1.6		mg/L	0.050	0.050	1.0	353.2
	Analysis Batch: 280-355103		Analysis Date: 12/11/2016 0914				
Alkalinity, Total (As CaCO3)	57		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-352383		Analysis Date: 11/20/2016 1516				
Alkalinity, Bicarbonate (As CaCO3)	57		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-352383		Analysis Date: 11/20/2016 1516				
Total Dissolved Solids (TDS)	76		mg/L	5.0	5.0	1.0	SM 2540C
	Analysis Batch: 280-352412		Analysis Date: 11/21/2016 1013				
Total Suspended Solids	ND		mg/L	4.0	4.0	1.0	SM 2540D
	Analysis Batch: 280-352044		Analysis Date: 11/17/2016 1754				
Total Organic Carbon - Average	ND		mg/L	1.0	1.0	1.0	SM 5310B
	Analysis Batch: 280-354778		Analysis Date: 12/07/2016 1750				

Client: Waste Management

Job Number: 280-90968-1

General Chemistry

Client Sample ID: MW-4

Lab Sample ID: 280-90968-5

Date Sampled: 11/14/2016 1500

Client Matrix: Water

Date Received: 11/15/2016 1217

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Chloride	1.4		mg/L	1.0	1.0	1.0	300.0
	Analysis Batch: 280-354768		Analysis Date: 12/08/2016 1329				
Sulfate	2.0		mg/L	1.0	1.0	1.0	300.0
	Analysis Batch: 280-354768		Analysis Date: 12/08/2016 1329				
Ammonia (as N)	ND		mg/L	0.030	0.030	1.0	350.1
	Analysis Batch: 280-352527		Analysis Date: 11/21/2016 1643				
Nitrate as N	0.33		mg/L	0.050	0.050	1.0	353.2
	Analysis Batch: 280-355103		Analysis Date: 12/11/2016 0914				
Alkalinity, Total (As CaCO3)	42		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-352831		Analysis Date: 11/22/2016 1633				
Alkalinity, Bicarbonate (As CaCO3)	42		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-352831		Analysis Date: 11/22/2016 1633				
Total Dissolved Solids (TDS)	36		mg/L	5.0	5.0	1.0	SM 2540C
	Analysis Batch: 280-352412		Analysis Date: 11/21/2016 1013				
Total Suspended Solids	ND		mg/L	4.0	4.0	1.0	SM 2540D
	Analysis Batch: 280-352044		Analysis Date: 11/17/2016 1754				
Total Organic Carbon - Average	ND		mg/L	1.0	1.0	1.0	SM 5310B
	Analysis Batch: 280-354778		Analysis Date: 12/07/2016 1804				

Client: Waste Management

Job Number: 280-90968-1

General Chemistry

Client Sample ID: MW-43

Lab Sample ID: 280-90968-6

Date Sampled: 11/14/2016 1158

Client Matrix: Water

Date Received: 11/15/2016 1217

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Chloride	ND		mg/L	1.0	1.0	1.0	300.0
	Analysis Batch: 280-354768	Analysis Date: 12/08/2016		1415			
Sulfate	1.7		mg/L	1.0	1.0	1.0	300.0
	Analysis Batch: 280-354768	Analysis Date: 12/08/2016		1415			
Ammonia (as N)	0.030		mg/L	0.030	0.030	1.0	350.1
	Analysis Batch: 280-352527	Analysis Date: 11/21/2016		1645			
Nitrate as N	0.52		mg/L	0.050	0.050	1.0	353.2
	Analysis Batch: 280-355103	Analysis Date: 12/11/2016		0914			
Alkalinity, Total (As CaCO3)	13		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-352383	Analysis Date: 11/20/2016		1525			
Alkalinity, Bicarbonate (As CaCO3)	13		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-352383	Analysis Date: 11/20/2016		1525			
Total Dissolved Solids (TDS)	28		mg/L	5.0	5.0	1.0	SM 2540C
	Analysis Batch: 280-352412	Analysis Date: 11/21/2016		1013			
Total Suspended Solids	ND		mg/L	4.0	4.0	1.0	SM 2540D
	Analysis Batch: 280-352044	Analysis Date: 11/17/2016		1754			
Total Organic Carbon - Average	1.2		mg/L	1.0	1.0	1.0	SM 5310B
	Analysis Batch: 280-354778	Analysis Date: 12/07/2016		1821			

Client: Waste Management

Job Number: 280-90968-1

General Chemistry

Client Sample ID: MW-20

Lab Sample ID: 280-90968-7

Date Sampled: 11/14/2016 1329

Client Matrix: Water

Date Received: 11/15/2016 1217

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Chloride	8.3		mg/L	1.0	1.0	1.0	300.0
	Analysis Batch: 280-354768		Analysis Date: 12/08/2016 1431				
Sulfate	4.2		mg/L	1.0	1.0	1.0	300.0
	Analysis Batch: 280-354768		Analysis Date: 12/08/2016 1431				
Ammonia (as N)	ND		mg/L	0.030	0.030	1.0	350.1
	Analysis Batch: 280-352527		Analysis Date: 11/21/2016 1701				
Nitrate as N	6.0		mg/L	0.050	0.050	1.0	353.2
	Analysis Batch: 280-355103		Analysis Date: 12/11/2016 0914				
Alkalinity, Total (As CaCO3)	75		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-352383		Analysis Date: 11/20/2016 1530				
Alkalinity, Bicarbonate (As CaCO3)	75		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-352383		Analysis Date: 11/20/2016 1530				
Total Dissolved Solids (TDS)	160		mg/L	5.0	5.0	1.0	SM 2540C
	Analysis Batch: 280-352412		Analysis Date: 11/21/2016 1013				
Total Suspended Solids	4.0		mg/L	4.0	4.0	1.0	SM 2540D
	Analysis Batch: 280-352044		Analysis Date: 11/17/2016 1754				
Total Organic Carbon - Average	ND		mg/L	1.0	1.0	1.0	SM 5310B
	Analysis Batch: 280-354778		Analysis Date: 12/07/2016 1907				

Client: Waste Management

Job Number: 280-90968-1

General Chemistry

Client Sample ID: DUP2

Lab Sample ID: 280-90968-8FD

Date Sampled: 11/14/2016 1339

Client Matrix: Water

Date Received: 11/15/2016 1217

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Chloride	8.4		mg/L	1.0	1.0	1.0	300.0
	Analysis Batch: 280-354768		Analysis Date: 12/08/2016 1446				
Sulfate	4.3		mg/L	1.0	1.0	1.0	300.0
	Analysis Batch: 280-354768		Analysis Date: 12/08/2016 1446				
Ammonia (as N)	ND		mg/L	0.030	0.030	1.0	350.1
	Analysis Batch: 280-352527		Analysis Date: 11/21/2016 1703				
Nitrate as N	5.9		mg/L	0.050	0.050	1.0	353.2
	Analysis Batch: 280-355103		Analysis Date: 12/11/2016 0914				
Alkalinity, Total (As CaCO3)	75		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-352383		Analysis Date: 11/20/2016 1534				
Alkalinity, Bicarbonate (As CaCO3)	75		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-352383		Analysis Date: 11/20/2016 1534				
Total Dissolved Solids (TDS)	150		mg/L	5.0	5.0	1.0	SM 2540C
	Analysis Batch: 280-352412		Analysis Date: 11/21/2016 1013				
Total Suspended Solids	5.6		mg/L	4.0	4.0	1.0	SM 2540D
	Analysis Batch: 280-352044		Analysis Date: 11/17/2016 1754				
Total Organic Carbon - Average	ND		mg/L	1.0	1.0	1.0	SM 5310B
	Analysis Batch: 280-354778		Analysis Date: 12/07/2016 1924				

Client: Waste Management

Job Number: 280-90968-1

General Chemistry

Client Sample ID: MW-19C

Lab Sample ID: 280-90968-9

Date Sampled: 11/14/2016 1428

Client Matrix: Water

Date Received: 11/15/2016 1217

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Chloride	5.7		mg/L	1.0	1.0	1.0	300.0
	Analysis Batch: 280-354768		Analysis Date: 12/08/2016 1502				
Sulfate	3.7		mg/L	1.0	1.0	1.0	300.0
	Analysis Batch: 280-354768		Analysis Date: 12/08/2016 1502				
Ammonia (as N)	0.67		mg/L	0.030	0.030	1.0	350.1
	Analysis Batch: 280-352527		Analysis Date: 11/21/2016 1705				
Nitrate as N	ND		mg/L	0.050	0.050	1.0	353.2
	Analysis Batch: 280-355103		Analysis Date: 12/11/2016 0914				
Alkalinity, Total (As CaCO3)	74		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-352331		Analysis Date: 11/17/2016 1143				
Alkalinity, Bicarbonate (As CaCO3)	74		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-352331		Analysis Date: 11/17/2016 1143				
Total Dissolved Solids (TDS)	110		mg/L	5.0	5.0	1.0	SM 2540C
	Analysis Batch: 280-352412		Analysis Date: 11/21/2016 1013				
Total Suspended Solids	ND		mg/L	4.0	4.0	1.0	SM 2540D
	Analysis Batch: 280-352044		Analysis Date: 11/17/2016 1754				
Total Organic Carbon - Average	ND		mg/L	1.0	1.0	1.0	SM 5310B
	Analysis Batch: 280-354778		Analysis Date: 12/07/2016 1938				

Client: Waste Management

Job Number: 280-90968-1

General Chemistry

Client Sample ID: MW-29A

Lab Sample ID: 280-90968-11

Date Sampled: 11/14/2016 1244

Client Matrix: Water

Date Received: 11/15/2016 1217

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Chloride	1.7		mg/L	1.0	1.0	1.0	300.0
	Analysis Batch: 280-354768		Analysis Date: 12/08/2016 1517				
Sulfate	ND		mg/L	1.0	1.0	1.0	300.0
	Analysis Batch: 280-354768		Analysis Date: 12/08/2016 1517				
Ammonia (as N)	0.075		mg/L	0.030	0.030	1.0	350.1
	Analysis Batch: 280-352527		Analysis Date: 11/21/2016 1718				
Nitrate as N	ND		mg/L	0.050	0.050	1.0	353.2
	Analysis Batch: 280-355103		Analysis Date: 12/11/2016 0914				
Alkalinity, Total (As CaCO3)	47		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-352331		Analysis Date: 11/17/2016 1149				
Alkalinity, Bicarbonate (As CaCO3)	47		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-352331		Analysis Date: 11/17/2016 1149				
Total Dissolved Solids (TDS)	58		mg/L	5.0	5.0	1.0	SM 2540C
	Analysis Batch: 280-352412		Analysis Date: 11/21/2016 1013				
Total Suspended Solids	4.0		mg/L	4.0	4.0	1.0	SM 2540D
	Analysis Batch: 280-352478		Analysis Date: 11/21/2016 1439				
Total Organic Carbon - Average	1.7		mg/L	1.0	1.0	1.0	SM 5310B
	Analysis Batch: 280-354778		Analysis Date: 12/07/2016 1955				

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Field Service / Mobile Lab

Client Sample ID: MW-13A

Lab Sample ID: 280-90968-1

Client Matrix: Water

Date Sampled: 11/14/2016 1004

Date Received: 11/15/2016 1217

Analyte	Result	Qual	Units	Dil	Method	Analysis Batch	Date Analyzed	Date Prepared
Depth to water	45.76		ft	1.0	Field Sampling	280-352756	11/14/2016	1104
Specific Conductivity	169		umhos/cm	1.0	Field Sampling	280-352756	11/14/2016	1104
Dissolved Oxygen	6.54		mg/L	1.0	Field Sampling	280-352756	11/14/2016	1104
eH	113.0		millivolts	1.0	Field Sampling	280-352756	11/14/2016	1104
Turbidity	0.84		NTU	1.0	Field Sampling	280-352756	11/14/2016	1104
Temperature	9.57		Degrees C	1.0	Field Sampling	280-352756	11/14/2016	1104
pH	6.50		SU	1.0	Field Sampling	280-352756	11/14/2016	1104

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Field Service / Mobile Lab

Client Sample ID: MW-13B

Lab Sample ID: 280-90968-2

Date Sampled: 11/14/2016 1135

Client Matrix: Water

Date Received: 11/15/2016 1217

Analyte	Result	Qual	Units	Dil	Method	Analysis Batch	Date Analyzed	Date Prepared
Depth to water	59.30		ft	1.0	Field Sampling	280-352756	11/14/2016	1235
Specific Conductivity	171		umhos/cm	1.0	Field Sampling	280-352756	11/14/2016	1235
Dissolved Oxygen	6.94		mg/L	1.0	Field Sampling	280-352756	11/14/2016	1235
eH	84.0		millivolts	1.0	Field Sampling	280-352756	11/14/2016	1235
Turbidity	0.89		NTU	1.0	Field Sampling	280-352756	11/14/2016	1235
Temperature	10.41		Degrees C	1.0	Field Sampling	280-352756	11/14/2016	1235
pH	7.17		SU	1.0	Field Sampling	280-352756	11/14/2016	1235

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Field Service / Mobile Lab

Client Sample ID: MW-16

Lab Sample ID: 280-90968-3

Client Matrix: Water

Date Sampled: 11/14/2016 1248

Date Received: 11/15/2016 1217

Analyte	Result	Qual	Units	Dil	Method	Analysis Batch	Date Analyzed	Date Prepared
Depth to water	59.30		ft	1.0	Field Sampling	280-352756	11/14/2016	1348
Specific Conductivity	110		umhos/cm	1.0	Field Sampling	280-352756	11/14/2016	1348
Dissolved Oxygen	6.91		mg/L	1.0	Field Sampling	280-352756	11/14/2016	1348
eH	135.0		millivolts	1.0	Field Sampling	280-352756	11/14/2016	1348
Turbidity	2.51		NTU	1.0	Field Sampling	280-352756	11/14/2016	1348
Temperature	9.81		Degrees C	1.0	Field Sampling	280-352756	11/14/2016	1348
pH	5.89		SU	1.0	Field Sampling	280-352756	11/14/2016	1348

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Field Service / Mobile Lab

Client Sample ID: MW-39

Lab Sample ID: 280-90968-4

Client Matrix: Water

Date Sampled: 11/14/2016 1354

Date Received: 11/15/2016 1217

Analyte	Result	Qual	Units	Dil	Method	Analysis Batch	Date Analyzed	Date Prepared
Depth to water	17.16		ft	1.0	Field Sampling	280-352756	11/14/2016	1454
Specific Conductivity	130		umhos/cm	1.0	Field Sampling	280-352756	11/14/2016	1454
Dissolved Oxygen	1.28		mg/L	1.0	Field Sampling	280-352756	11/14/2016	1454
eH	47.0		millivolts	1.0	Field Sampling	280-352756	11/14/2016	1454
Turbidity	4.53		NTU	1.0	Field Sampling	280-352756	11/14/2016	1454
Temperature	12.89		Degrees C	1.0	Field Sampling	280-352756	11/14/2016	1454
pH	5.27		SU	1.0	Field Sampling	280-352756	11/14/2016	1454

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Field Service / Mobile Lab

Client Sample ID: MW-4

Lab Sample ID: 280-90968-5

Client Matrix: Water

Date Sampled: 11/14/2016 1500

Date Received: 11/15/2016 1217

Analyte	Result	Qual	Units	Dil	Method	Analysis Batch	Date Analyzed	Date Prepared
Depth to water	11.79		ft	1.0	Field Sampling	280-352756	11/14/2016	1600
Specific Conductivity	50		umhos/cm	1.0	Field Sampling	280-352756	11/14/2016	1600
Dissolved Oxygen	4.07		mg/L	1.0	Field Sampling	280-352756	11/14/2016	1600
eH	142.0		millivolts	1.0	Field Sampling	280-352756	11/14/2016	1600
Turbidity	1.06		NTU	1.0	Field Sampling	280-352756	11/14/2016	1600
Temperature	11.49		Degrees C	1.0	Field Sampling	280-352756	11/14/2016	1600
pH	5.06		SU	1.0	Field Sampling	280-352756	11/14/2016	1600

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Field Service / Mobile Lab

Client Sample ID: MW-43

Lab Sample ID: 280-90968-6

Client Matrix: Water

Date Sampled: 11/14/2016 1158

Date Received: 11/15/2016 1217

Analyte	Result	Qual	Units	Dil	Method	Analysis Batch	Date Analyzed	Date Prepared
Specific Conductivity	34		umhos/cm	1.0	Field Sampling	280-352756	11/14/2016	1258
Dissolved Oxygen	2.73		mg/L	1.0	Field Sampling	280-352756	11/14/2016	1258
eH	156.8		millivolts	1.0	Field Sampling	280-352756	11/14/2016	1258
Turbidity	17.19		NTU	1.0	Field Sampling	280-352756	11/14/2016	1258
Temperature	12.63		Degrees C	1.0	Field Sampling	280-352756	11/14/2016	1258
pH	6.38		SU	1.0	Field Sampling	280-352756	11/14/2016	1258

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Field Service / Mobile Lab

Client Sample ID: MW-20

Lab Sample ID: 280-90968-7

Client Matrix: Water

Date Sampled: 11/14/2016 1329

Date Received: 11/15/2016 1217

Analyte	Result	Qual	Units	Dil	Method	Analysis Batch	Date Analyzed	Date Prepared
Depth to water	35.01		ft	1.0	Field Sampling	280-352756	11/14/2016	1429
Specific Conductivity	200		umhos/cm	1.0	Field Sampling	280-352756	11/14/2016	1429
Dissolved Oxygen	6.39		mg/L	1.0	Field Sampling	280-352756	11/14/2016	1429
eH	121.8		millivolts	1.0	Field Sampling	280-352756	11/14/2016	1429
Turbidity	12.91		NTU	1.0	Field Sampling	280-352756	11/14/2016	1429
Temperature	14.37		Degrees C	1.0	Field Sampling	280-352756	11/14/2016	1429
pH	6.94		SU	1.0	Field Sampling	280-352756	11/14/2016	1429

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Field Service / Mobile Lab

Client Sample ID: MW-19C

Lab Sample ID: 280-90968-9

Client Matrix: Water

Date Sampled: 11/14/2016 1428

Date Received: 11/15/2016 1217

Analyte	Result	Qual	Units	Dil	Method	Analysis Batch	Date Analyzed	Date Prepared
Depth to water	32.96		ft	1.0	Field Sampling	280-352756	11/14/2016	1528
Specific Conductivity	154		umhos/cm	1.0	Field Sampling	280-352756	11/14/2016	1528
Dissolved Oxygen	0.33		mg/L	1.0	Field Sampling	280-352756	11/14/2016	1528
eH	63.1		millivolts	1.0	Field Sampling	280-352756	11/14/2016	1528
Turbidity	5.85		NTU	1.0	Field Sampling	280-352756	11/14/2016	1528
Temperature	10.56		Degrees C	1.0	Field Sampling	280-352756	11/14/2016	1528
pH	7.41		SU	1.0	Field Sampling	280-352756	11/14/2016	1528

Analytical Data

Client: Waste Management

Job Number: 280-90968-1

Field Service / Mobile Lab

Client Sample ID: MW-29A

Lab Sample ID: 280-90968-11

Date Sampled: 11/14/2016 1244

Client Matrix: Water

Date Received: 11/15/2016 1217

Analyte	Result	Qual	Units	Dil	Method	Analysis Batch	Date Analyzed	Date Prepared
Depth to water	14.68		ft	1.0	Field Sampling	280-352756	11/14/2016	1344
Specific Conductivity	87		umhos/cm	1.0	Field Sampling	280-352756	11/14/2016	1344
Dissolved Oxygen	0.23		mg/L	1.0	Field Sampling	280-352756	11/14/2016	1344
eH	45.6		millivolts	1.0	Field Sampling	280-352756	11/14/2016	1344
Turbidity	8.87		NTU	1.0	Field Sampling	280-352756	11/14/2016	1344
Temperature	11.34		Degrees C	1.0	Field Sampling	280-352756	11/14/2016	1344
pH	6.96		SU	1.0	Field Sampling	280-352756	11/14/2016	1344

DATA REPORTING QUALIFIERS

Client: Waste Management

Job Number: 280-90968-1

Lab Section	Qualifier	Description
GC/MS VOA	B	Compound was found in the blank and sample.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
Metals	4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
General Chemistry	F3	Duplicate RPD exceeds the control limit
	F1	MS and/or MSD Recovery is outside acceptance limits.

QUALITY CONTROL RESULTS

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:480-332057					
LCS 480-332057/4	Lab Control Sample	T	Water	8260C SIM	
LCSD 480-332057/5	Lab Control Sample Duplicate	T	Water	8260C SIM	
MB 480-332057/7	Method Blank	T	Water	8260C SIM	
280-90968-1	MW-13A	T	Water	8260C SIM	
280-90968-2	MW-13B	T	Water	8260C SIM	
280-90968-3	MW-16	T	Water	8260C SIM	
280-90968-4	MW-39	T	Water	8260C SIM	
280-90968-5	MW-4	T	Water	8260C SIM	
280-90968-6	MW-43	T	Water	8260C SIM	
280-90968-7	MW-20	T	Water	8260C SIM	
280-90968-8FD	DUP2	T	Water	8260C SIM	
280-90968-9	MW-19C	T	Water	8260C SIM	
280-90968-10TB	TRIP BLANK	T	Water	8260C SIM	
280-90968-11	MW-29A	T	Water	8260C SIM	
Analysis Batch:480-333215					
LCS 480-333215/4	Lab Control Sample	T	Water	8260C	
MB 480-333215/6	Method Blank	T	Water	8260C	
280-90968-1	MW-13A	T	Water	8260C	
280-90968-2	MW-13B	T	Water	8260C	
280-90968-3	MW-16	T	Water	8260C	
280-90968-4	MW-39	T	Water	8260C	
280-90968-5	MW-4	T	Water	8260C	
280-90968-6	MW-43	T	Water	8260C	
280-90968-7	MW-20	T	Water	8260C	
280-90968-8FD	DUP2	T	Water	8260C	
280-90968-9	MW-19C	T	Water	8260C	
280-90968-10TB	TRIP BLANK	T	Water	8260C	
280-90968-11	MW-29A	T	Water	8260C	
280-91030-E-2 MS	Matrix Spike	T	Water	8260C	
280-91030-E-2 MSD	Matrix Spike Duplicate	T	Water	8260C	

Report Basis

T = Total

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 280-352234					
LCS 280-352234/2-A	Lab Control Sample	R	Water	3005A	
MB 280-352234/1-A	Method Blank	R	Water	3005A	
280-90915-C-2-B MS	Matrix Spike	R	Water	3005A	
280-90915-C-2-C MSD	Matrix Spike Duplicate	R	Water	3005A	
280-90968-1	MW-13A	R	Water	3005A	
280-90968-2	MW-13B	R	Water	3005A	
280-90968-3	MW-16	R	Water	3005A	
280-90968-4	MW-39	R	Water	3005A	
280-90968-5	MW-4	R	Water	3005A	
280-90968-6	MW-43	R	Water	3005A	
280-90968-7	MW-20	R	Water	3005A	
280-90968-8FD	DUP2	R	Water	3005A	
280-90968-9	MW-19C	R	Water	3005A	
280-90968-11	MW-29A	R	Water	3005A	
Prep Batch: 280-352238					
LCS 280-352238/2-A	Lab Control Sample	R	Water	3005A	
MB 280-352238/1-A	Method Blank	R	Water	3005A	
280-90968-1	MW-13A	R	Water	3005A	
280-90968-1MS	Matrix Spike	R	Water	3005A	
280-90968-1MSD	Matrix Spike Duplicate	R	Water	3005A	
280-90968-2	MW-13B	R	Water	3005A	
280-90968-3	MW-16	R	Water	3005A	
280-90968-4	MW-39	R	Water	3005A	
280-90968-5	MW-4	R	Water	3005A	
280-90968-6	MW-43	R	Water	3005A	
280-90968-7	MW-20	R	Water	3005A	
280-90968-8FD	DUP2	R	Water	3005A	
280-90968-9	MW-19C	R	Water	3005A	
280-90968-11	MW-29A	R	Water	3005A	

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 280-352489					
LCS 280-352489/2-A	Lab Control Sample	R	Water	3005A	
MB 280-352489/1-A	Method Blank	R	Water	3005A	
280-90968-1	MW-13A	D	Water	3005A	
280-90968-2	MW-13B	D	Water	3005A	
280-90968-3	MW-16	D	Water	3005A	
280-90968-4	MW-39	D	Water	3005A	
280-90968-5	MW-4	D	Water	3005A	
280-90968-6	MW-43	D	Water	3005A	
280-90968-7	MW-20	D	Water	3005A	
280-90968-8FD	DUP2	D	Water	3005A	
280-90968-9	MW-19C	D	Water	3005A	
280-90968-11	MW-29A	D	Water	3005A	
280-91030-D-2-B MS	Matrix Spike	D	Water	3005A	
280-91030-D-2-C MSD	Matrix Spike Duplicate	D	Water	3005A	
Analysis Batch:280-353028					
LCS 280-352489/2-A	Lab Control Sample	R	Water	6020	280-352489
MB 280-352489/1-A	Method Blank	R	Water	6020	280-352489
280-90968-1	MW-13A	D	Water	6020	280-352489
280-90968-2	MW-13B	D	Water	6020	280-352489
280-90968-3	MW-16	D	Water	6020	280-352489
280-90968-4	MW-39	D	Water	6020	280-352489
280-90968-5	MW-4	D	Water	6020	280-352489
280-90968-6	MW-43	D	Water	6020	280-352489
280-90968-7	MW-20	D	Water	6020	280-352489
280-90968-8FD	DUP2	D	Water	6020	280-352489
280-90968-9	MW-19C	D	Water	6020	280-352489
280-90968-11	MW-29A	D	Water	6020	280-352489
280-91030-D-2-B MS	Matrix Spike	D	Water	6020	280-352489
280-91030-D-2-C MSD	Matrix Spike Duplicate	D	Water	6020	280-352489

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 280-353142					
LCS 280-353142/2-A	Lab Control Sample	R	Water	3005A	
MB 280-353142/1-A	Method Blank	R	Water	3005A	
280-90959-L-1-C MS	Matrix Spike	D	Water	3005A	
280-90959-L-1-D MSD	Matrix Spike Duplicate	D	Water	3005A	
280-90968-1	MW-13A	D	Water	3005A	
280-90968-2	MW-13B	D	Water	3005A	
280-90968-3	MW-16	D	Water	3005A	
280-90968-4	MW-39	D	Water	3005A	
280-90968-5	MW-4	D	Water	3005A	
280-90968-6	MW-43	D	Water	3005A	
280-90968-7	MW-20	D	Water	3005A	
280-90968-8FD	DUP2	D	Water	3005A	
280-90968-9	MW-19C	D	Water	3005A	
280-90968-11	MW-29A	D	Water	3005A	
Analysis Batch:280-353261					
LCS 280-352238/2-A	Lab Control Sample	R	Water	6020	280-352238
MB 280-352238/1-A	Method Blank	R	Water	6020	280-352238
280-90968-1	MW-13A	R	Water	6020	280-352238
280-90968-1MS	Matrix Spike	R	Water	6020	280-352238
280-90968-1MSD	Matrix Spike Duplicate	R	Water	6020	280-352238
280-90968-2	MW-13B	R	Water	6020	280-352238
280-90968-3	MW-16	R	Water	6020	280-352238
280-90968-4	MW-39	R	Water	6020	280-352238
280-90968-5	MW-4	R	Water	6020	280-352238
280-90968-6	MW-43	R	Water	6020	280-352238
280-90968-7	MW-20	R	Water	6020	280-352238
280-90968-8FD	DUP2	R	Water	6020	280-352238
280-90968-9	MW-19C	R	Water	6020	280-352238
280-90968-11	MW-29A	R	Water	6020	280-352238

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:280-353463					
LCS 280-352234/2-A	Lab Control Sample	R	Water	6010B	280-352234
MB 280-352234/1-A	Method Blank	R	Water	6010B	280-352234
280-90915-C-2-B MS	Matrix Spike	R	Water	6010B	280-352234
280-90915-C-2-C MSD	Matrix Spike Duplicate	R	Water	6010B	280-352234
280-90968-1	MW-13A	R	Water	6010B	280-352234
280-90968-2	MW-13B	R	Water	6010B	280-352234
280-90968-3	MW-16	R	Water	6010B	280-352234
280-90968-4	MW-39	R	Water	6010B	280-352234
280-90968-5	MW-4	R	Water	6010B	280-352234
280-90968-6	MW-43	R	Water	6010B	280-352234
280-90968-7	MW-20	R	Water	6010B	280-352234
280-90968-8FD	DUP2	R	Water	6010B	280-352234
280-90968-9	MW-19C	R	Water	6010B	280-352234
280-90968-11	MW-29A	R	Water	6010B	280-352234
Analysis Batch:280-355067					
LCS 280-353142/2-A	Lab Control Sample	R	Water	6010B	280-353142
MB 280-353142/1-A	Method Blank	R	Water	6010B	280-353142
280-90959-L-1-C MS	Matrix Spike	D	Water	6010B	280-353142
280-90959-L-1-D MSD	Matrix Spike Duplicate	D	Water	6010B	280-353142
280-90968-1	MW-13A	D	Water	6010B	280-353142
280-90968-2	MW-13B	D	Water	6010B	280-353142
280-90968-3	MW-16	D	Water	6010B	280-353142
280-90968-4	MW-39	D	Water	6010B	280-353142
280-90968-5	MW-4	D	Water	6010B	280-353142
280-90968-6	MW-43	D	Water	6010B	280-353142
280-90968-7	MW-20	D	Water	6010B	280-353142
280-90968-8FD	DUP2	D	Water	6010B	280-353142
280-90968-9	MW-19C	D	Water	6010B	280-353142
280-90968-11	MW-29A	D	Water	6010B	280-353142

Report Basis

D = Dissolved

R = Total Recoverable

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Field Service / Mobile Lab					
Analysis Batch:280-352756					
280-90968-1	MW-13A	T	Water	Field Sampling	
280-90968-2	MW-13B	T	Water	Field Sampling	
280-90968-3	MW-16	T	Water	Field Sampling	
280-90968-4	MW-39	T	Water	Field Sampling	
280-90968-5	MW-4	T	Water	Field Sampling	
280-90968-6	MW-43	T	Water	Field Sampling	
280-90968-7	MW-20	T	Water	Field Sampling	
280-90968-9	MW-19C	T	Water	Field Sampling	
280-90968-11	MW-29A	T	Water	Field Sampling	

Report Basis

T = Total

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:280-352044					
LCS 280-352044/1	Lab Control Sample	T	Water	SM 2540D	
MB 280-352044/2	Method Blank	T	Water	SM 2540D	
280-90968-1	MW-13A	T	Water	SM 2540D	
280-90968-1DU	Duplicate	T	Water	SM 2540D	
280-90968-2	MW-13B	T	Water	SM 2540D	
280-90968-3	MW-16	T	Water	SM 2540D	
280-90968-4	MW-39	T	Water	SM 2540D	
280-90968-5	MW-4	T	Water	SM 2540D	
280-90968-6	MW-43	T	Water	SM 2540D	
280-90968-7	MW-20	T	Water	SM 2540D	
280-90968-8FD	DUP2	T	Water	SM 2540D	
280-90968-9	MW-19C	T	Water	SM 2540D	
Analysis Batch:280-352331					
LCS 280-352331/4	Lab Control Sample	T	Water	SM 2320B	
MB 280-352331/5	Method Blank	T	Water	SM 2320B	
280-90901-A-1 DU	Duplicate	T	Water	SM 2320B	
280-90968-9	MW-19C	T	Water	SM 2320B	
280-90968-11	MW-29A	T	Water	SM 2320B	
Analysis Batch:280-352383					
LCS 280-352383/30	Lab Control Sample	T	Water	SM 2320B	
LCS 280-352383/4	Lab Control Sample	T	Water	SM 2320B	
MB 280-352383/31	Method Blank	T	Water	SM 2320B	
MB 280-352383/5	Method Blank	T	Water	SM 2320B	
280-90968-1	MW-13A	T	Water	SM 2320B	
280-90968-2	MW-13B	T	Water	SM 2320B	
280-90968-2DU	Duplicate	T	Water	SM 2320B	
280-90968-3	MW-16	T	Water	SM 2320B	
280-90968-4	MW-39	T	Water	SM 2320B	
280-90968-6	MW-43	T	Water	SM 2320B	
280-90968-7	MW-20	T	Water	SM 2320B	
280-90968-8FD	DUP2	T	Water	SM 2320B	

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:280-352412					
LCS 280-352412/2	Lab Control Sample	T	Water	SM 2540C	
MB 280-352412/1	Method Blank	T	Water	SM 2540C	
280-90968-1	MW-13A	T	Water	SM 2540C	
280-90968-2	MW-13B	T	Water	SM 2540C	
280-90968-3	MW-16	T	Water	SM 2540C	
280-90968-4	MW-39	T	Water	SM 2540C	
280-90968-5	MW-4	T	Water	SM 2540C	
280-90968-6	MW-43	T	Water	SM 2540C	
280-90968-7	MW-20	T	Water	SM 2540C	
280-90968-8FD	DUP2	T	Water	SM 2540C	
280-90968-9	MW-19C	T	Water	SM 2540C	
280-90968-11	MW-29A	T	Water	SM 2540C	
280-90969-B-2 DU	Duplicate	T	Water	SM 2540C	
Analysis Batch:280-352478					
LCS 280-352478/1	Lab Control Sample	T	Water	SM 2540D	
LCSD 280-352478/2	Lab Control Sample Duplicate	T	Water	SM 2540D	
MB 280-352478/3	Method Blank	T	Water	SM 2540D	
280-90968-11	MW-29A	T	Water	SM 2540D	
280-91242-A-3 DU	Duplicate	T	Water	SM 2540D	
Analysis Batch:280-352527					
LCS 280-352527/107	Lab Control Sample	T	Water	350.1	
LCS 280-352527/59	Lab Control Sample	T	Water	350.1	
LCSD 280-352527/108	Lab Control Sample Duplicate	T	Water	350.1	
LCSD 280-352527/60	Lab Control Sample Duplicate	T	Water	350.1	
MB 280-352527/109	Method Blank	T	Water	350.1	
MB 280-352527/61	Method Blank	T	Water	350.1	
280-90968-1	MW-13A	T	Water	350.1	
280-90968-2	MW-13B	T	Water	350.1	
280-90968-3	MW-16	T	Water	350.1	
280-90968-3MS	Matrix Spike	T	Water	350.1	
280-90968-3MSD	Matrix Spike Duplicate	T	Water	350.1	
280-90968-4	MW-39	T	Water	350.1	
280-90968-5	MW-4	T	Water	350.1	
280-90968-6	MW-43	T	Water	350.1	
280-90968-7	MW-20	T	Water	350.1	
280-90968-8FD	DUP2	T	Water	350.1	
280-90968-9	MW-19C	T	Water	350.1	
280-90968-11	MW-29A	T	Water	350.1	

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:280-352831					
LCS 280-352831/30	Lab Control Sample	T	Water	SM 2320B	
MB 280-352831/31	Method Blank	T	Water	SM 2320B	
280-90968-5	MW-4	T	Water	SM 2320B	
280-91153-A-1 DU	Duplicate	T	Water	SM 2320B	
Analysis Batch:280-353491					
LCS 280-353491/2	Lab Control Sample	T	Water	SM 2540C	
LCSD 280-353491/3	Lab Control Sample Duplicate	T	Water	SM 2540C	
MB 280-353491/1	Method Blank	T	Water	SM 2540C	
280-90968-5	MW-4	T	Water	SM 2540C	
280-90968-5DU	Duplicate	T	Water	SM 2540C	
280-90968-8FD	DUP2	T	Water	SM 2540C	
280-90968-8DU	Duplicate	T	Water	SM 2540C	
Analysis Batch:280-354768					
LCS 280-354768/4	Lab Control Sample	T	Water	300.0	
LCSD 280-354768/5	Lab Control Sample Duplicate	T	Water	300.0	
MB 280-354768/6	Method Blank	T	Water	300.0	
280-90968-1	MW-13A	T	Water	300.0	
280-90968-2	MW-13B	T	Water	300.0	
280-90968-3	MW-16	T	Water	300.0	
280-90968-4	MW-39	T	Water	300.0	
280-90968-5	MW-4	T	Water	300.0	
280-90968-6	MW-43	T	Water	300.0	
280-90968-7	MW-20	T	Water	300.0	
280-90968-8FD	DUP2	T	Water	300.0	
280-90968-9	MW-19C	T	Water	300.0	
280-90968-11	MW-29A	T	Water	300.0	
280-91032-B-10 DU	Duplicate	T	Water	300.0	
280-91032-B-10 MS	Matrix Spike	T	Water	300.0	
280-91032-B-10 MSD	Matrix Spike Duplicate	T	Water	300.0	

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:280-354778					
LCS 280-354778/3	Lab Control Sample	T	Water	SM 5310B	
MB 280-354778/4	Method Blank	T	Water	SM 5310B	
280-90968-1	MW-13A	T	Water	SM 5310B	
280-90968-2	MW-13B	T	Water	SM 5310B	
280-90968-2MS	Matrix Spike	T	Water	SM 5310B	
280-90968-2MSD	Matrix Spike Duplicate	T	Water	SM 5310B	
280-90968-3	MW-16	T	Water	SM 5310B	
280-90968-4	MW-39	T	Water	SM 5310B	
280-90968-5	MW-4	T	Water	SM 5310B	
280-90968-6	MW-43	T	Water	SM 5310B	
280-90968-7	MW-20	T	Water	SM 5310B	
280-90968-8FD	DUP2	T	Water	SM 5310B	
280-90968-9	MW-19C	T	Water	SM 5310B	
280-90968-11	MW-29A	T	Water	SM 5310B	
Analysis Batch:280-355103					
MB 280-355103/1	Method Blank	T	Water	353.2	
280-90968-1	MW-13A	T	Water	353.2	
280-90968-2	MW-13B	T	Water	353.2	
280-90968-3	MW-16	T	Water	353.2	
280-90968-4	MW-39	T	Water	353.2	
280-90968-5	MW-4	T	Water	353.2	
280-90968-6	MW-43	T	Water	353.2	
280-90968-7	MW-20	T	Water	353.2	
280-90968-8FD	DUP2	T	Water	353.2	
280-90968-9	MW-19C	T	Water	353.2	
280-90968-11	MW-29A	T	Water	353.2	

Report Basis

T = Total

Client: Waste Management

Job Number: 280-90968-1

Surrogate Recovery Report

8260C Volatile Organic Compounds by GC/MS

Client Matrix: Water

Lab Sample ID	Client Sample ID	DCA %Rec	BFB %Rec	TOL %Rec
280-90968-1	MW-13A	103	99	101
280-90968-2	MW-13B	104	100	102
280-90968-3	MW-16	106	99	103
280-90968-4	MW-39	102	100	102
280-90968-5	MW-4	106	98	101
280-90968-6	MW-43	104	95	99
280-90968-7	MW-20	104	99	102
280-90968-8	DUP2	103	97	100
280-90968-9	MW-19C	100	98	102
280-90968-10	TRIP BLANK	105	98	100
280-90968-11	MW-29A	102	96	102
MB 480-333215/6		102	100	101
LCS 480-333215/4		102	98	102
280-91030-E-2 MS		100	97	101
280-91030-E-2 MSD		99	98	104

Surrogate	Acceptance Limits
DCA = 1,2-Dichloroethane-d4 (Surr)	77-120
BFB = 4-Bromofluorobenzene (Surr)	73-120
TOL = Toluene-d8 (Surr)	80-120

Client: Waste Management

Job Number: 280-90968-1

Surrogate Recovery Report

8260C SIM Volatile Organic Compounds (GC/MS)

Client Matrix: Water

Lab Sample ID	Client Sample ID	DBFM %Rec	TBA %Rec
280-90968-1	MW-13A	97	91
280-90968-2	MW-13B	100	96
280-90968-3	MW-16	100	102
280-90968-4	MW-39	98	117
280-90968-5	MW-4	101	104
280-90968-6	MW-43	100	111
280-90968-7	MW-20	100	105
280-90968-8	DUP2	98	115
280-90968-9	MW-19C	101	121
280-90968-10	TRIP BLANK	102	125
280-90968-11	MW-29A	102	110
MB 480-332057/7		97	97
LCS 480-332057/4		101	87
LCSD 480-332057/5		96	85

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

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

Method Blank - Batch: 480-333215

**Method: 8260C
Preparation: 5030C**

Lab Sample ID: MB 480-333215/6
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/23/2016 1043
 Prep Date: 11/23/2016 1043
 Leach Date: N/A

Analysis Batch: 480-333215
 Prep Batch: N/A
 Leach Batch: N/A
 Units: ug/L

Instrument ID: HP5973S
 Lab File ID: S9804.D
 Initial Weight/Volume: 5 mL
 Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
1,1,1,2-Tetrachloroethane	ND		0.35	1.0
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,1-Dichloropropene	ND		0.72	1.0
1,2,3-Trichlorobenzene	ND		0.41	1.0
1,2,3-Trichloropropane	ND		0.89	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2,4-Trimethylbenzene	ND		0.75	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane (EDB)	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloroethene, Total	ND		0.81	2.0
1,2-Dichloropropane	ND		0.72	1.0
1,3,5-Trichlorobenzene	ND		0.23	1.0
1,3,5-Trimethylbenzene	ND		0.77	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,3-Dichloropropane	ND		0.75	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
1,4-Dioxane	ND		9.3	40
2,2-Dichloropropane	ND		0.40	1.0
2-Butanone (MEK)	ND		1.3	10
2-Chloroethyl vinyl ether	ND		0.96	5.0
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Acetonitrile	ND		4.9	15
Acrolein	ND		0.91	20
Acrylonitrile	ND		0.83	5.0
Benzene	ND		0.41	1.0
Bromobenzene	ND		0.80	1.0
Bromochloromethane	ND		0.87	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Butyl alcohol, n-	ND		8.9	40
Butyl alcohol, tert-	ND		3.3	10
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Chlorodifluoromethane	ND		0.26	1.0

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

Method Blank - Batch: 480-333215

**Method: 8260C
Preparation: 5030C**

Lab Sample ID: MB 480-333215/6
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/23/2016 1043
 Prep Date: 11/23/2016 1043
 Leach Date: N/A

Analysis Batch: 480-333215
 Prep Batch: N/A
 Leach Batch: N/A
 Units: ug/L

Instrument ID: HP5973S
 Lab File ID: S9804.D
 Initial Weight/Volume: 5 mL
 Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
Chloroethane	ND		0.32	1.0
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dibromochloromethane	ND		0.32	1.0
Dibromomethane	ND		0.41	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Dichlorofluoromethane	ND		0.34	1.0
Ethyl acetate	ND		0.66	1.0
Ethyl ether	ND		0.72	1.0
Ethyl tert-butyl ether	ND		0.29	1.0
Ethylbenzene	ND		0.74	1.0
Hexachlorobutadiene	ND		0.28	1.0
Hexane	ND		0.40	10
Iodomethane	ND		0.30	1.0
Isobutanol	ND		4.8	25
Isopropyl ether	ND		0.59	1.0
Isopropylbenzene	ND		0.79	1.0
Methacrylonitrile	ND		0.69	5.0
Methyl acetate	ND		1.3	2.5
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
Naphthalene	ND		0.43	1.0
n-Butylbenzene	ND		0.64	1.0
N-Propylbenzene	ND		0.69	1.0
o-Chlorotoluene	ND		0.86	1.0
o-Xylene	ND		0.76	1.0
p-Chlorotoluene	ND		0.84	1.0
p-Cymene	ND		0.31	1.0
sec-Butylbenzene	ND		0.75	1.0
Styrene	ND		0.73	1.0
Tert-amyl methyl ether	ND		0.27	1.0
tert-Butylbenzene	ND		0.81	1.0
Tetrachloroethene	ND		0.36	1.0
Tetrahydrofuran	ND		1.3	5.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
trans-1,4-Dichloro-2-butene	ND		0.22	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

Method Blank - Batch: 480-333215

Method: 8260C
Preparation: 5030C

Lab Sample ID: MB 480-333215/6	Analysis Batch: 480-333215	Instrument ID: HP5973S
Client Matrix: Water	Prep Batch: N/A	Lab File ID: S9804.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 1043	Units: ug/L	Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 1043		
Leach Date: N/A		

Analyte	Result	Qual	MDL	RL
Vinyl acetate	ND		0.85	5.0
Vinyl chloride	ND		0.90	1.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	102	77 - 120
4-Bromofluorobenzene (Surr)	100	73 - 120
Toluene-d8 (Surr)	101	80 - 120

Method Blank TICs- Batch: 480-333215

Cas Number	Analyte	RT	Est. Result (ug)	Qual
67-72-1	Hexachloroethane TIC	0.00	ND	

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

Lab Control Sample - Batch: 480-333215

**Method: 8260C
Preparation: 5030C**

Lab Sample ID: LCS 480-333215/4	Analysis Batch: 480-333215	Instrument ID: HP5973S
Client Matrix: Water	Prep Batch: N/A	Lab File ID: S9802.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 0950	Units: ug/L	Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 0950		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,1,1,2-Tetrachloroethane	25.0	26.8	107	80 - 120	
1,1,1-Trichloroethane	25.0	25.9	104	73 - 126	
1,1,2,2-Tetrachloroethane	25.0	25.6	102	76 - 120	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	24.8	99	61 - 148	
1,1,2-Trichloroethane	25.0	25.5	102	76 - 122	
1,1-Dichloroethane	25.0	25.0	100	77 - 120	
1,1-Dichloroethene	25.0	27.2	109	66 - 127	
1,1-Dichloropropene	25.0	25.6	102	72 - 122	
1,2,3-Trichlorobenzene	25.0	24.9	100	75 - 123	
1,2,3-Trichloropropane	25.0	24.3	97	68 - 122	
1,2,4-Trichlorobenzene	25.0	25.6	102	79 - 122	
1,2,4-Trimethylbenzene	25.0	25.9	103	76 - 121	
1,2-Dibromo-3-Chloropropane	25.0	25.0	100	56 - 134	
1,2-Dibromoethane (EDB)	25.0	25.3	101	77 - 120	
1,2-Dichlorobenzene	25.0	26.1	105	80 - 124	
1,2-Dichloroethane	25.0	24.0	96	75 - 120	
1,2-Dichloropropane	25.0	24.4	98	76 - 120	
1,3,5-Trimethylbenzene	25.0	26.0	104	77 - 121	
1,3-Dichlorobenzene	25.0	25.8	103	77 - 120	
1,3-Dichloropropane	25.0	24.6	98	75 - 120	
1,4-Dichlorobenzene	25.0	25.4	102	80 - 120	
1,4-Dioxane	500	398	80	50 - 150	
2,2-Dichloropropane	25.0	27.3	109	63 - 136	
2-Butanone (MEK)	125	115	92	57 - 140	
2-Chloroethyl vinyl ether	25.0	24.4	98	70 - 129	
2-Hexanone	125	111	89	65 - 127	
4-Methyl-2-pentanone (MIBK)	125	109	87	71 - 125	
Acetone	125	115	92	56 - 142	
Acrolein	125	108	87	52 - 143	
Acrylonitrile	250	232	93	63 - 125	
Benzene	25.0	25.1	100	71 - 124	
Bromobenzene	25.0	24.5	98	78 - 120	
Bromochloromethane	25.0	26.6	107	72 - 130	
Bromodichloromethane	25.0	25.4	101	80 - 122	
Bromoform	25.0	25.4	102	61 - 132	
Bromomethane	25.0	25.1	100	55 - 144	
Butyl alcohol, tert-	250	219	88	75 - 125	
Carbon disulfide	25.0	23.1	92	59 - 134	
Carbon tetrachloride	25.0	26.0	104	72 - 134	
Chlorobenzene	25.0	24.9	99	80 - 120	
Chloroethane	25.0	28.0	112	69 - 136	
Chloroform	25.0	25.1	100	73 - 127	
Chloromethane	25.0	24.7	99	68 - 124	
cis-1,2-Dichloroethene	25.0	25.4	102	74 - 124	
cis-1,3-Dichloropropene	25.0	24.9	100	74 - 124	
Cyclohexane	25.0	25.1	100	59 - 135	

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

Lab Control Sample - Batch: 480-333215

**Method: 8260C
Preparation: 5030C**

Lab Sample ID: LCS 480-333215/4	Analysis Batch: 480-333215	Instrument ID: HP5973S
Client Matrix: Water	Prep Batch: N/A	Lab File ID: S9802.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 0950	Units: ug/L	Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 0950		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Dibromochloromethane	25.0	25.3	101	75 - 125	
Dibromomethane	25.0	25.1	100	76 - 127	
Dichlorodifluoromethane	25.0	25.5	102	59 - 135	
Dichlorofluoromethane	25.0	24.4	98	76 - 127	
Ethyl ether	25.0	26.2	105	76 - 123	
Ethylbenzene	25.0	24.3	97	77 - 123	
Hexachlorobutadiene	25.0	24.4	98	68 - 131	
Iodomethane	25.0	24.8	99	78 - 123	
Isobutanol	625	572	92	51 - 150	
Isopropylbenzene	25.0	25.4	102	77 - 122	
Methyl acetate	125	110	88	74 - 133	
Methyl tert-butyl ether	25.0	24.3	97	77 - 120	
Methylcyclohexane	25.0	26.0	104	68 - 134	
Methylene Chloride	25.0	23.9	95	75 - 124	
m-Xylene & p-Xylene	25.0	24.4	98	76 - 122	
Naphthalene	25.0	24.3	97	66 - 125	
n-Butylbenzene	25.0	26.5	106	71 - 128	
N-Propylbenzene	25.0	25.3	101	75 - 127	
o-Chlorotoluene	25.0	25.0	100	76 - 121	
o-Xylene	25.0	24.7	99	76 - 122	
p-Chlorotoluene	25.0	25.2	101	77 - 121	
p-Cymene	25.0	26.0	104	73 - 120	
sec-Butylbenzene	25.0	25.4	101	74 - 127	
Styrene	25.0	24.8	99	80 - 120	
tert-Butylbenzene	25.0	26.0	104	75 - 123	
Tetrachloroethene	25.0	25.0	100	74 - 122	
Tetrahydrofuran	50.0	41.2	82	62 - 132	
Toluene	25.0	24.8	99	80 - 122	
trans-1,2-Dichloroethene	25.0	25.8	103	73 - 127	
trans-1,3-Dichloropropene	25.0	25.1	100	80 - 120	
trans-1,4-Dichloro-2-butene	25.0	19.5	78	41 - 131	
Trichloroethene	25.0	25.1	101	74 - 123	
Trichlorofluoromethane	25.0	24.4	98	62 - 150	
Vinyl acetate	50.0	48.5	97	50 - 144	
Vinyl chloride	25.0	27.8	111	65 - 133	
Surrogate		% Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		102		77 - 120	
4-Bromofluorobenzene (Surr)		98		73 - 120	
Toluene-d8 (Surr)		102		80 - 120	

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 480-333215**

**Method: 8260C
Preparation: 5030C**

MS Lab Sample ID: 280-91030-E-2 MS	Analysis Batch: 480-333215	Instrument ID: HP5973S
Client Matrix: Water	Prep Batch: N/A	Lab File ID: S9825.D
Dilution: 5.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 1902		Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 1902		5 mL
Leach Date: N/A		

MSD Lab Sample ID: 280-91030-E-2 MSD	Analysis Batch: 480-333215	Instrument ID: HP5973S
Client Matrix: Water	Prep Batch: N/A	Lab File ID: S9826.D
Dilution: 5.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 1925		Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 1925		5 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
1,1,1,2-Tetrachloroethane	109	109	80 - 120	0	20		
1,1,1-Trichloroethane	109	105	73 - 126	4	15		
1,1,2,2-Tetrachloroethane	101	103	76 - 120	1	15		
1,1,2-Trichloro-1,2,2-trifluoroethane	106	98	61 - 148	8	20		
1,1,2-Trichloroethane	104	108	76 - 122	4	15		
1,1-Dichloroethane	104	100	77 - 120	4	20		
1,1-Dichloroethene	114	108	66 - 127	5	16		
1,1-Dichloropropene	110	106	72 - 122	4	20		
1,2,3-Trichlorobenzene	98	98	75 - 123	0	20		
1,2,3-Trichloropropane	97	98	68 - 122	1	14		
1,2,4-Trichlorobenzene	99	99	79 - 122	1	20		
1,2,4-Trimethylbenzene	106	103	76 - 121	3	20		
1,2-Dibromo-3-Chloropropane	97	100	56 - 134	4	15		
1,2-Dibromoethane (EDB)	102	105	77 - 120	3	15		
1,2-Dichlorobenzene	104	103	80 - 124	1	20		
1,2-Dichloroethane	97	93	75 - 120	4	20		
1,2-Dichloropropane	101	97	76 - 120	4	20		
1,3,5-Trimethylbenzene	105	102	77 - 121	3	20		
1,3-Dichlorobenzene	105	102	77 - 120	3	20		
1,3-Dichloropropane	99	102	75 - 120	3	20		
1,4-Dichlorobenzene	102	100	78 - 124	2	20		
1,4-Dioxane	69	82	50 - 150	17	20		
2,2-Dichloropropane	104	99	63 - 136	6	20		
2-Butanone (MEK)	88	86	57 - 140	2	20		
2-Chloroethyl vinyl ether	96	92	70 - 129	4	20		
2-Hexanone	84	87	65 - 127	4	15		
4-Methyl-2-pentanone (MIBK)	88	91	71 - 125	4	35		
Acetone	79	78	56 - 142	0	15		
Acrolein	88	86	52 - 143	3	20		
Acrylonitrile	93	89	63 - 125	4	20		
Benzene	106	101	71 - 124	4	13		
Bromobenzene	104	98	78 - 120	5	15		
Bromochloromethane	108	101	72 - 130	6	15		

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 480-333215**

**Method: 8260C
Preparation: 5030C**

MS Lab Sample ID: 280-91030-E-2 MS	Analysis Batch: 480-333215	Instrument ID: HP5973S
Client Matrix: Water	Prep Batch: N/A	Lab File ID: S9825.D
Dilution: 5.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 1902		Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 1902		5 mL
Leach Date: N/A		

MSD Lab Sample ID: 280-91030-E-2 MSD	Analysis Batch: 480-333215	Instrument ID: HP5973S
Client Matrix: Water	Prep Batch: N/A	Lab File ID: S9826.D
Dilution: 5.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 1925		Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 1925		5 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Bromodichloromethane	102	99	80 - 122	3	15		
Bromoform	97	99	61 - 132	2	15		
Bromomethane	109	98	55 - 144	11	15		
Butyl alcohol, tert-	75	80	75 - 125	6	15		
Carbon disulfide	98	93	59 - 134	6	15		
Carbon tetrachloride	115	106	72 - 134	8	15		
Chlorobenzene	102	103	80 - 120	1	25		
Chloroethane	117	113	69 - 136	4	15		
Chloroform	103	99	73 - 127	4	20		
Chloromethane	110	101	68 - 124	9	15		
cis-1,2-Dichloroethene	107	101	74 - 124	6	15		
cis-1,3-Dichloropropene	100	95	74 - 124	5	15		
Cyclohexane	112	103	59 - 135	8	20		
Dibromochloromethane	103	106	75 - 125	3	15		
Dibromomethane	102	100	76 - 127	2	15		
Dichlorodifluoromethane	109	100	59 - 135	8	20		
Dichlorofluoromethane	106	101	76 - 127	5	20		
Ethyl ether	106	102	76 - 123	4	20		
Ethylbenzene	103	101	77 - 123	2	15		
Hexachlorobutadiene	95	96	68 - 131	1	20		
Iodomethane	102	97	78 - 123	5	20		
Isobutanol	80	82	51 - 150	3	20		
Isopropylbenzene	105	102	77 - 122	2	20		
Methyl acetate	89	88	74 - 133	1	20		
Methyl tert-butyl ether	99	96	77 - 120	3	37		
Methylcyclohexane	110	101	68 - 134	8	20		
Methylene Chloride	98	96	75 - 124	3	15		
m-Xylene & p-Xylene	101	101	76 - 122	1	16		
Naphthalene	96	97	66 - 125	1	20		
n-Butylbenzene	106	102	71 - 128	3	15		
N-Propylbenzene	104	101	75 - 127	4	15		
o-Chlorotoluene	103	102	76 - 121	1	20		
o-Xylene	102	103	76 - 122	2	16		

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 480-333215**

**Method: 8260C
Preparation: 5030C**

MS Lab Sample ID: 280-91030-E-2 MS	Analysis Batch: 480-333215	Instrument ID: HP5973S
Client Matrix: Water	Prep Batch: N/A	Lab File ID: S9825.D
Dilution: 5.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 1902		Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 1902		5 mL
Leach Date: N/A		

MSD Lab Sample ID: 280-91030-E-2 MSD	Analysis Batch: 480-333215	Instrument ID: HP5973S
Client Matrix: Water	Prep Batch: N/A	Lab File ID: S9826.D
Dilution: 5.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/23/2016 1925		Final Weight/Volume: 5 mL
Prep Date: 11/23/2016 1925		5 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
p-Chlorotoluene	103	101	77 - 121	2	15		
p-Cymene	105	102	73 - 120	3	20		
sec-Butylbenzene	104	102	74 - 127	3	15		
Styrene	102	103	80 - 120	0	20		
tert-Butylbenzene	107	104	75 - 123	3	15		
Tetrachloroethene	105	103	74 - 122	2	20		
Tetrahydrofuran	85	85	62 - 132	0	25		
Toluene	104	104	80 - 122	0	15		
trans-1,2-Dichloroethene	110	102	73 - 127	8	20		
trans-1,3-Dichloropropene	96	100	80 - 120	5	15		
trans-1,4-Dichloro-2-butene	65	69	41 - 131	5	20		
Trichloroethene	105	99	74 - 123	6	16		
Trichlorofluoromethane	110	103	62 - 150	6	20		
Vinyl acetate	91	91	50 - 144	1	23		
Vinyl chloride	123	115	65 - 133	7	15		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	100	99	77 - 120
4-Bromofluorobenzene (Surr)	97	98	73 - 120
Toluene-d8 (Surr)	101	104	80 - 120

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 480-333215**

**Method: 8260C
Preparation: 5030C**

MS Lab Sample ID: 280-91030-E-2 MS Units: ug/L
Client Matrix: Water
Dilution: 5.0
Analysis Date: 11/23/2016 1902
Prep Date: 11/23/2016 1902
Leach Date: N/A

MSD Lab Sample ID: 280-91030-E-2 MSD
Client Matrix: Water
Dilution: 5.0
Analysis Date: 11/23/2016 1925
Prep Date: 11/23/2016 1925
Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
1,1,1,2-Tetrachloroethane	ND	125	125	136	136
1,1,1-Trichloroethane	ND	125	125	136	131
1,1,2,2-Tetrachloroethane	ND	125	125	127	128
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	125	125	133	122
1,1,2-Trichloroethane	ND	125	125	130	135
1,1-Dichloroethane	ND	125	125	130	125
1,1-Dichloroethene	ND	125	125	142	135
1,1-Dichloropropene	ND	125	125	137	132
1,2,3-Trichlorobenzene	ND	125	125	122	123
1,2,3-Trichloropropane	ND	125	125	122	123
1,2,4-Trichlorobenzene	ND	125	125	124	123
1,2,4-Trimethylbenzene	ND	125	125	132	128
1,2-Dibromo-3-Chloropropane	ND	125	125	121	125
1,2-Dibromoethane (EDB)	ND	125	125	127	131
1,2-Dichlorobenzene	ND	125	125	130	128
1,2-Dichloroethane	ND	125	125	122	116
1,2-Dichloropropane	ND	125	125	127	122
1,3,5-Trimethylbenzene	ND	125	125	131	128
1,3-Dichlorobenzene	ND	125	125	131	128
1,3-Dichloropropane	ND	125	125	124	127
1,4-Dichlorobenzene	ND	125	125	127	125
1,4-Dioxane	ND	2500	2500	1730	2040
2,2-Dichloropropane	ND	125	125	130	123
2-Butanone (MEK)	ND	625	625	549	537
2-Chloroethyl vinyl ether	ND	125	125	119	115
2-Hexanone	ND	625	625	522	543
4-Methyl-2-pentanone (MIBK)	ND	625	625	550	570
Acetone	ND	625	625	492	490
Acrolein	ND	625	625	550	536
Acrylonitrile	ND	1250	1250	1160	1110
Benzene	ND	125	125	132	126
Bromobenzene	ND	125	125	130	123
Bromochloromethane	ND	125	125	135	127
Bromodichloromethane	ND	125	125	128	124
Bromoform	ND	125	125	122	124
Bromomethane	ND	125	125	136	123
Butyl alcohol, tert-	190	1250	1250	1130	1200
Carbon disulfide	ND	125	125	123	116
Carbon tetrachloride	ND	125	125	143	133
Chlorobenzene	ND	125	125	127	129
Chloroethane	ND	125	125	146	141
Chloroform	ND	125	125	129	124
Chloromethane	ND	125	125	138	126

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 480-333215**

**Method: 8260C
Preparation: 5030C**

MS Lab Sample ID: 280-91030-E-2 MS Units: ug/L
 Client Matrix: Water
 Dilution: 5.0
 Analysis Date: 11/23/2016 1902
 Prep Date: 11/23/2016 1902
 Leach Date: N/A

MSD Lab Sample ID: 280-91030-E-2 MSD
 Client Matrix: Water
 Dilution: 5.0
 Analysis Date: 11/23/2016 1925
 Prep Date: 11/23/2016 1925
 Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
cis-1,2-Dichloroethene	ND	125	125	134	126
cis-1,3-Dichloropropene	ND	125	125	125	119
Cyclohexane	ND	125	125	140	129
Dibromochloromethane	ND	125	125	128	132
Dibromomethane	ND	125	125	128	126
Dichlorodifluoromethane	ND	125	125	136	126
Dichlorofluoromethane	ND	125	125	133	126
Ethyl ether	ND	125	125	133	127
Ethylbenzene	ND	125	125	128	126
Hexachlorobutadiene	ND	125	125	119	120
Iodomethane	ND	125	125	127	121
Isobutanol	ND	3130	3130	2500	2570
Isopropylbenzene	ND	125	125	131	128
Methyl acetate	ND	625	625	555	548
Methyl tert-butyl ether	ND	125	125	123	120
Methylcyclohexane	ND	125	125	137	127
Methylene Chloride	ND	125	125	123	120
m-Xylene & p-Xylene	ND	125	125	126	127
Naphthalene	ND	125	125	121	121
n-Butylbenzene	ND	125	125	132	128
N-Propylbenzene	ND	125	125	130	126
o-Chlorotoluene	ND	125	125	128	127
o-Xylene	ND	125	125	127	129
p-Chlorotoluene	ND	125	125	128	126
p-Cymene	ND	125	125	131	127
sec-Butylbenzene	ND	125	125	130	127
Styrene	ND	125	125	128	128
tert-Butylbenzene	ND	125	125	134	130
Tetrachloroethene	ND	125	125	132	129
Tetrahydrofuran	43	250	250	256	255
Toluene	ND	125	125	130	130
trans-1,2-Dichloroethene	ND	125	125	138	127
trans-1,3-Dichloropropene	ND	125	125	120	125
trans-1,4-Dichloro-2-butene	ND	125	125	81.7	86.1
Trichloroethene	ND	125	125	131	124
Trichlorofluoromethane	ND	125	125	137	129
Vinyl acetate	ND	250	250	229	227
Vinyl chloride	ND	125	125	154	143

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

Method Blank - Batch: 480-332057

**Method: 8260C SIM
Preparation: 5030C**

Lab Sample ID: MB 480-332057/7	Analysis Batch: 480-332057	Instrument ID: HP5973J
Client Matrix: Water	Prep Batch: N/A	Lab File ID: J1436.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 25 mL
Analysis Date: 11/16/2016 2326	Units: ug/L	Final Weight/Volume: 25 mL
Prep Date: 11/16/2016 2326		
Leach Date: N/A		

Analyte	Result	Qual	MDL	RL
Vinyl chloride	0.00786	J	0.0040	0.020

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

Lab Control Sample/

**Method: 8260C SIM
Preparation: 5030C**

Lab Control Sample Duplicate Recovery Report - Batch: 480-332057

LCS Lab Sample ID: LCS 480-332057/4	Analysis Batch: 480-332057	Instrument ID: HP5973J
Client Matrix: Water	Prep Batch: N/A	Lab File ID: J1433.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 25 mL
Analysis Date: 11/16/2016 2213	Units: ug/L	Final Weight/Volume: 25 mL
Prep Date: 11/16/2016 2213		25 mL
Leach Date: N/A		

LCSD Lab Sample ID: LCSD 480-332057/5	Analysis Batch: 480-332057	Instrument ID: HP5973J
Client Matrix: Water	Prep Batch: N/A	Lab File ID: J1434.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 25 mL
Analysis Date: 11/16/2016 2237	Units: ug/L	Final Weight/Volume: 25 mL
Prep Date: 11/16/2016 2237		25 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Vinyl chloride	104	97	50 - 150	7	20		
Surrogate	LCS % Rec		LCSD % Rec		Acceptance Limits		
Dibromofluoromethane (Surr)	101	96			50 - 150		
TBA-d9 (Surr)	87	85			50 - 150		

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

**Laboratory Control/
Laboratory Duplicate Data Report - Batch: 480-332057**

**Method: 8260C SIM
Preparation: 5030C**

LCS Lab Sample ID: LCS 480-332057/4 Units: ug/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/16/2016 2213
Prep Date: 11/16/2016 2213
Leach Date: N/A

LCSD Lab Sample ID: LCSD 480-332057/5
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/16/2016 2237
Prep Date: 11/16/2016 2237
Leach Date: N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Vinyl chloride	0.200	0.200	0.207	0.194

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

Method Blank - Batch: 280-352234

Lab Sample ID: MB 280-352234/1-A
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/29/2016 0433
 Prep Date: 11/23/2016 1445
 Leach Date: N/A

Analysis Batch: 280-353463
 Prep Batch: 280-352234
 Leach Batch: N/A
 Units: mg/L

Method: 6010B Preparation: 3005A Total Recoverable

Instrument ID: MT_025
 Lab File ID: 25E112816.asc
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL	RL
Cobalt, Total	ND		0.0030	0.0030
Iron, Total	ND		0.060	0.060

Lab Control Sample - Batch: 280-352234

Lab Sample ID: LCS 280-352234/2-A
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/29/2016 0436
 Prep Date: 11/23/2016 1445
 Leach Date: N/A

Analysis Batch: 280-353463
 Prep Batch: 280-352234
 Leach Batch: N/A
 Units: mg/L

Method: 6010B Preparation: 3005A Total Recoverable

Instrument ID: MT_025
 Lab File ID: 25E112816.asc
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Cobalt, Total	0.500	0.491	98	89 - 111	
Iron, Total	1.00	1.04	104	89 - 115	

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 280-352234

MS Lab Sample ID: 280-90915-C-2-B MS
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/29/2016 0446
 Prep Date: 11/23/2016 1445
 Leach Date: N/A

Analysis Batch: 280-353463
 Prep Batch: 280-352234
 Leach Batch: N/A

Method: 6010B Preparation: 3005A Total Recoverable

Instrument ID: MT_025
 Lab File ID: 25E112816.asc
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

MSD Lab Sample ID: 280-90915-C-2-C MSD
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/29/2016 0448
 Prep Date: 11/23/2016 1445
 Leach Date: N/A

Analysis Batch: 280-353463
 Prep Batch: 280-352234
 Leach Batch: N/A

Instrument ID: MT_025
 Lab File ID: 25E112816.asc
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Cobalt, Total	87	89	82 - 119	2	20		
Iron, Total	86	147	52 - 155	7	20	4	4

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-352234**

**Method: 6010B
Preparation: 3005A
Total Recoverable**

MS Lab Sample ID: 280-90915-C-2-B MS Units: mg/L
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/29/2016 0446
 Prep Date: 11/23/2016 1445
 Leach Date: N/A

MSD Lab Sample ID: 280-90915-C-2-C MSD
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/29/2016 0448
 Prep Date: 11/23/2016 1445
 Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Cobalt, Total	ND	0.500	0.500	0.436	0.446
Iron, Total	8.1	1.00	1.00	8.96 4	9.56 4

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

Method Blank - Batch: 280-353142

Lab Sample ID: MB 280-353142/1-A
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/10/2016 0227
 Prep Date: 12/01/2016 1405
 Leach Date: N/A

Analysis Batch: 280-355067
 Prep Batch: 280-353142
 Leach Batch: N/A
 Units: mg/L

**Method: 6010B
 Preparation: 3005A
 Total Recoverable**

Instrument ID: MT_025
 Lab File ID: 25D120916.asc
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL	RL
Calcium, Dissolved	ND		0.040	0.040
Iron, Dissolved	ND		0.060	0.060
Magnesium, Dissolved	ND		0.050	0.050
Potassium, Dissolved	ND		1.0	1.0
Sodium, Dissolved	ND		1.0	1.0

Lab Control Sample - Batch: 280-353142

Lab Sample ID: LCS 280-353142/2-A
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/10/2016 0230
 Prep Date: 12/01/2016 1405
 Leach Date: N/A

Analysis Batch: 280-355067
 Prep Batch: 280-353142
 Leach Batch: N/A
 Units: mg/L

**Method: 6010B
 Preparation: 3005A
 Total Recoverable**

Instrument ID: MT_025
 Lab File ID: 25D120916.asc
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Calcium, Dissolved	50.0	51.5	103	90 - 111	
Iron, Dissolved	1.00	0.952	95	89 - 115	
Magnesium, Dissolved	50.0	55.0	110	90 - 113	
Potassium, Dissolved	50.0	51.5	103	89 - 114	
Sodium, Dissolved	50.0	52.7	105	90 - 115	

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-353142**

**Method: 6010B
Preparation: 3005A
Dissolved**

MS Lab Sample ID: 280-90959-L-1-C MS	Analysis Batch: 280-355067	Instrument ID: MT_025
Client Matrix: Water	Prep Batch: 280-353142	Lab File ID: 25D120916.asc
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 50 mL
Analysis Date: 12/10/2016 0237		Final Weight/Volume: 50 mL
Prep Date: 12/01/2016 1405		
Leach Date: N/A		

MSD Lab Sample ID: 280-90959-L-1-D MSD	Analysis Batch: 280-355067	Instrument ID: MT_025
Client Matrix: Water	Prep Batch: 280-353142	Lab File ID: 25D120916.asc
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 50 mL
Analysis Date: 12/10/2016 0240		Final Weight/Volume: 50 mL
Prep Date: 12/01/2016 1405		
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Calcium, Dissolved	111	101	48 - 153	3	20		
Iron, Dissolved	94	93	52 - 155	1	20		
Magnesium, Dissolved	145	84	62 - 146	4	20	4	4
Potassium, Dissolved	109	107	76 - 132	1	20		
Sodium, Dissolved	181	112	70 - 203	4	20	4	4

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-353142**

**Method: 6010B
Preparation: 3005A
Dissolved**

MS Lab Sample ID: 280-90959-L-1-C MS	Units: mg/L	MSD Lab Sample ID: 280-90959-L-1-D MSD
Client Matrix: Water		Client Matrix: Water
Dilution: 1.0		Dilution: 1.0
Analysis Date: 12/10/2016 0237		Analysis Date: 12/10/2016 0240
Prep Date: 12/01/2016 1405		Prep Date: 12/01/2016 1405
Leach Date: N/A		Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual		
Calcium, Dissolved	99	50.0	50.0	154	149		
Iron, Dissolved	0.14	1.00	1.00	1.08	1.07		
Magnesium, Dissolved	710	50.0	50.0	781	751	4	4
Potassium, Dissolved	23	50.0	50.0	77.7	76.8		
Sodium, Dissolved	740	50.0	50.0	831	796	4	4

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

Method Blank - Batch: 280-352238

Lab Sample ID: MB 280-352238/1-A
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/25/2016 1552
 Prep Date: 11/25/2016 0725
 Leach Date: N/A

Analysis Batch: 280-353261
 Prep Batch: 280-352238
 Leach Batch: N/A
 Units: mg/L

**Method: 6020
 Preparation: 3005A
 Total Recoverable**

Instrument ID: MT_077
 Lab File ID: 058_BLK.d
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL	RL
Antimony, Total	ND		0.0010	0.0010
Barium, Total	ND		0.0010	0.0010
Beryllium, Total	ND		0.0010	0.0010
Cadmium, Total	ND		0.00020	0.00020
Chromium, Total	ND		0.0030	0.0030
Copper, Total	ND		0.0020	0.0020
Lead, Total	ND		0.0010	0.0010
Manganese, Total	ND		0.0010	0.0010
Nickel, Total	ND		0.0040	0.0040
Selenium, Total	ND		0.0010	0.0010
Silver, Total	ND		0.0020	0.0020
Thallium, Total	ND		0.0010	0.0010
Vanadium, Total	ND		0.0020	0.0020
Zinc, Total	ND		0.0050	0.0050

Lab Control Sample - Batch: 280-352238

Lab Sample ID: LCS 280-352238/2-A
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/25/2016 1556
 Prep Date: 11/25/2016 0725
 Leach Date: N/A

Analysis Batch: 280-353261
 Prep Batch: 280-352238
 Leach Batch: N/A
 Units: mg/L

**Method: 6020
 Preparation: 3005A
 Total Recoverable**

Instrument ID: MT_077
 Lab File ID: 059_LCS.d
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Antimony, Total	0.0400	0.0400	100	85 - 115	
Barium, Total	0.0400	0.0420	105	85 - 118	
Beryllium, Total	0.0400	0.0374	93	80 - 125	
Cadmium, Total	0.0400	0.0373	93	85 - 115	
Chromium, Total	0.0400	0.0389	97	84 - 121	
Copper, Total	0.0400	0.0382	96	85 - 119	
Lead, Total	0.0400	0.0393	98	85 - 118	
Manganese, Total	0.0400	0.0397	99	85 - 117	
Nickel, Total	0.0400	0.0393	98	85 - 119	
Selenium, Total	0.0400	0.0379	95	77 - 122	
Silver, Total	0.0400	0.0382	95	85 - 115	
Thallium, Total	0.0400	0.0393	98	85 - 118	
Vanadium, Total	0.0400	0.0388	97	85 - 120	
Zinc, Total	0.0400	0.0374	94	83 - 122	

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-352238**

**Method: 6020
Preparation: 3005A
Total Recoverable**

MS Lab Sample ID: 280-90968-1
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/25/2016 1739
Prep Date: 11/25/2016 0725
Leach Date: N/A

Analysis Batch: 280-353261
Prep Batch: 280-352238
Leach Batch: N/A

Instrument ID: MT_077
Lab File ID: 086SMPL.d
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

MSD Lab Sample ID: 280-90968-1
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/25/2016 1743
Prep Date: 11/25/2016 0725
Leach Date: N/A

Analysis Batch: 280-353261
Prep Batch: 280-352238
Leach Batch: N/A

Instrument ID: MT_077
Lab File ID: 087SMPL.d
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Antimony, Total	104	104	85 - 115	0	20		
Barium, Total	101	103	85 - 118	2	20		
Beryllium, Total	99	102	80 - 125	3	20		
Cadmium, Total	102	103	85 - 115	1	20		
Chromium, Total	109	107	84 - 121	2	20		
Copper, Total	93	95	85 - 119	2	20		
Lead, Total	103	103	85 - 118	1	20		
Manganese, Total	106	106	85 - 117	1	20		
Nickel, Total	99	100	85 - 119	1	20		
Selenium, Total	95	95	77 - 122	0	20		
Silver, Total	103	104	85 - 115	0	20		
Thallium, Total	101	101	85 - 118	0	20		
Vanadium, Total	99	100	85 - 120	2	20		
Zinc, Total	101	106	83 - 122	5	20		

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-352238**

**Method: 6020
Preparation: 3005A
Total Recoverable**

MS Lab Sample ID: 280-90968-1 Units: mg/L
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/25/2016 1739
 Prep Date: 11/25/2016 0725
 Leach Date: N/A

MSD Lab Sample ID: 280-90968-1
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/25/2016 1743
 Prep Date: 11/25/2016 0725
 Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Antimony, Total	ND	0.0400	0.0400	0.0417	0.0417
Barium, Total	0.0028	0.0400	0.0400	0.0431	0.0438
Beryllium, Total	ND	0.0400	0.0400	0.0397	0.0407
Cadmium, Total	ND	0.0400	0.0400	0.0409	0.0412
Chromium, Total	ND	0.0400	0.0400	0.0437	0.0430
Copper, Total	0.0021	0.0400	0.0400	0.0395	0.0402
Lead, Total	ND	0.0400	0.0400	0.0411	0.0413
Manganese, Total	ND	0.0400	0.0400	0.0425	0.0423
Nickel, Total	ND	0.0400	0.0400	0.0396	0.0399
Selenium, Total	ND	0.0400	0.0400	0.0380	0.0380
Silver, Total	ND	0.0400	0.0400	0.0412	0.0414
Thallium, Total	ND	0.0400	0.0400	0.0404	0.0403
Vanadium, Total	0.0039	0.0400	0.0400	0.0434	0.0441
Zinc, Total	ND	0.0400	0.0400	0.0403	0.0426

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

Method Blank - Batch: 280-352489

Lab Sample ID: MB 280-352489/1-A
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/23/2016 2315
 Prep Date: 11/23/2016 1445
 Leach Date: N/A

Analysis Batch: 280-353028
 Prep Batch: 280-352489
 Leach Batch: N/A
 Units: mg/L

**Method: 6020
 Preparation: 3005A
 Total Recoverable**

Instrument ID: MT_077
 Lab File ID: 175_BLK.d
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL	RL
Manganese, Dissolved	ND		0.0010	0.0010

Lab Control Sample - Batch: 280-352489

Lab Sample ID: LCS 280-352489/2-A
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/23/2016 2319
 Prep Date: 11/23/2016 1445
 Leach Date: N/A

Analysis Batch: 280-353028
 Prep Batch: 280-352489
 Leach Batch: N/A
 Units: mg/L

**Method: 6020
 Preparation: 3005A
 Total Recoverable**

Instrument ID: MT_077
 Lab File ID: 176_LCS.d
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Manganese, Dissolved	0.0400	0.0402	101	85 - 117	

**Matrix Spike/
 Matrix Spike Duplicate Recovery Report - Batch: 280-352489**

MS Lab Sample ID: 280-91030-D-2-B MS
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/23/2016 2334
 Prep Date: 11/23/2016 1445
 Leach Date: N/A

Analysis Batch: 280-353028
 Prep Batch: 280-352489
 Leach Batch: N/A

**Method: 6020
 Preparation: 3005A
 Dissolved**

Instrument ID: MT_077
 Lab File ID: 180SMPL.d
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

MSD Lab Sample ID: 280-91030-D-2-C MSD
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/23/2016 2338
 Prep Date: 11/23/2016 1445
 Leach Date: N/A

Analysis Batch: 280-353028
 Prep Batch: 280-352489
 Leach Batch: N/A

Instrument ID: MT_077
 Lab File ID: 181SMPL.d
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Manganese, Dissolved	307	388	85 - 117	1	20	4	4

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-352489**

**Method: 6020
Preparation: 3005A
Dissolved**

MS Lab Sample ID: 280-91030-D-2-B MS Units: mg/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/23/2016 2334
Prep Date: 11/23/2016 1445
Leach Date: N/A

MSD Lab Sample ID: 280-91030-D-2-C MSD
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/23/2016 2338
Prep Date: 11/23/2016 1445
Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Manganese, Dissolved	2.7	0.0400	0.0400	2.84 4	2.88 4

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

Method Blank - Batch: 280-354768

Method: 300.0
Preparation: N/A

Lab Sample ID: MB 280-354768/6	Analysis Batch: 280-354768	Instrument ID: WC_IonChrom10
Client Matrix: Water	Prep Batch: N/A	Lab File ID: Info 2_DENPC179_Anic
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 12/08/2016 1055	Units: mg/L	Final Weight/Volume: 5 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	Result	Qual	RL	RL
Chloride	ND		1.0	1.0
Sulfate	ND		1.0	1.0

Method Reporting Limit Check - Batch: 280-354768

Method: 300.0
Preparation: N/A

Lab Sample ID: MRL 280-354768/3	Analysis Batch: 280-354768	Instrument ID: WC_IonChrom10
Client Matrix: Water	Prep Batch: N/A	Lab File ID: Info 2_DENPC179_Anic
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 12/08/2016 1009	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	96	50 - 150	
Sulfate	2.50	ND	97	50 - 150	

Lab Control Sample/

Method: 300.0
Preparation: N/A

Lab Control Sample Duplicate Recovery Report - Batch: 280-354768

LCS Lab Sample ID: LCS 280-354768/4	Analysis Batch: 280-354768	Instrument ID: WC_IonChrom10
Client Matrix: Water	Prep Batch: N/A	Lab File ID: Info 2_DENPC179_Anic
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 12/08/2016 1024	Units: mg/L	Final Weight/Volume: 5 mL
Prep Date: N/A		5 uL
Leach Date: N/A		

LCSD Lab Sample ID: LCSD 280-354768/5	Analysis Batch: 280-354768	Instrument ID: WC_IonChrom10
Client Matrix: Water	Prep Batch: N/A	Lab File ID: Info 2_DENPC179_Anic
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 12/08/2016 1039	Units: mg/L	Final Weight/Volume: 5 mL
Prep Date: N/A		5 uL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Chloride	102	102	90 - 110	0	10		
Sulfate	102	102	90 - 110	0	10		

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

**Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-354768**

**Method: 300.0
Preparation: N/A**

LCS Lab Sample ID: LCS 280-354768/4 Units: mg/L
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/08/2016 1024
 Prep Date: N/A
 Leach Date: N/A

LCSD Lab Sample ID: LCSD 280-354768/5
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/08/2016 1039
 Prep Date: N/A
 Leach Date: N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Chloride	100	100	102	102
Sulfate	100	100	102	102

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-354768**

**Method: 300.0
Preparation: N/A**

MS Lab Sample ID: 280-91032-B-10 MS
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/08/2016 1141
 Prep Date: N/A
 Leach Date: N/A

Analysis Batch: 280-354768
 Prep Batch: N/A
 Leach Batch: N/A

Instrument ID: WC_IonChrom10
 Lab File ID: Info 2_DENPC179_Anic
 Initial Weight/Volume: 5 mL
 Final Weight/Volume: 5 mL
 5 uL

MSD Lab Sample ID: 280-91032-B-10 MSD
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/08/2016 1156
 Prep Date: N/A
 Leach Date: N/A

Analysis Batch: 280-354768
 Prep Batch: N/A
 Leach Batch: N/A

Instrument ID: WC_IonChrom10
 Lab File ID: Info 2_DENPC179_Anic
 Initial Weight/Volume: 5 mL
 Final Weight/Volume: 5 mL
 5 uL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Chloride	107	107	80 - 120	0	20		
Sulfate	108	108	80 - 120	0	20		

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-354768**

**Method: 300.0
Preparation: N/A**

MS Lab Sample ID: 280-91032-B-10 MS Units: mg/L
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/08/2016 1141
 Prep Date: N/A
 Leach Date: N/A

MSD Lab Sample ID: 280-91032-B-10 MSD
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/08/2016 1156
 Prep Date: N/A
 Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Chloride	4.2	25.0	25.0	30.8	30.8
Sulfate	25	25.0	25.0	51.5	51.5

Duplicate - Batch: 280-354768

**Method: 300.0
Preparation: N/A**

Lab Sample ID: 280-91032-B-10 DU
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/08/2016 1126
 Prep Date: N/A
 Leach Date: N/A

Analysis Batch: 280-354768
 Prep Batch: N/A
 Leach Batch: N/A
 Units: mg/L

Instrument ID: WC_IonChrom10
 Lab File ID: Info 2_DENPC179_Anic
 Initial Weight/Volume: 5 mL
 Final Weight/Volume: 5 mL
 5 uL

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Chloride	4.2	4.16	0	15	
Sulfate	25	24.5	0	15	

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

Method Blank - Batch: 280-352527

Method: 350.1
Preparation: N/A

Lab Sample ID:	MB 280-352527/61	Analysis Batch:	280-352527	Instrument ID:	WC_Al3
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\112116.RS
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	11/21/2016 1457	Units:	mg/L	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	RL	RL
Ammonia (as N)	ND		0.030	0.030

Method Blank - Batch: 280-352527

Method: 350.1
Preparation: N/A

Lab Sample ID:	MB 280-352527/109	Analysis Batch:	280-352527	Instrument ID:	WC_Al3
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\112116.RS
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	11/21/2016 1633	Units:	mg/L	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	RL	RL
Ammonia (as N)	ND		0.030	0.030

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-352527 **Method: 350.1**
Preparation: N/A

LCS Lab Sample ID: LCS 280-352527/59	Analysis Batch: 280-352527	Instrument ID: WC_Alp 3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: C:\FLOW_4\112116.RS
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 100 mL
Analysis Date: 11/21/2016 1453	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

LCSD Lab Sample ID: LCSD 280-352527/60	Analysis Batch: 280-352527	Instrument ID: WC_Alp 3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: C:\FLOW_4\112116.RS
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 100 mL
Analysis Date: 11/21/2016 1455	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	<u>% Rec.</u>		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Ammonia (as N)	105	102	90 - 110	2	10		

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-352527 **Method: 350.1**
Preparation: N/A

LCS Lab Sample ID: LCS 280-352527/107	Analysis Batch: 280-352527	Instrument ID: WC_Alp 3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: C:\FLOW_4\112116.RS
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 100 mL
Analysis Date: 11/21/2016 1629	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

LCSD Lab Sample ID: LCSD 280-352527/108	Analysis Batch: 280-352527	Instrument ID: WC_Alp 3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: C:\FLOW_4\112116.RS
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 100 mL
Analysis Date: 11/21/2016 1631	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	<u>% Rec.</u>		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Ammonia (as N)	102	103	90 - 110	1	10		

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

**Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-352527**

**Method: 350.1
Preparation: N/A**

LCS Lab Sample ID: LCS 280-352527/59 Units: mg/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/21/2016 1453
Prep Date: N/A
Leach Date: N/A

LCSD Lab Sample ID: LCSD 280-352527/60
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/21/2016 1455
Prep 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	2.61	2.55

**Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-352527**

**Method: 350.1
Preparation: N/A**

LCS Lab Sample ID: LCS 280-352527/107 Units: mg/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/21/2016 1629
Prep Date: N/A
Leach Date: N/A

LCSD Lab Sample ID: LCSD 280-352527/108
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/21/2016 1631
Prep 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	2.54	2.57

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-352527**

**Method: 350.1
Preparation: N/A**

MS Lab Sample ID: 280-90968-3
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/21/2016 1637
Prep Date: N/A
Leach Date: N/A

Analysis Batch: 280-352527
Prep Batch: N/A
Leach Batch: N/A

Instrument ID: WC_Alp 3
Lab File ID: C:\FLOW_4\112116.RS
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

MSD Lab Sample ID: 280-90968-3
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/21/2016 1639
Prep Date: N/A
Leach Date: N/A

Analysis Batch: 280-352527
Prep Batch: N/A
Leach Batch: N/A

Instrument ID: WC_Alp 3
Lab File ID: C:\FLOW_4\112116.RS
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Ammonia (as N)	191	185	90 - 110	3	10	F1	F1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-352527**

**Method: 350.1
Preparation: N/A**

MS Lab Sample ID: 280-90968-3
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/21/2016 1637
Prep Date: N/A
Leach Date: N/A

Units: mg/L

MSD Lab Sample ID: 280-90968-3
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/21/2016 1639
Prep 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	1.91 F1	1.85 F1

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

Method Blank - Batch: 280-355103

Method: 353.2
Preparation: N/A

Lab Sample ID:	MB 280-355103/1	Analysis Batch:	280-355103	Instrument ID:	No Equipment Assigned
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	12/11/2016 0914	Units:	mg/L	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	RL	RL
Nitrate as N	ND		0.050	0.050

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

Method Blank - Batch: 280-352331

Method: SM 2320B

Preparation: N/A

Lab Sample ID: MB 280-352331/5	Analysis Batch: 280-352331	Instrument ID: WC_AT2
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 111716.TXT
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 11/17/2016 1120	Units: mg/L	Final Weight/Volume:
Prep Date: N/A		
Leach Date: N/A		

Analyte	Result	Qual	RL	RL
Alkalinity, Total (As CaCO3)	ND		5.0	5.0
Alkalinity, Bicarbonate (As CaCO3)	ND		5.0	5.0

Lab Control Sample - Batch: 280-352331

Method: SM 2320B

Preparation: N/A

Lab Sample ID: LCS 280-352331/4	Analysis Batch: 280-352331	Instrument ID: WC_AT2
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 111716.TXT
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 11/17/2016 1113	Units: mg/L	Final Weight/Volume:
Prep Date: N/A		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Alkalinity, Total (As CaCO3)	200	197	99	90 - 110	

Duplicate - Batch: 280-352331

Method: SM 2320B

Preparation: N/A

Lab Sample ID: 280-90901-A-1 DU	Analysis Batch: 280-352331	Instrument ID: WC_AT2
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 111716.TXT
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 11/17/2016 1138	Units: mg/L	Final Weight/Volume:
Prep Date: N/A		
Leach Date: N/A		

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Alkalinity, Total (As CaCO3)	ND	ND	NC	10	

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

Method Blank - Batch: 280-352383

Method: SM 2320B

Preparation: N/A

Lab Sample ID: MB 280-352383/5
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/20/2016 1257
Prep Date: N/A
Leach Date: N/A

Analysis Batch: 280-352383
Prep Batch: N/A
Leach Batch: N/A
Units: mg/L

Instrument ID: WC-AT3
Lab File ID: 112016 alk.TXT
Initial Weight/Volume:
Final Weight/Volume:

Analyte	Result	Qual	RL	RL
Alkalinity, Total (As CaCO ₃)	ND		5.0	5.0
Alkalinity, Bicarbonate (As CaCO ₃)	ND		5.0	5.0

Method Blank - Batch: 280-352383

Method: SM 2320B

Preparation: N/A

Lab Sample ID: MB 280-352383/31
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/20/2016 1459
Prep Date: N/A
Leach Date: N/A

Analysis Batch: 280-352383
Prep Batch: N/A
Leach Batch: N/A
Units: mg/L

Instrument ID: WC-AT3
Lab File ID: 112016 alk.TXT
Initial Weight/Volume:
Final Weight/Volume:

Analyte	Result	Qual	RL	RL
Alkalinity, Total (As CaCO ₃)	ND		5.0	5.0
Alkalinity, Bicarbonate (As CaCO ₃)	ND		5.0	5.0

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

Lab Control Sample - Batch: 280-352383

Method: SM 2320B
Preparation: N/A

Lab Sample ID: LCS 280-352383/4	Analysis Batch: 280-352383	Instrument ID: WC-AT3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 112016 alk.TXT
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 11/20/2016 1253	Units: mg/L	Final Weight/Volume:
Prep Date: N/A		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Alkalinity, Total (As CaCO3)	200	200	100	90 - 110	

Lab Control Sample - Batch: 280-352383

Method: SM 2320B
Preparation: N/A

Lab Sample ID: LCS 280-352383/30	Analysis Batch: 280-352383	Instrument ID: WC-AT3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 112016 alk.TXT
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 11/20/2016 1455	Units: mg/L	Final Weight/Volume:
Prep Date: N/A		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Alkalinity, Total (As CaCO3)	200	194	97	90 - 110	

Duplicate - Batch: 280-352383

Method: SM 2320B
Preparation: N/A

Lab Sample ID: 280-90968-2	Analysis Batch: 280-352383	Instrument ID: WC-AT3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 112016 alk.TXT
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 11/20/2016 1508	Units: mg/L	Final Weight/Volume:
Prep Date: N/A		
Leach Date: N/A		

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Alkalinity, Total (As CaCO3)	80	78.8	1	10	

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

Method Blank - Batch: 280-352831

Method: SM 2320B

Preparation: N/A

Lab Sample ID: MB 280-352831/31	Analysis Batch: 280-352831	Instrument ID: WC-AT3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 112216 alk.TXT
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 11/22/2016 1516	Units: mg/L	Final Weight/Volume:
Prep Date: N/A		
Leach Date: N/A		

Analyte	Result	Qual	RL	RL
Alkalinity, Total (As CaCO3)	ND		5.0	5.0
Alkalinity, Bicarbonate (As CaCO3)	ND		5.0	5.0

Lab Control Sample - Batch: 280-352831

Method: SM 2320B

Preparation: N/A

Lab Sample ID: LCS 280-352831/30	Analysis Batch: 280-352831	Instrument ID: WC-AT3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 112216 alk.TXT
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 11/22/2016 1511	Units: mg/L	Final Weight/Volume:
Prep Date: N/A		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Alkalinity, Total (As CaCO3)	200	194	97	90 - 110	

Duplicate - Batch: 280-352831

Method: SM 2320B

Preparation: N/A

Lab Sample ID: 280-91153-A-1 DU	Analysis Batch: 280-352831	Instrument ID: WC-AT3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 112216 alk.TXT
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 11/22/2016 1555	Units: mg/L	Final Weight/Volume:
Prep Date: N/A		
Leach Date: N/A		

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Alkalinity, Total (As CaCO3)	150	152	2	10	

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

Method Blank - Batch: 280-352412

Method: SM 2540C

Preparation: N/A

Lab Sample ID: MB 280-352412/1	Analysis Batch: 280-352412	Instrument ID: No Equipment Assigned
Client Matrix: Water	Prep Batch: N/A	Lab File ID: N/A
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 100 mL
Analysis Date: 11/21/2016 1013	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	Result	Qual	RL	RL
Total Dissolved Solids (TDS)	ND		5.0	5.0

Lab Control Sample - Batch: 280-352412

Method: SM 2540C

Preparation: N/A

Lab Sample ID: LCS 280-352412/2	Analysis Batch: 280-352412	Instrument ID: No Equipment Assigned
Client Matrix: Water	Prep Batch: N/A	Lab File ID: N/A
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 100 mL
Analysis Date: 11/21/2016 1013	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Total Dissolved Solids (TDS)	500	490	98	86 - 110	

Duplicate - Batch: 280-352412

Method: SM 2540C

Preparation: N/A

Lab Sample ID: 280-90969-B-2 DU	Analysis Batch: 280-352412	Instrument ID: No Equipment Assigned
Client Matrix: Water	Prep Batch: N/A	Lab File ID: N/A
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 100 mL
Analysis Date: 11/21/2016 1013	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Total Dissolved Solids (TDS)	300	303	1	10	

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

Method Blank - Batch: 280-353491

Method: SM 2540C

Preparation: N/A

Lab Sample ID: MB 280-353491/1	Analysis Batch: 280-353491	Instrument ID: No Equipment Assigned
Client Matrix: Water	Prep Batch: N/A	Lab File ID: N/A
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 100 mL
Analysis Date: 11/29/2016 0842	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	Result	Qual	RL	RL
Total Dissolved Solids (TDS)	ND		5.0	5.0

Lab Control Sample/

Method: SM 2540C

Lab Control Sample Duplicate Recovery Report - Batch: 280-353491

Preparation: N/A

LCS Lab Sample ID: LCS 280-353491/2	Analysis Batch: 280-353491	Instrument ID: No Equipment Assigned
Client Matrix: Water	Prep Batch: N/A	Lab File ID: N/A
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 100 mL
Analysis Date: 11/29/2016 0842	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

LCSD Lab Sample ID: LCSD 280-353491/3	Analysis Batch: 280-353491	Instrument ID: No Equipment Assigned
Client Matrix: Water	Prep Batch: N/A	Lab File ID: N/A
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 100 mL
Analysis Date: 11/29/2016 0842	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Total Dissolved Solids (TDS)	99	96	86 - 110	3	20		

Laboratory Control/

Method: SM 2540C

Laboratory Duplicate Data Report - Batch: 280-353491

Preparation: N/A

LCS Lab Sample ID: LCS 280-353491/2	Units: mg/L	LCSD Lab Sample ID: LCSD 280-353491/3
Client Matrix: Water		Client Matrix: Water
Dilution: 1.0		Dilution: 1.0
Analysis Date: 11/29/2016 0842		Analysis Date: 11/29/2016 0842
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
Total Dissolved Solids (TDS)	500	500	494	479

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

Duplicate - Batch: 280-353491

Method: SM 2540C

Preparation: N/A

Lab Sample ID:	280-90968-5	Analysis Batch:	280-353491	Instrument ID:	No Equipment Assigned
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	11/29/2016 0842	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Total Dissolved Solids (TDS)	43	52.0	19	10	F3

Duplicate - Batch: 280-353491

Method: SM 2540C

Preparation: N/A

Lab Sample ID:	280-90968-8	Analysis Batch:	280-353491	Instrument ID:	No Equipment Assigned
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	11/29/2016 0842	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Total Dissolved Solids (TDS)	130	154	15	10	F3

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

Method Blank - Batch: 280-352044

Method: SM 2540D
Preparation: N/A

Lab Sample ID: MB 280-352044/2	Analysis Batch: 280-352044	Instrument ID: No Equipment Assigned
Client Matrix: Water	Prep Batch: N/A	Lab File ID: N/A
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 250 mL
Analysis Date: 11/17/2016 1754	Units: mg/L	Final Weight/Volume: 250 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	Result	Qual	RL	RL
Total Suspended Solids	ND		4.0	4.0

Lab Control Sample - Batch: 280-352044

Method: SM 2540D
Preparation: N/A

Lab Sample ID: LCS 280-352044/1	Analysis Batch: 280-352044	Instrument ID: No Equipment Assigned
Client Matrix: Water	Prep Batch: N/A	Lab File ID: N/A
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 250 mL
Analysis Date: 11/17/2016 1754	Units: mg/L	Final Weight/Volume: 250 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Total Suspended Solids	100	91.6	92	86 - 114	

Duplicate - Batch: 280-352044

Method: SM 2540D
Preparation: N/A

Lab Sample ID: 280-90968-1	Analysis Batch: 280-352044	Instrument ID: No Equipment Assigned
Client Matrix: Water	Prep Batch: N/A	Lab File ID: N/A
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 250 mL
Analysis Date: 11/17/2016 1754	Units: mg/L	Final Weight/Volume: 250 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Total Suspended Solids	ND	ND	NC	10	

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

Method Blank - Batch: 280-352478

Method: SM 2540D

Preparation: N/A

Lab Sample ID: MB 280-352478/3	Analysis Batch: 280-352478	Instrument ID: No Equipment Assigned
Client Matrix: Water	Prep Batch: N/A	Lab File ID: N/A
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 250 mL
Analysis Date: 11/21/2016 1439	Units: mg/L	Final Weight/Volume: 250 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	Result	Qual	RL	RL
Total Suspended Solids	ND		4.0	4.0

Lab Control Sample/

Method: SM 2540D

Lab Control Sample Duplicate Recovery Report - Batch: 280-352478

Preparation: N/A

LCS Lab Sample ID: LCS 280-352478/1	Analysis Batch: 280-352478	Instrument ID: No Equipment Assigned
Client Matrix: Water	Prep Batch: N/A	Lab File ID: N/A
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 250 mL
Analysis Date: 11/21/2016 1439	Units: mg/L	Final Weight/Volume: 250 mL
Prep Date: N/A		
Leach Date: N/A		

LCSD Lab Sample ID: LCSD 280-352478/2	Analysis Batch: 280-352478	Instrument ID: No Equipment Assigned
Client Matrix: Water	Prep Batch: N/A	Lab File ID: N/A
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 250 mL
Analysis Date: 11/21/2016 1439	Units: mg/L	Final Weight/Volume: 250 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Total Suspended Solids	93	91	86 - 114	2	20		

Laboratory Control/

Method: SM 2540D

Laboratory Duplicate Data Report - Batch: 280-352478

Preparation: N/A

LCS Lab Sample ID: LCS 280-352478/1	Units: mg/L	LCSD Lab Sample ID: LCSD 280-352478/2
Client Matrix: Water		Client Matrix: Water
Dilution: 1.0		Dilution: 1.0
Analysis Date: 11/21/2016 1439		Analysis Date: 11/21/2016 1439
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
Total Suspended Solids	100	100	92.8	90.8

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

Duplicate - Batch: 280-352478

Method: SM 2540D

Preparation: N/A

Lab Sample ID:	280-91242-A-3 DU	Analysis Batch:	280-352478	Instrument ID:	No Equipment Assigned
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	250 mL
Analysis Date:	11/21/2016 1439	Units:	mg/L	Final Weight/Volume:	250 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Total Suspended Solids	ND	ND	NC	10	

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

Method Blank - Batch: 280-354778

Method: SM 5310B

Preparation: N/A

Lab Sample ID: MB 280-354778/4	Analysis Batch: 280-354778	Instrument ID: WC_SHI3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 120716B.txt
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 12/07/2016 1252	Units: mg/L	Final Weight/Volume:
Prep Date: N/A		
Leach Date: N/A		

Analyte	Result	Qual	RL	RL
Total Organic Carbon - Average	ND		1.0	1.0

Lab Control Sample - Batch: 280-354778

Method: SM 5310B

Preparation: N/A

Lab Sample ID: LCS 280-354778/3	Analysis Batch: 280-354778	Instrument ID: WC_SHI3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 120716B.txt
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 12/07/2016 1237	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	24.4	98	88 - 112	

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-354778**

Method: SM 5310B

Preparation: N/A

MS Lab Sample ID: 280-90968-2	Analysis Batch: 280-354778	Instrument ID: WC_SHI3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 120716B.txt
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 12/07/2016 1706		Final Weight/Volume: 50 mL
Prep Date: N/A		
Leach Date: N/A		

MSD Lab Sample ID: 280-90968-2	Analysis Batch: 280-354778	Instrument ID: WC_SHI3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 120716B.txt
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 12/07/2016 1720		Final Weight/Volume: 50 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Total Organic Carbon - Average	99	99	88 - 112	0	15		

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-354778**

**Method: SM 5310B
Preparation: N/A**

MS Lab Sample ID: 280-90968-2 Units: mg/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/07/2016 1706
Prep Date: N/A
Leach Date: N/A

MSD Lab Sample ID: 280-90968-2
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/07/2016 1720
Prep 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	ND	25.0	25.0	24.8	24.9

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

Laboratory Chronicle

Lab ID: 280-90968-1

Client ID: MW-13A

Sample Date/Time: 11/14/2016 10:04 Received Date/Time: 11/15/2016 12:17

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	280-90968-F-1		480-333215		11/23/2016 11:44	1	TAL BUF	NEA
A:8260C	280-90968-F-1		480-333215		11/23/2016 11:44	1	TAL BUF	NEA
P:5030C	280-90968-K-1		480-332057		11/17/2016 00:19	1	TAL BUF	NMD1
A:8260C SIM	280-90968-K-1		480-332057		11/17/2016 00:19	1	TAL BUF	NMD1
P:3005A	280-90968-D-1-A		280-353463	280-352234	11/23/2016 14:45	1	TAL DEN	SEJ
A:6010B	280-90968-D-1-A		280-353463	280-352234	11/29/2016 05:23	1	TAL DEN	CML
P:3005A	280-90968-E-1-B		280-355067	280-353142	12/01/2016 14:05	1	TAL DEN	MLS
A:6010B	280-90968-E-1-B		280-355067	280-353142	12/10/2016 02:52	1	TAL DEN	LRD
P:3005A	280-90968-E-1-A		280-353028	280-352489	11/23/2016 14:45	1	TAL DEN	SEJ
A:6020	280-90968-E-1-A		280-353028	280-352489	11/23/2016 23:54	1	TAL DEN	LMT
P:3005A	280-90968-D-1-B		280-353261	280-352238	11/25/2016 07:25	1	TAL DEN	TEB
A:6020	280-90968-D-1-B		280-353261	280-352238	11/25/2016 17:32	1	TAL DEN	LMT
A:300.0	280-90968-A-1		280-354768		12/08/2016 12:27	1	TAL DEN	AFB
A:350.1	280-90968-C-1		280-352527		11/21/2016 16:11	1	TAL DEN	MAS
A:353.2	280-90968-A-1		280-355103		12/11/2016 09:14	1	TAL DEN	AJA
A:SM 2320B	280-90968-B-1		280-352383		11/20/2016 14:41	1	TAL DEN	MMC
A:SM 2540C	280-90968-B-1		280-352412		11/21/2016 10:13	1	TAL DEN	JAP
A:SM 2540D	280-90968-B-1		280-352044		11/17/2016 17:54	1	TAL DEN	SVC
A:SM 5310B	280-90968-C-1		280-354778		12/07/2016 16:36	1	TAL DEN	CCJ
A:Field Sampling	280-90968-A-1		280-352756		11/14/2016 11:04	1	TAL DEN	C1K

Lab ID: 280-90968-1 MS

Client ID: MW-13A

Sample Date/Time: 11/14/2016 10:04 Received Date/Time: 11/15/2016 12:17

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3005A	280-90968-D-1-C MS		280-353261	280-352238	11/25/2016 07:25	1	TAL DEN	TEB
A:6020	280-90968-D-1-C MS		280-353261	280-352238	11/25/2016 17:39	1	TAL DEN	LMT

Lab ID: 280-90968-1 MSD

Client ID: MW-13A

Sample Date/Time: 11/14/2016 10:04 Received Date/Time: 11/15/2016 12:17

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3005A	280-90968-D-1-D MSD		280-353261	280-352238	11/25/2016 07:25	1	TAL DEN	TEB
A:6020	280-90968-D-1-D MSD		280-353261	280-352238	11/25/2016 17:43	1	TAL DEN	LMT

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

Laboratory Chronicle

Lab ID: 280-90968-1 DU

Client ID: MW-13A

Sample Date/Time: 11/14/2016 10:04 Received Date/Time: 11/15/2016 12:17

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:SM 2540D	280-90968-B-1 DU		280-352044		11/17/2016 17:54	1	TAL DEN	SVC

Lab ID: 280-90968-2

Client ID: MW-13B

Sample Date/Time: 11/14/2016 11:35 Received Date/Time: 11/15/2016 12:17

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	280-90968-F-2		480-333215		11/23/2016 12:07	1	TAL BUF	NEA
A:8260C	280-90968-F-2		480-333215		11/23/2016 12:07	1	TAL BUF	NEA
P:5030C	280-90968-K-2		480-332057		11/17/2016 00:43	1	TAL BUF	NMD1
A:8260C SIM	280-90968-K-2		480-332057		11/17/2016 00:43	1	TAL BUF	NMD1
P:3005A	280-90968-D-2-A		280-353463	280-352234	11/23/2016 14:45	1	TAL DEN	SEJ
A:6010B	280-90968-D-2-A		280-353463	280-352234	11/29/2016 05:26	1	TAL DEN	CML
P:3005A	280-90968-E-2-B		280-355067	280-353142	12/01/2016 14:05	1	TAL DEN	MLS
A:6010B	280-90968-E-2-B		280-355067	280-353142	12/10/2016 02:55	1	TAL DEN	LRD
P:3005A	280-90968-E-2-A		280-353028	280-352489	11/23/2016 14:45	1	TAL DEN	SEJ
A:6020	280-90968-E-2-A		280-353028	280-352489	11/23/2016 23:57	1	TAL DEN	LMT
P:3005A	280-90968-D-2-B		280-353261	280-352238	11/25/2016 07:25	1	TAL DEN	TEB
A:6020	280-90968-D-2-B		280-353261	280-352238	11/25/2016 18:02	1	TAL DEN	LMT
A:300.0	280-90968-A-2		280-354768		12/08/2016 12:43	1	TAL DEN	AFB
A:350.1	280-90968-C-2		280-352527		11/21/2016 16:27	1	TAL DEN	MAS
A:353.2	280-90968-A-2		280-355103		12/11/2016 09:14	1	TAL DEN	AJA
A:SM 2320B	280-90968-B-2		280-352383		11/20/2016 15:03	1	TAL DEN	MMC
A:SM 2540C	280-90968-B-2		280-352412		11/21/2016 10:13	1	TAL DEN	JAP
A:SM 2540D	280-90968-B-2		280-352044		11/17/2016 17:54	1	TAL DEN	SVC
A:SM 5310B	280-90968-C-2		280-354778		12/07/2016 16:51	1	TAL DEN	CCJ
A:Field Sampling	280-90968-A-2		280-352756		11/14/2016 12:35	1	TAL DEN	C1K

Lab ID: 280-90968-2 MS

Client ID: MW-13B

Sample Date/Time: 11/14/2016 11:35 Received Date/Time: 11/15/2016 12:17

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:SM 5310B	280-90968-C-2 MS		280-354778		12/07/2016 17:06	1	TAL DEN	CCJ

Lab ID: 280-90968-2 MSD

Client ID: MW-13B

Sample Date/Time: 11/14/2016 11:35 Received Date/Time: 11/15/2016 12:17

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:SM 5310B	280-90968-C-2 MSD		280-354778		12/07/2016 17:20	1	TAL DEN	CCJ

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

Laboratory Chronicle

Lab ID: 280-90968-2 DU

Client ID: MW-13B

Sample Date/Time: 11/14/2016 11:35 Received Date/Time: 11/15/2016 12:17

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:SM 2320B	280-90968-B-2 DU		280-352383		11/20/2016 15:08	1	TAL DEN	MMC

Lab ID: 280-90968-3

Client ID: MW-16

Sample Date/Time: 11/14/2016 12:48 Received Date/Time: 11/15/2016 12:17

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	280-90968-F-3		480-333215		11/23/2016 12:30	1	TAL BUF	NEA
A:8260C	280-90968-F-3		480-333215		11/23/2016 12:30	1	TAL BUF	NEA
P:5030C	280-90968-K-3		480-332057		11/17/2016 01:07	1	TAL BUF	NMD1
A:8260C SIM	280-90968-K-3		480-332057		11/17/2016 01:07	1	TAL BUF	NMD1
P:3005A	280-90968-D-3-A		280-353463	280-352234	11/23/2016 14:45	1	TAL DEN	SEJ
A:6010B	280-90968-D-3-A		280-353463	280-352234	11/29/2016 05:38	1	TAL DEN	CML
P:3005A	280-90968-E-3-B		280-355067	280-353142	12/01/2016 14:05	1	TAL DEN	MLS
A:6010B	280-90968-E-3-B		280-355067	280-353142	12/10/2016 02:57	1	TAL DEN	LRD
P:3005A	280-90968-E-3-A		280-353028	280-352489	11/23/2016 14:45	1	TAL DEN	SEJ
A:6020	280-90968-E-3-A		280-353028	280-352489	11/24/2016 00:01	1	TAL DEN	LMT
P:3005A	280-90968-D-3-B		280-353261	280-352238	11/25/2016 07:25	1	TAL DEN	TEB
A:6020	280-90968-D-3-B		280-353261	280-352238	11/25/2016 18:06	1	TAL DEN	LMT
A:300.0	280-90968-A-3		280-354768		12/08/2016 12:58	1	TAL DEN	AFB
A:350.1	280-90968-C-3		280-352527		11/21/2016 16:35	1	TAL DEN	MAS
A:353.2	280-90968-A-3		280-355103		12/11/2016 09:14	1	TAL DEN	AJA
A:SM 2320B	280-90968-B-3		280-352383		11/20/2016 15:12	1	TAL DEN	MMC
A:SM 2540C	280-90968-B-3		280-352412		11/21/2016 10:13	1	TAL DEN	JAP
A:SM 2540D	280-90968-B-3		280-352044		11/17/2016 17:54	1	TAL DEN	SVC
A:SM 5310B	280-90968-C-3		280-354778		12/07/2016 17:35	1	TAL DEN	CCJ
A:Field Sampling	280-90968-A-3		280-352756		11/14/2016 13:48	1	TAL DEN	C1K

Lab ID: 280-90968-3 MS

Client ID: MW-16

Sample Date/Time: 11/14/2016 12:48 Received Date/Time: 11/15/2016 12:17

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:350.1	280-90968-C-3 MS		280-352527		11/21/2016 16:37	1	TAL DEN	MAS

Lab ID: 280-90968-3 MSD

Client ID: MW-16

Sample Date/Time: 11/14/2016 12:48 Received Date/Time: 11/15/2016 12:17

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:350.1	280-90968-C-3 MSD		280-352527		11/21/2016 16:39	1	TAL DEN	MAS

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

Laboratory Chronicle

Lab ID: 280-90968-4

Client ID: MW-39

Sample Date/Time: 11/14/2016 13:54 Received Date/Time: 11/15/2016 12:17

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	280-90968-F-4		480-333215		11/23/2016 12:53	1	TAL BUF	NEA
A:8260C	280-90968-F-4		480-333215		11/23/2016 12:53	1	TAL BUF	NEA
P:5030C	280-90968-K-4		480-332057		11/17/2016 01:31	1	TAL BUF	NMD1
A:8260C SIM	280-90968-K-4		480-332057		11/17/2016 01:31	1	TAL BUF	NMD1
P:3005A	280-90968-D-4-A		280-353463	280-352234	11/23/2016 14:45	1	TAL DEN	SEJ
A:6010B	280-90968-D-4-A		280-353463	280-352234	11/29/2016 05:41	1	TAL DEN	CML
P:3005A	280-90968-E-4-B		280-355067	280-353142	12/01/2016 14:05	1	TAL DEN	MLS
A:6010B	280-90968-E-4-B		280-355067	280-353142	12/10/2016 03:00	1	TAL DEN	LRD
P:3005A	280-90968-E-4-A		280-353028	280-352489	11/23/2016 14:45	1	TAL DEN	SEJ
A:6020	280-90968-E-4-A		280-353028	280-352489	11/24/2016 00:05	1	TAL DEN	LMT
P:3005A	280-90968-D-4-B		280-353261	280-352238	11/25/2016 07:25	1	TAL DEN	TEB
A:6020	280-90968-D-4-B		280-353261	280-352238	11/25/2016 18:10	1	TAL DEN	LMT
A:300.0	280-90968-A-4		280-354768		12/08/2016 13:14	1	TAL DEN	AFB
A:350.1	280-90968-C-4		280-352527		11/21/2016 16:41	1	TAL DEN	MAS
A:353.2	280-90968-A-4		280-355103		12/11/2016 09:14	1	TAL DEN	AJA
A:SM 2320B	280-90968-B-4		280-352383		11/20/2016 15:16	1	TAL DEN	MMC
A:SM 2540C	280-90968-B-4		280-352412		11/21/2016 10:13	1	TAL DEN	JAP
A:SM 2540D	280-90968-B-4		280-352044		11/17/2016 17:54	1	TAL DEN	SVC
A:SM 5310B	280-90968-C-4		280-354778		12/07/2016 17:50	1	TAL DEN	CCJ
A:Field Sampling	280-90968-A-4		280-352756		11/14/2016 14:54	1	TAL DEN	C1K

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

Laboratory Chronicle

Lab ID: 280-90968-5

Client ID: MW-4

Sample Date/Time: 11/14/2016 15:00 Received Date/Time: 11/15/2016 12:17

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	280-90968-F-5		480-333215		11/23/2016 14:02	1	TAL BUF	NEA
A:8260C	280-90968-F-5		480-333215		11/23/2016 14:02	1	TAL BUF	NEA
P:5030C	280-90968-K-5		480-332057		11/17/2016 01:55	1	TAL BUF	NMD1
A:8260C SIM	280-90968-K-5		480-332057		11/17/2016 01:55	1	TAL BUF	NMD1
P:3005A	280-90968-D-5-A		280-353463	280-352234	11/23/2016 14:45	1	TAL DEN	SEJ
A:6010B	280-90968-D-5-A		280-353463	280-352234	11/29/2016 05:43	1	TAL DEN	CML
P:3005A	280-90968-E-5-B		280-355067	280-353142	12/01/2016 14:05	1	TAL DEN	MLS
A:6010B	280-90968-E-5-B		280-355067	280-353142	12/10/2016 03:02	1	TAL DEN	LRD
P:3005A	280-90968-E-5-A		280-353028	280-352489	11/23/2016 14:45	1	TAL DEN	SEJ
A:6020	280-90968-E-5-A		280-353028	280-352489	11/24/2016 00:09	1	TAL DEN	LMT
P:3005A	280-90968-D-5-B		280-353261	280-352238	11/25/2016 07:25	1	TAL DEN	TEB
A:6020	280-90968-D-5-B		280-353261	280-352238	11/25/2016 18:13	1	TAL DEN	LMT
A:300.0	280-90968-A-5		280-354768		12/08/2016 13:29	1	TAL DEN	AFB
A:350.1	280-90968-C-5		280-352527		11/21/2016 16:43	1	TAL DEN	MAS
A:353.2	280-90968-A-5		280-355103		12/11/2016 09:14	1	TAL DEN	AJA
A:SM 2320B	280-90968-B-5		280-352831		11/22/2016 16:33	1	TAL DEN	MMC
A:SM 2540C	280-90968-B-5		280-352412		11/21/2016 10:13	1	TAL DEN	JAP
A:SM 2540D	280-90968-B-5		280-352044		11/17/2016 17:54	1	TAL DEN	SVC
A:SM 5310B	280-90968-C-5		280-354778		12/07/2016 18:04	1	TAL DEN	CCJ
A:Field Sampling	280-90968-A-5		280-352756		11/14/2016 16:00	1	TAL DEN	C1K

Lab ID: 280-90968-5 DU

Client ID: MW-4

Sample Date/Time: 11/14/2016 15:00 Received Date/Time: 11/15/2016 12:17

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:SM 2540C	280-90968-B-5 DU		280-353491		11/29/2016 08:42	1	TAL DEN	JAP

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

Laboratory Chronicle

Lab ID: 280-90968-6

Client ID: MW-43

Sample Date/Time: 11/14/2016 11:58 Received Date/Time: 11/15/2016 12:17

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	280-90968-F-6		480-333215		11/23/2016 14:25	1	TAL BUF	NEA
A:8260C	280-90968-F-6		480-333215		11/23/2016 14:25	1	TAL BUF	NEA
P:5030C	280-90968-K-6		480-332057		11/17/2016 02:20	1	TAL BUF	NMD1
A:8260C SIM	280-90968-K-6		480-332057		11/17/2016 02:20	1	TAL BUF	NMD1
P:3005A	280-90968-D-6-A		280-353463	280-352234	11/23/2016 14:45	1	TAL DEN	SEJ
A:6010B	280-90968-D-6-A		280-353463	280-352234	11/29/2016 05:46	1	TAL DEN	CML
P:3005A	280-90968-E-6-B		280-355067	280-353142	12/01/2016 14:05	1	TAL DEN	MLS
A:6010B	280-90968-E-6-B		280-355067	280-353142	12/10/2016 03:05	1	TAL DEN	LRD
P:3005A	280-90968-E-6-A		280-353028	280-352489	11/23/2016 14:45	1	TAL DEN	SEJ
A:6020	280-90968-E-6-A		280-353028	280-352489	11/24/2016 00:12	1	TAL DEN	LMT
P:3005A	280-90968-D-6-B		280-353261	280-352238	11/25/2016 07:25	1	TAL DEN	TEB
A:6020	280-90968-D-6-B		280-353261	280-352238	11/25/2016 18:17	1	TAL DEN	LMT
A:300.0	280-90968-A-6		280-354768		12/08/2016 14:15	1	TAL DEN	AFB
A:350.1	280-90968-C-6		280-352527		11/21/2016 16:45	1	TAL DEN	MAS
A:353.2	280-90968-A-6		280-355103		12/11/2016 09:14	1	TAL DEN	AJA
A:SM 2320B	280-90968-B-6		280-352383		11/20/2016 15:25	1	TAL DEN	MMC
A:SM 2540C	280-90968-B-6		280-352412		11/21/2016 10:13	1	TAL DEN	JAP
A:SM 2540D	280-90968-B-6		280-352044		11/17/2016 17:54	1	TAL DEN	SVC
A:SM 5310B	280-90968-C-6		280-354778		12/07/2016 18:21	1	TAL DEN	CCJ
A:Field Sampling	280-90968-A-6		280-352756		11/14/2016 12:58	1	TAL DEN	C1K

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

Laboratory Chronicle

Lab ID: 280-90968-7

Client ID: MW-20

Sample Date/Time: 11/14/2016 13:29 Received Date/Time: 11/15/2016 12:17

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	280-90968-F-7		480-333215		11/23/2016 14:48	1	TAL BUF	NEA
A:8260C	280-90968-F-7		480-333215		11/23/2016 14:48	1	TAL BUF	NEA
P:5030C	280-90968-K-7		480-332057		11/17/2016 02:44	1	TAL BUF	NMD1
A:8260C SIM	280-90968-K-7		480-332057		11/17/2016 02:44	1	TAL BUF	NMD1
P:3005A	280-90968-D-7-A		280-353463	280-352234	11/23/2016 14:45	1	TAL DEN	SEJ
A:6010B	280-90968-D-7-A		280-353463	280-352234	11/29/2016 05:48	1	TAL DEN	CML
P:3005A	280-90968-E-7-B		280-355067	280-353142	12/01/2016 14:05	1	TAL DEN	MLS
A:6010B	280-90968-E-7-B		280-355067	280-353142	12/10/2016 03:07	1	TAL DEN	LRD
P:3005A	280-90968-E-7-A		280-353028	280-352489	11/23/2016 14:45	1	TAL DEN	SEJ
A:6020	280-90968-E-7-A		280-353028	280-352489	11/24/2016 00:16	1	TAL DEN	LMT
P:3005A	280-90968-D-7-B		280-353261	280-352238	11/25/2016 07:25	1	TAL DEN	TEB
A:6020	280-90968-D-7-B		280-353261	280-352238	11/25/2016 18:21	1	TAL DEN	LMT
A:300.0	280-90968-A-7		280-354768		12/08/2016 14:31	1	TAL DEN	AFB
A:350.1	280-90968-C-7		280-352527		11/21/2016 17:01	1	TAL DEN	MAS
A:353.2	280-90968-A-7		280-355103		12/11/2016 09:14	1	TAL DEN	AJA
A:SM 2320B	280-90968-B-7		280-352383		11/20/2016 15:30	1	TAL DEN	MMC
A:SM 2540C	280-90968-B-7		280-352412		11/21/2016 10:13	1	TAL DEN	JAP
A:SM 2540D	280-90968-B-7		280-352044		11/17/2016 17:54	1	TAL DEN	SVC
A:SM 5310B	280-90968-C-7		280-354778		12/07/2016 19:07	1	TAL DEN	CCJ
A:Field Sampling	280-90968-A-7		280-352756		11/14/2016 14:29	1	TAL DEN	C1K

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

Laboratory Chronicle

Lab ID: 280-90968-8

Client ID: DUP2

Sample Date/Time: 11/14/2016 13:39 Received Date/Time: 11/15/2016 12:17

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	280-90968-F-8		480-333215		11/23/2016 15:11	1	TAL BUF	NEA
A:8260C	280-90968-F-8		480-333215		11/23/2016 15:11	1	TAL BUF	NEA
P:5030C	280-90968-K-8		480-332057		11/17/2016 03:09	1	TAL BUF	NMD1
A:8260C SIM	280-90968-K-8		480-332057		11/17/2016 03:09	1	TAL BUF	NMD1
P:3005A	280-90968-D-8-A		280-353463	280-352234	11/23/2016 14:45	1	TAL DEN	SEJ
A:6010B	280-90968-D-8-A		280-353463	280-352234	11/29/2016 05:51	1	TAL DEN	CML
P:3005A	280-90968-E-8-B		280-355067	280-353142	12/01/2016 14:05	1	TAL DEN	MLS
A:6010B	280-90968-E-8-B		280-355067	280-353142	12/10/2016 03:10	1	TAL DEN	LRD
P:3005A	280-90968-E-8-A		280-353028	280-352489	11/23/2016 14:45	1	TAL DEN	SEJ
A:6020	280-90968-E-8-A		280-353028	280-352489	11/24/2016 00:20	1	TAL DEN	LMT
P:3005A	280-90968-D-8-B		280-353261	280-352238	11/25/2016 07:25	1	TAL DEN	TEB
A:6020	280-90968-D-8-B		280-353261	280-352238	11/25/2016 18:25	1	TAL DEN	LMT
A:300.0	280-90968-A-8		280-354768		12/08/2016 14:46	1	TAL DEN	AFB
A:350.1	280-90968-C-8		280-352527		11/21/2016 17:03	1	TAL DEN	MAS
A:353.2	280-90968-A-8		280-355103		12/11/2016 09:14	1	TAL DEN	AJA
A:SM 2320B	280-90968-B-8		280-352383		11/20/2016 15:34	1	TAL DEN	MMC
A:SM 2540C	280-90968-B-8		280-352412		11/21/2016 10:13	1	TAL DEN	JAP
A:SM 2540D	280-90968-B-8		280-352044		11/17/2016 17:54	1	TAL DEN	SVC
A:SM 5310B	280-90968-C-8		280-354778		12/07/2016 19:24	1	TAL DEN	CCJ

Lab ID: 280-90968-8 DU

Client ID: DUP2

Sample Date/Time: 11/14/2016 13:39 Received Date/Time: 11/15/2016 12:17

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:SM 2540C	280-90968-B-8 DU		280-353491		11/29/2016 08:42	1	TAL DEN	JAP

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

Laboratory Chronicle

Lab ID: 280-90968-9

Client ID: MW-19C

Sample Date/Time: 11/14/2016 14:28 Received Date/Time: 11/15/2016 12:17

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	280-90968-F-9		480-333215		11/23/2016 15:34	1	TAL BUF	NEA
A:8260C	280-90968-F-9		480-333215		11/23/2016 15:34	1	TAL BUF	NEA
P:5030C	280-90968-K-9		480-332057		11/17/2016 03:33	1	TAL BUF	NMD1
A:8260C SIM	280-90968-K-9		480-332057		11/17/2016 03:33	1	TAL BUF	NMD1
P:3005A	280-90968-D-9-A		280-353463	280-352234	11/23/2016 14:45	1	TAL DEN	SEJ
A:6010B	280-90968-D-9-A		280-353463	280-352234	11/29/2016 05:54	1	TAL DEN	CML
P:3005A	280-90968-E-9-B		280-355067	280-353142	12/01/2016 14:05	1	TAL DEN	MLS
A:6010B	280-90968-E-9-B		280-355067	280-353142	12/10/2016 03:13	1	TAL DEN	LRD
P:3005A	280-90968-E-9-A		280-353028	280-352489	11/23/2016 14:45	1	TAL DEN	SEJ
A:6020	280-90968-E-9-A		280-353028	280-352489	11/24/2016 00:24	1	TAL DEN	LMT
P:3005A	280-90968-D-9-B		280-353261	280-352238	11/25/2016 07:25	1	TAL DEN	TEB
A:6020	280-90968-D-9-B		280-353261	280-352238	11/25/2016 18:28	1	TAL DEN	LMT
A:300.0	280-90968-A-9		280-354768		12/08/2016 15:02	1	TAL DEN	AFB
A:350.1	280-90968-C-9		280-352527		11/21/2016 17:05	1	TAL DEN	MAS
A:353.2	280-90968-A-9		280-355103		12/11/2016 09:14	1	TAL DEN	AJA
A:SM 2320B	280-90968-B-9		280-352331		11/17/2016 11:43	1	TAL DEN	MMC
A:SM 2540C	280-90968-B-9		280-352412		11/21/2016 10:13	1	TAL DEN	JAP
A:SM 2540D	280-90968-B-9		280-352044		11/17/2016 17:54	1	TAL DEN	SVC
A:SM 5310B	280-90968-C-9		280-354778		12/07/2016 19:38	1	TAL DEN	CCJ
A:Field Sampling	280-90968-A-9		280-352756		11/14/2016 15:28	1	TAL DEN	C1K

Lab ID: 280-90968-10

Client ID: TRIP BLANK

Sample Date/Time: 11/14/2016 00:00 Received Date/Time: 11/15/2016 12:17

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	280-90968-A-10		480-333215		11/23/2016 15:58	1	TAL BUF	NEA
A:8260C	280-90968-A-10		480-333215		11/23/2016 15:58	1	TAL BUF	NEA
P:5030C	280-90968-D-10		480-332057		11/17/2016 03:57	1	TAL BUF	NMD1
A:8260C SIM	280-90968-D-10		480-332057		11/17/2016 03:57	1	TAL BUF	NMD1

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

Laboratory Chronicle

Lab ID: 280-90968-11

Client ID: MW-29A

Sample Date/Time: 11/14/2016 12:44 Received Date/Time: 11/15/2016 12:17

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	280-90968-F-11		480-333215		11/23/2016 16:21	1	TAL BUF	NEA
A:8260C	280-90968-F-11		480-333215		11/23/2016 16:21	1	TAL BUF	NEA
P:5030C	280-90968-K-11		480-332057		11/17/2016 04:21	1	TAL BUF	NMD1
A:8260C SIM	280-90968-K-11		480-332057		11/17/2016 04:21	1	TAL BUF	NMD1
P:3005A	280-90968-D-11-A		280-353463	280-352234	11/23/2016 14:45	1	TAL DEN	SEJ
A:6010B	280-90968-D-11-A		280-353463	280-352234	11/29/2016 05:56	1	TAL DEN	CML
P:3005A	280-90968-E-11-B		280-355067	280-353142	12/01/2016 14:05	1	TAL DEN	MLS
A:6010B	280-90968-E-11-B		280-355067	280-353142	12/10/2016 03:15	1	TAL DEN	LRD
P:3005A	280-90968-E-11-A		280-353028	280-352489	11/23/2016 14:45	1	TAL DEN	SEJ
A:6020	280-90968-E-11-A		280-353028	280-352489	11/24/2016 00:27	1	TAL DEN	LMT
P:3005A	280-90968-D-11-B		280-353261	280-352238	11/25/2016 07:25	1	TAL DEN	TEB
A:6020	280-90968-D-11-B		280-353261	280-352238	11/25/2016 18:32	1	TAL DEN	LMT
A:300.0	280-90968-A-11		280-354768		12/08/2016 15:17	1	TAL DEN	AFB
A:350.1	280-90968-C-11		280-352527		11/21/2016 17:18	1	TAL DEN	MAS
A:353.2	280-90968-A-11		280-355103		12/11/2016 09:14	1	TAL DEN	AJA
A:SM 2320B	280-90968-B-11		280-352331		11/17/2016 11:49	1	TAL DEN	MMC
A:SM 2540C	280-90968-B-11		280-352412		11/21/2016 10:13	1	TAL DEN	JAP
A:SM 2540D	280-90968-B-11		280-352478		11/21/2016 14:39	1	TAL DEN	SVC
A:SM 5310B	280-90968-C-11		280-354778		12/07/2016 19:55	1	TAL DEN	CCJ
A:Field Sampling	280-90968-A-11		280-352756		11/14/2016 13:44	1	TAL DEN	C1K

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

Laboratory Chronicle

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 480-333215/6		480-333215		11/23/2016 10:43	1	TAL BUF	NEA
A:8260C	MB 480-333215/6		480-333215		11/23/2016 10:43	1	TAL BUF	NEA
P:5030C	MB 480-332057/7		480-332057		11/16/2016 23:26	1	TAL BUF	NMD1
A:8260C SIM	MB 480-332057/7		480-332057		11/16/2016 23:26	1	TAL BUF	NMD1
P:3005A	MB 280-352234/1-A		280-353463	280-352234	11/23/2016 14:45	1	TAL DEN	SEJ
A:6010B	MB 280-352234/1-A		280-353463	280-352234	11/29/2016 04:33	1	TAL DEN	CML
P:3005A	MB 280-353142/1-A		280-355067	280-353142	12/01/2016 14:05	1	TAL DEN	MLS
A:6010B	MB 280-353142/1-A		280-355067	280-353142	12/10/2016 02:27	1	TAL DEN	LRD
P:3005A	MB 280-352489/1-A		280-353028	280-352489	11/23/2016 14:45	1	TAL DEN	SEJ
A:6020	MB 280-352489/1-A		280-353028	280-352489	11/23/2016 23:15	1	TAL DEN	LMT
P:3005A	MB 280-352238/1-A		280-353261	280-352238	11/25/2016 07:25	1	TAL DEN	TEB
A:6020	MB 280-352238/1-A		280-353261	280-352238	11/25/2016 15:52	1	TAL DEN	LMT
A:300.0	MB 280-354768/6		280-354768		12/08/2016 10:55	1	TAL DEN	AFB
A:350.1	MB 280-352527/61		280-352527		11/21/2016 14:57	1	TAL DEN	MAS
A:350.1	MB 280-352527/109		280-352527		11/21/2016 16:33	1	TAL DEN	MAS
A:353.2	MB 280-355103/1		280-355103		12/11/2016 09:14	1	TAL DEN	AJA
A:SM 2320B	MB 280-352331/5		280-352331		11/17/2016 11:20	1	TAL DEN	MMC
A:SM 2320B	MB 280-352383/5		280-352383		11/20/2016 12:57	1	TAL DEN	MMC
A:SM 2320B	MB 280-352383/31		280-352383		11/20/2016 14:59	1	TAL DEN	MMC
A:SM 2320B	MB 280-352831/31		280-352831		11/22/2016 15:16	1	TAL DEN	MMC
A:SM 2540C	MB 280-352412/1		280-352412		11/21/2016 10:13	1	TAL DEN	JAP
A:SM 2540C	MB 280-353491/1		280-353491		11/29/2016 08:42	1	TAL DEN	JAP
A:SM 2540D	MB 280-352044/2		280-352044		11/17/2016 17:54	1	TAL DEN	SVC
A:SM 2540D	MB 280-352478/3		280-352478		11/21/2016 14:39	1	TAL DEN	SVC
A:SM 5310B	MB 280-354778/4		280-354778		12/07/2016 12:52	1	TAL DEN	CCJ

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

Laboratory Chronicle

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 480-333215/4		480-333215		11/23/2016 09:50	1	TAL BUF	NEA
A:8260C	LCS 480-333215/4		480-333215		11/23/2016 09:50	1	TAL BUF	NEA
P:5030C	LCS 480-332057/4		480-332057		11/16/2016 22:13	1	TAL BUF	NMD1
A:8260C SIM	LCS 480-332057/4		480-332057		11/16/2016 22:13	1	TAL BUF	NMD1
P:3005A	LCS 280-352234/2-A		280-353463	280-352234	11/23/2016 14:45	1	TAL DEN	SEJ
A:6010B	LCS 280-352234/2-A		280-353463	280-352234	11/29/2016 04:36	1	TAL DEN	CML
P:3005A	LCS 280-353142/2-A		280-355067	280-353142	12/01/2016 14:05	1	TAL DEN	MLS
A:6010B	LCS 280-353142/2-A		280-355067	280-353142	12/10/2016 02:30	1	TAL DEN	LRD
P:3005A	LCS 280-352489/2-A		280-353028	280-352489	11/23/2016 14:45	1	TAL DEN	SEJ
A:6020	LCS 280-352489/2-A		280-353028	280-352489	11/23/2016 23:19	1	TAL DEN	LMT
P:3005A	LCS 280-352238/2-A		280-353261	280-352238	11/25/2016 07:25	1	TAL DEN	TEB
A:6020	LCS 280-352238/2-A		280-353261	280-352238	11/25/2016 15:56	1	TAL DEN	LMT
A:300.0	LCS 280-354768/4		280-354768		12/08/2016 10:24	1	TAL DEN	AFB
A:350.1	LCS 280-352527/59		280-352527		11/21/2016 14:53	1	TAL DEN	MAS
A:350.1	LCS 280-352527/107		280-352527		11/21/2016 16:29	1	TAL DEN	MAS
A:SM 2320B	LCS 280-352331/4		280-352331		11/17/2016 11:13	1	TAL DEN	MMC
A:SM 2320B	LCS 280-352383/4		280-352383		11/20/2016 12:53	1	TAL DEN	MMC
A:SM 2320B	LCS 280-352383/30		280-352383		11/20/2016 14:55	1	TAL DEN	MMC
A:SM 2320B	LCS 280-352831/30		280-352831		11/22/2016 15:11	1	TAL DEN	MMC
A:SM 2540C	LCS 280-352412/2		280-352412		11/21/2016 10:13	1	TAL DEN	JAP
A:SM 2540C	LCS 280-353491/2		280-353491		11/29/2016 08:42	1	TAL DEN	JAP
A:SM 2540D	LCS 280-352044/1		280-352044		11/17/2016 17:54	1	TAL DEN	SVC
A:SM 2540D	LCS 280-352478/1		280-352478		11/21/2016 14:39	1	TAL DEN	SVC
A:SM 5310B	LCS 280-354778/3		280-354778		12/07/2016 12:37	1	TAL DEN	CCJ

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 480-332057/5		480-332057		11/16/2016 22:37	1	TAL BUF	NMD1
A:8260C SIM	LCSD 480-332057/5		480-332057		11/16/2016 22:37	1	TAL BUF	NMD1
A:300.0	LCSD 280-354768/5		280-354768		12/08/2016 10:39	1	TAL DEN	AFB
A:350.1	LCSD 280-352527/60		280-352527		11/21/2016 14:55	1	TAL DEN	MAS
A:350.1	LCSD 280-352527/108		280-352527		11/21/2016 16:31	1	TAL DEN	MAS
A:SM 2540C	LCSD 280-353491/3		280-353491		11/29/2016 08:42	1	TAL DEN	JAP
A:SM 2540D	LCSD 280-352478/2		280-352478		11/21/2016 14:39	1	TAL DEN	SVC

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

Laboratory Chronicle

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 280-354768/3		280-354768		12/08/2016 10:09	1	TAL DEN	AFB

Lab ID: MS

Client ID: N/A

Sample Date/Time: 11/14/2016 11:00

Received Date/Time: 11/15/2016 08:50

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	280-91030-E-2 MS		480-333215		11/23/2016 19:02	5	TAL BUF	NEA
A:8260C	280-91030-E-2 MS		480-333215		11/23/2016 19:02	5	TAL BUF	NEA
P:3005A	280-90915-C-2-B MS		280-353463	280-352234	11/23/2016 14:45	1	TAL DEN	SEJ
A:6010B	280-90915-C-2-B MS		280-353463	280-352234	11/29/2016 04:46	1	TAL DEN	CML
P:3005A	280-90959-L-1-C MS		280-355067	280-353142	12/01/2016 14:05	1	TAL DEN	MLS
A:6010B	280-90959-L-1-C MS		280-355067	280-353142	12/10/2016 02:37	1	TAL DEN	LRD
P:3005A	280-91030-D-2-B MS		280-353028	280-352489	11/23/2016 14:45	1	TAL DEN	SEJ
A:6020	280-91030-D-2-B MS		280-353028	280-352489	11/23/2016 23:34	1	TAL DEN	LMT
A:300.0	280-91032-B-10 MS		280-354768		12/08/2016 11:41	1	TAL DEN	AFB

Lab ID: MSD

Client ID: N/A

Sample Date/Time: 11/14/2016 11:00

Received Date/Time: 11/15/2016 08:50

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	280-91030-E-2 MSD		480-333215		11/23/2016 19:25	5	TAL BUF	NEA
A:8260C	280-91030-E-2 MSD		480-333215		11/23/2016 19:25	5	TAL BUF	NEA
P:3005A	280-90915-C-2-C MSD		280-353463	280-352234	11/23/2016 14:45	1	TAL DEN	SEJ
A:6010B	280-90915-C-2-C MSD		280-353463	280-352234	11/29/2016 04:48	1	TAL DEN	CML
P:3005A	280-90959-L-1-D MSD		280-355067	280-353142	12/01/2016 14:05	1	TAL DEN	MLS
A:6010B	280-90959-L-1-D MSD		280-355067	280-353142	12/10/2016 02:40	1	TAL DEN	LRD
P:3005A	280-91030-D-2-C MSD		280-353028	280-352489	11/23/2016 14:45	1	TAL DEN	SEJ
A:6020	280-91030-D-2-C MSD		280-353028	280-352489	11/23/2016 23:38	1	TAL DEN	LMT
A:300.0	280-91032-B-10 MSD		280-354768		12/08/2016 11:56	1	TAL DEN	AFB

Quality Control Results

Client: Waste Management

Job Number: 280-90968-1

Laboratory Chronicle

Lab ID: DU

Client ID: N/A

Sample Date/Time: 11/14/2016 13:45 Received Date/Time: 11/15/2016 09:40

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:300.0	280-91032-B-10 DU		280-354768		12/08/2016 11:26	1	TAL DEN	AFB
A:SM 2320B	280-90901-A-1 DU		280-352331		11/17/2016 11:38	1	TAL DEN	MMC
A:SM 2320B	280-91153-A-1 DU		280-352831		11/22/2016 15:55	1	TAL DEN	MMC
A:SM 2540C	280-90969-B-2 DU		280-352412		11/21/2016 10:13	1	TAL DEN	JAP
A:SM 2540D	280-91242-A-3 DU		280-352478		11/21/2016 14:39	1	TAL DEN	SVC

Lab References:

TAL BUF = TestAmerica Buffalo

TAL DEN = TestAmerica Denver

90968

FIELD INFORMATION FORM



Site Name: QJSC **This Waste Management Field Information Form is Required**
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).
 Site No.: Sample Points: MW-13A Sample ID
 Laboratory Use Only/Lab ID:

PURGE INFO
 PURGE DATE (MM DD YY): 11/16 PURGE TIME (2400 Hr Clock): 10:20 ELAPSED HRS (hrs:min): 23
 WATER VOL IN CASING (Gallons): ACTUAL VOL PURGED (Gallons): WELL VOLs PURGED

PURGE/SAMPLE EQUIPMENT
 Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.
 Purging and Sampling Equipment... Dedicated: Y or N Filter Devices: Y or N 0.45 μ or μ (circle or fill in)
 Purging Device: C A-Submersible Pump D-Bailer Filter-Type: A B-Peristaltic Pump E-Piston Pump A-In-line Disposable C-Vacuum
 Sampling Device: C C-QED Bladder Pump F-Dipper/Bottle B-Pressure X-Other
 X-Other: Sample Tube Type: D A-Teflon C-PVC X-Other:
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC) (ft) Depth to Water (DTW) (from TOC) 4576 (ft) Groundwater Elevation (site datum, from TOC) (ft)
 Total Well Depth (from TOC) (ft) Stick Up (from ground elevation) (ft) Casing ID (in) Casing Material
 Note: Total Well Depth, Stick Up, Casing Id, etc, are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit (ml/min)	pH (std)	Conductance (SC/EC) (umhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
110128	350	5.72	1173	19.85		16.94	11360	
110218		6.22	1170	19.63		16.72	11220	
110311		6.29	1170	19.61		16.66	11190	
110314		6.34	1170	19.60		16.62	11170	
110317		6.43	1169	19.59		16.59	11150	
110410		6.49	1169	19.57		16.56	11130	
110413	↓	6.50	1169	19.57		16.54	11130	4575
					10.84			

Suggested range for 3 consec. readings or note Permit/State requirements:
 pH: ± 0.2 Conductance: ± 3% Temp: - D.O.: ± 10% eH/ORP: ± 25 mV Stabilize

FIELD DATA
 SAMPLE DATE (MM DD YY): 11/14/16 pH (std): 6.50 CONDUCTANCE (umhos/cm @ 25°C): 169 TEMP. (°C): 9.57
 TURBIDITY (ntu): 0.84 DO (mg/L - ppm): 6.54 eH/ORP (mV): 1130 Units:
 Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: clear Odor: Color: Other:
 Weather Conditions (required daily, or as conditions change): Direction/Speed: Outlook: Precipitation: Y or N
 Specific Comments (including purge/well volume calculations if required):

FIELD COMMENTS

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
11/14/16 Sam Graber [Signature] SCS
 Date Name Signature Company

FIELD INFORMATION FORM



Site Name: _____
 Site No.: _____
 Sample Point: QVSL
 Sample ID: _____

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID: _____

PURGE INFO

PURGE DATE (MM DD YY) <u>11 14 16</u>	PURGE TIME (2400 Hr Clock) <u>11 12</u>	ELAPSED HRS (hrs:min) <u>23</u>	WATER VOL IN CASING (Gallons) _____	ACTUAL VOL PURGED (Gallons) _____	WELL VOLs PURGED _____
--	--	------------------------------------	--	--------------------------------------	---------------------------

Note: For Passive Sampling, replace "Water Vol In Casing" and "Well Vols Purged" w/ Water Vol In Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment, Dedicated: or N

Purging Device: C A-Submersible Pump D-Bailer
 B-Peristaltic Pump E-Piston Pump
 Sampling Device: C C-QED Bladder Pump F-Dipper/Bottle
 X-Other: _____

Filter Device: Y or N 0.45 μ or _____ μ (circle or fill in)
 Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other _____
 Sample Tube Type: D A-Teflon C-PVC X-Other: _____
 B-Stainless Steel D-Polypropylene

WELL DATA

Well Elevation (at TOC) _____ (ft/msl) Depth to Water (DTW) (from TOC) 59.30 (ft)
 Groundwater Elevation (site datum, from TOC) _____ (ft/msl)
 Total Well Depth (from TOC) _____ (ft) Stick Up (from ground elevation) _____ (ft)
 Casing ID _____ (in) Casing Material _____

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by State/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit (g/min)	pH (std)	Conductance (SC/BC) (μ mhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
<u>111115</u>	<u>350</u>	<u>6.53</u>	<u>1170</u>	<u>10.81</u>		<u>16.11</u>	<u>113.0</u>	
<u>111210</u>		<u>6.62</u>	<u>1170</u>	<u>10.65</u>		<u>16.70</u>	<u>100.0</u>	
<u>111213</u>		<u>6.76</u>	<u>1170</u>	<u>10.54</u>		<u>16.90</u>	<u>111.0</u>	
<u>111216</u>		<u>7.02</u>	<u>1170</u>	<u>10.75</u>		<u>16.96</u>	<u>135.0</u>	
<u>111219</u>		<u>7.08</u>	<u>11619</u>	<u>10.31</u>		<u>16.94</u>	<u>186.0</u>	
<u>111312</u>		<u>7.14</u>	<u>1170</u>	<u>10.56</u>		<u>16.95</u>	<u>184.0</u>	<u>59.32</u>
<u>111315</u>	<u>V</u>	<u>7.17</u>	<u>1171</u>	<u>10.41</u>	<u>0.89</u>	<u>16.94</u>	<u>184.5</u>	
							<u>184.0</u>	

Suggested range for 3 consec. readings or note Permit/State requirements: pH +/- 0.2, Conductance +/- 3%, D.O. +/- 10%, eH/ORP +/- 25 mV, DTW Stabilize

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (μ mhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L - ppm)	eH/ORP (mV)	Other: <u>None</u>
<u>11 14 16</u>	<u>7.17</u>	<u>171</u>	<u>10.41</u>	<u>0.89</u>	<u>6.94</u>	<u>184.0</u>	Units: <u>1135</u>

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/State).

Sample Appearance: clear Odor: _____ Color: _____ Other: _____
 Weather Conditions (required daily, or as conditions change): _____ Direction/Speed: _____ Outlook: _____ Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required): _____

FIELD COMMENTS

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

11, 14, 16 Sara Gruber _____ SCS
 Date Name Signature Company

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM



Site Name: DUSL
 Site No.:
 Sample Point: MW-16
 Sample ID:

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO
 PURGE DATE (MM DD YY): 11/14/16 PURGE TIME (2400 Hr Clock): 12:25 ELAPSED HRS (hrs:min): 23
 WATER VOL IN CASING (Gallons): ACTUAL VOL PURGED (Gallons): WELL VOL PURGED (Gallons):

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: Y or N Filter Device: Y or N 0.45 μ or μ (circle or fill in)
 Purging Device: C A-Submersible Pump D-Bailer Filter-Type: A A-In-line Disposable C-Vacuum
 C B-Peristaltic Pump E-Piston Pump B-Pressure X-Other
 Sampling Device: C C-QED Bladder Pump F-Dipper/Bottle Sample Tube Type: D A-Teflon C-PVC X-Other:
 X-Other: B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC) (ft/msl) Depth to Water (DTW) (from TOC) 5930 (ft) Groundwater Elevation (site datum, from TOC) (ft/msl)
 Total Well Depth (from TOC) (ft) Stick Up (from ground elevation) (ft) Casing ID (in) Casing Material
Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit (ml/min)	pH (std)	Conductance (SC/EC) (μ mhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
121218	350	6.19	1120	10.52		18.02	1114.0	
121313		6.15	1112	19.72		16.97	130.0	
121316		5.98	1110	19.64		17.12	133.0	
121319		5.94	1110	19.62		17.12	133.0	
121412		5.91	1110	19.62		16.97	135.0	
121415		5.91	1110	19.62		17.02	135.0	5937
121418		5.89	1110	19.81	12.51	16.91	135.0	

Suggested range for 3 consec. readings or note Permit/State requirements:
 pH: ± 0.2 Conductance: $\pm 3\%$ D.O.: $\pm 10\%$ eH/ORP: ± 25 mV Stabilize

FIELD DATA
 SAMPLE DATE (MM DD YY): 11/14/16 pH (std): 5.89 CONDUCTANCE (umhos/cm @ 25°C): 110 TEMP. (°C): 9.81 TURBIDITY (ntu): 2.51 DO (mg/L-ppm): 6.91 eH/ORP (mV): 1350 Other: fine
Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: Clear Odor: - Color: - Other: -
 Weather Conditions (required daily, or as conditions change): Direction/Speed: Outlook: Precipitation: Y or N
 Specific Comments (including purge/well volume calculations if required):

FIELD COMMENTS

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
11/14/16 Sam Becker [Signature] SCS
 Date Name Signature Company

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM



Site Name: 055C
 Site No.:
 Sample Point: MW-39
 Sample ID:

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO

PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs:min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)	WELL VOL. PURGED
11/14/16	1331	23			

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment... Dedicated: or N

Filter Device: or N | 0.45 μ or μ (circle or fill in)

Purging Device: C | A-Submersible Pump | D-Bailer

Filter-Type: A | A-In-line Disposable | C-Vacuum

Sampling Device: C | B-Peristaltic Pump | E-Piston Pump | B-Pressure

X-Other:

C-QED Bladder Pump | F-Dipper/Bottle

Sample Tube Type: D | A-Teflon | C-PVC | X-Other:

B-Stainless Steel | D-Polypropylene

WELL DATA

Well Elevation (at TOC) (ft/msl) | Depth to Water (DTW) (from TOC) 1716 (ft)

Groundwater Elevation (site datum, from TOC) (ft/msl)

Total Well Depth (from TOC) (ft) | Stick Up (from ground elevation) (ft)

Casing ID (ft) | Casing Material

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by State/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit (gal/min)	pH (std)	Conductance (SC/BC) (umhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
113314	390	5.510	11316	12.74		1.30	12710	
113319	11	5.310	11216	12.93		1.51	15010	
113342	11	5.311	11311	12.95		1.49	15310	
113345	11	5.219	11314	12.94		1.42	15110	
113348	11	5.311	11314	12.94		1.40	15010	
113351	11	5.310	11313	12.93		1.34	14810	
113354	↓	5.217	11310	12.89	4.53	1.28	14710	11847

Suggested range for 3 consec. readings or note Permit/State requirements: pH +/- 0.2 | Conductance +/- 3% | Temp. - | Turbidity - | D.O. +/- 10% | eH/ORP +/- 25 mV | DTW Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, State, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. *If more fields above are needed, use separate sheet or form.*

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (umhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L - ppm)	eH/ORP (mV)	Other: <u>None</u>
11/14/16	5.27	130	12.89	4.53	1.28	470	1354

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: clear | Odor: - | Color: - | Other: -

Weather Conditions (required daily, or as conditions change): | Direction/Speed: - | Outlook: - | Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required):

FIELD COMMENTS

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

11/14/16 | Sam Graber | [Signature] | SCS

Date | Name | Signature | Company

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM



Site Name: OSL
 Site No.:
 Sample Point: MW-4
 Sample ID:

This Waste Management Field Information Form is Required.
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO

PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs:min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)	WELL VOLs PURGED
<u>11/14/16</u>	<u>1437</u>	<u>23</u>	<u> </u>	<u> </u>	<u> </u>

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLER EQUIPMENT

Purging and Sampling Equipment... Dedicated: or N

Filter Device: or N 0.45 μ or μ (circle or fill in)

Purging Device: C A-Submersible Pump D-Bailer
 B-Peristaltic Pump E-Riston Pump

Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other

Sampling Device: C C-QED Bladder Pump F-Dipper/Bottle

X-Other: Sample Tube Type: D A-Teflon C-PVC X-Other:
 B-Stainless Steel D-Polypropylene

WELL DATA

Well Elevation (at TOC) (ft/msl) Depth to Water (DTW) (from TOC) 1179 (ft) Groundwater Elevation (site datum, from TOC) (ft/msl)

Total Well Depth (from TOC) (ft) Stick Up (from ground elevation) (ft) Casing ID (in) Casing Material

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit (ml/min)	pH (std)	Conductance (SC/EC) (umhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
<u>141410</u>	<u>300</u>	<u>5.17</u>	<u>17110</u>	<u>12.67</u>	<u> </u>	<u>16.62</u>	<u>111910</u>	<u> </u>
<u>141415</u>	<u> </u>	<u>5.15</u>	<u>1511</u>	<u>11.56</u>	<u> </u>	<u>14.30</u>	<u>113010</u>	<u> </u>
<u>141418</u>	<u> </u>	<u>5.12</u>	<u>1511</u>	<u>11.58</u>	<u> </u>	<u>14.12</u>	<u>113510</u>	<u> </u>
<u>141511</u>	<u> </u>	<u>5.07</u>	<u>1510</u>	<u>11.54</u>	<u> </u>	<u>13.98</u>	<u>113910</u>	<u> </u>
<u>141514</u>	<u> </u>	<u>5.09</u>	<u>1419</u>	<u>11.52</u>	<u> </u>	<u>14.17</u>	<u>114110</u>	<u> </u>
<u>141517</u>	<u> </u>	<u>5.06</u>	<u>1419</u>	<u>11.49</u>	<u> </u>	<u>14.13</u>	<u>114210</u>	<u>111100</u>
<u>15100</u>	<u> </u>	<u>5.06</u>	<u>1510</u>	<u>11.49</u>	<u>1.06</u>	<u>14.07</u>	<u>114210</u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>

Suggested range for 3 consec. readings or note Permit/State requirements:
 pH: ± 0.2 Conductance: $\pm 3\%$ Temp: $-$ Turbidity: $-$ D.O.: $\pm 10\%$ eH/ORP: ± 25 mV DTW: Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/State. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (umhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L - ppm)	eH/ORP (mV)	Other: <u>Time</u>
<u>111416</u>	<u>5.06</u>	<u>50</u>	<u>11.49</u>	<u>1.06</u>	<u>4.07</u>	<u>11420</u>	<u>1500</u>

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/State).

Sample Appearance: Clear Odor: - Color: - Other: -

Weather Conditions (required daily, or as conditions change): Direction/Speed: - Outlook: - Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required):

FIELD COMMENTS

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

11/14/16 Sam Graber [Signature] SCS

Date Name Signature Company

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM



Site Name: OV5L

Site No.:
Sample Point: MW-43
Sample ID

This Waste Management Field Information Form is Required
This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO
111416 1136
PURGE DATE (MM DD YY) PURGE TIME (2400 Hr Clock) ELAPSED HRS (hrs:min) WATER VOL IN CASING (Gallons) ACTUAL VOL PURGED (Gallons) WELL VOL PURGED

PURGE SAMPLE EQUIPMENT
Purging and Sampling Equipment... Dedicated: Y or N Filter Device: Y or N 0.45 μ or μ (circle or fill in)
Purging Device: C A-Submersible Pump D-Bailer Filter Type: A A-In-line Disposable C-Vacuum
Sampling Device: C B-Peristaltic Pump E-Piston Pump B-Pressure X-Other
X-Other: C-QED Bladder Pump F-Dipper/Bottle Sample Tube Type: D A-Teflon C-PVC X-Other:
B-Stainless Steel D-Polypropylene

WELL DATA
Well Elevation (at TOC) (ft/mal) Depth to Water (DTW) (from TOC) (ft) (R) Groundwater Elevation (site datum, from TOC) (ft/mal)
Total Well Depth (ft) Stick Up (from ground elevation) (ft) (R) Casing ID (in) Casing Material
Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)	Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (μ mhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
		<u>111314</u>	<u>1"</u>	<u>8.35</u>	<u>1412</u>	<u>12.71</u>	<u>2100.0</u>	<u>15.32</u>	<u>180.19</u>
	<u>111413</u>	<u>2"</u>	<u>7.310</u>	<u>137</u>	<u>12.64</u>	<u>162.41</u>	<u>13.32</u>	<u>1130.15</u>	<u>TTT</u>
	<u>111416</u>	<u>3"</u>	<u>6.818</u>	<u>135</u>	<u>12.68</u>	<u>118.76</u>	<u>12.92</u>	<u>1145.18</u>	<u>TTT</u>
	<u>111419</u>	<u>4"</u>	<u>6.66</u>	<u>135</u>	<u>12.66</u>	<u>115.78</u>	<u>12.86</u>	<u>1152.16</u>	<u>TTT</u>
	<u>111512</u>		<u>6.513</u>	<u>134</u>	<u>12.67</u>	<u>115.75</u>	<u>12.78</u>	<u>1154.17</u>	<u>TTT</u>
	<u>111515</u>		<u>6.47</u>	<u>134</u>	<u>12.65</u>	<u>114.04</u>	<u>12.73</u>	<u>1156.18</u>	<u>TTT</u>
	<u>111518</u>		<u>6.318</u>	<u>134</u>	<u>12.63</u>	<u>117.19</u>	<u>12.73</u>	<u>1156.18</u>	<u>TTT</u>

Suggested range for 3 consec. readings or note Permit/State requirements:
pH: ± 0.2 Conductance: $\pm 3\%$ Temp: - Turbidity: - D.O.: $\pm 10\%$ eH/ORP: ± 25 mV DTW: Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA
SAMPLE DATE (MM DD YY) 111416 pH (std) 6.38 CONDUCTANCE (μ mhos/cm @ 25°C) 34 TEMP. (°C) 12.63 TURBIDITY (ntu) 1719 DO (mg/L - ppm) 2.73 eH/ORP (mV) 1156.8 Other: TURB Units
Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: CLEAR Odor: Color: LT. ORANGE Other:
Weather Conditions (required daily, or as conditions change): Direction/Speed: Outlook: OVERCAST Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required):
DTW OBSTRUCTION AT 28.75' FROM TOL
2 X 1000ml Poly, 3 X 500ml HNO3 (2 FILTERED), 1 X 500ml H2SO4 AMBER
6XVOA

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
11/14/16 SAM ADUNGTON [Signature] SCS ENGINEERS
Date Name Signature Company

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM



Site Name: ONSL

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID: _____

Sample Point: M4-20
 Sample ID

PURGE INFO
 PURGE DATE (MM DD YY): 11/14/16 PURGE TIME (2400 Hr Clock): 1311 ELAPSED HRS (hrs:min): _____ WATER VOL IN CASING (Gallons): _____ ACTUAL VOL PURGED (Gallons): _____ WELL VOLs PURGED: _____

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLER EQUIPMENT
 Purging and Sampling Equipment... Dedicated: Y N Filter Device: Y N 0.45 µ or _____ µ (circle or fill in)
 Purging Device: C A-Submersible Pump D-Bailer Filter-Type: A A-In-line Disposable C-Vacuum
 B-Peristaltic Pump E-Piston Pump B-Pressure X-Other _____
 Sampling Device: C C-QED Bladder Pump F-Dipper/Bottle
 X-Other: _____ Sample Tube Type: D A-Teflon C-PVC X-Other: _____
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC): _____ (ft/mst) Depth to Water (DTW) (from TOC): 3501 (ft) Groundwater Elevation (site datum, from TOC): _____ (ft/mst)
 Total Well Depth (from TOC): _____ (ft) Stick Up (from ground elevation): _____ (ft) Casing ID: _____ (in) Casing Material: _____

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)	Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (µmhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
		<u>13114</u>		<u>710</u>	<u>211</u>	<u>1436</u>	<u>1790</u>	<u>634</u>	<u>1973</u>
	<u>13117</u>		<u>702</u>	<u>209</u>	<u>1437</u>	<u>345</u>	<u>621</u>	<u>11085</u>	<u>131530</u>
	<u>13120</u>		<u>698</u>	<u>199</u>	<u>1437</u>	<u>11066</u>	<u>638</u>	<u>11149</u>	
	<u>13123</u>		<u>696</u>	<u>197</u>	<u>1436</u>	<u>978</u>	<u>638</u>	<u>1182</u>	<u>31534</u>
	<u>13126</u>		<u>696</u>	<u>198</u>	<u>1436</u>	<u>11144</u>	<u>638</u>	<u>12011</u>	
	<u>13129</u>		<u>694</u>	<u>200</u>	<u>1437</u>	<u>11291</u>	<u>639</u>	<u>1218</u>	<u>31538</u>

Suggested range for 3 consec. readings or note Permit/State requirements: pH +/- 0.2, Conductance +/- 3%, Temp. -, Turbidity +, D.O. +/- 10%, eH/ORP +/- 25 mV, DTW Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA
 SAMPLE DATE (MM DD YY): 11/14/16 pH (std): 694 CONDUCTANCE (µmhos/cm @ 25°C): 200 TEMP. (°C): 1437 TURBIDITY (ntu): 1291 DO (mg/L-ppm): 639 eH/ORP (mV): 1218 Other: Time
 Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: _____ Odor: _____ Color: _____ Other: _____
 Weather Conditions (required daily, or as conditions change): _____ Direction/Speed: _____ Outlook: overcast Precipitation: Y or N
 Specific Comments (including purge/well volume calculations if required): _____

FIELD COMMENTS
DUPLICATE VOLUME COLLECTED AS DUP2 @ 1339
2x 1000ml Poly, 3x 500ml HNO3 (1 FILTERED), 1x 500ml AMBER, 3x VDA
PER SAMPLE VOLUME

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
 Date: 11/14/16 Name: SAM AD-INGRION Signature: [Signature] Company: SOS ENGINEERS

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM



Site Name: OVSL
 Site No.:
 Sample Point: 0400-19C
 Sample ID:

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO
 PURGE DATE (MM DD YY): 11/14/16 PURGE TIME (2400 Hr Clock): 14:06
 ELAPSED HRS (hrs:min): WATER VOL IN CASING (Gallons):
 ACTUAL VOL PURGED (Gallons): WELL VOL PURGED:

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: Y or N
 Filter Device: Y or N 0.45 μ or μ (circle or fill in)
 Purging Device: C A-Submersible Pump D-Bailer
 B-Peristaltic Pump E-Piston Pump
 Sampling Device: C C-QED Bladder Pump F-Dipper/Bottle
 Filter-Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other
 X-Other: Sample Tube Type: C A-Teflon C-PVC X-Other:
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC): (ft/msl) Depth to Water (DTW) (from TOC): 3296 (ft)
 Groundwater Elevation (site datum, from TOC): (ft/msl)
 Total Well Depth (from TOC): (ft) Slick Up (from ground elevation): (ft)
 Casing ID (in): Casing Material:
Note: Total Well Depth, Slick Up, Casing Id. etc. are optional and can be from historical data, unless required by State/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (μ mhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
11/14/16	1 st	741	1141	11.64	1370	1604	1989	
11/14/16	2 nd	730	1149	10.73	1488	1231	7914	3297
11/14/16	3 rd	732	1152	10.64	876	1089	739	
11/14/16	4 th	734	1154	10.65	1632	1056	706	3217
11/14/16		737	1154	10.60	426	1041	673	
11/14/16		739	1154	10.62	589	1036	651	3297
11/14/16		741	1154	10.56	585	1033	631	

Suggested range for 3 consec. readings or note: Permit/State requirements:
 pH: ± 0.2 Conductance: $\pm 3\%$ D.O.: $\pm 10\%$ eH/ORP: ± 25 mV DTW: Stabilize

FIELD DATA
 SAMPLE DATE (MM DD YY): 11/14/16 pH (std): 741
 CONDUCTANCE (μ mhos/cm @ 25°C): 154 TEMP. (°C): 10.56
 TURBIDITY (ntu): 585 DO (mg/L - ppm): 0.33
 eH/ORP (mV): 631 Other: TIME
 Units: 1428
Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site.

Sample Appearance: Odor: Color: Other:
 Weather Conditions (required daily, or as conditions change): Direction/Speed: Outlook: OVERCAST Precipitation: Y or N
 Specific Comments (including purge/well volume calculations if required):

FIELD COMMENTS
2 x 1000ml Poly, 3 x 500ml HNO3 Poly (1 FILTERED), 1 x 500ml AMBER
6 x VOA

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
11/14/16 SAM ADLINGTON [Signature] SLS ENGINEERS
 Date Name Signature Company

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM



Site Name: OVSL
 Site No.:
 Sample Point: MW-29A
 Sample ID

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID: _____

PURGE INFO
 PURGE DATE (MM DD YY): 11/14/16
 PURGE TIME (2400 Hr Clock): 12:26
 ELAPSED HRS (hrs:min):
 WATER VOL IN CASING (Gallons):
 ACTUAL VOL PURGED (Gallons):
 WELL VOLS PURGED:
 Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: Y N
 Purging Device: C A-Submersible Pump D-Bailer
 Sampling Device: C C-QED Bladder Pump E-Piston Pump
 X-Other: _____
 Filter Devices: Y N 0.45 µ or _____ µ (circle or fill in)
 Filter Type: A A-In-line Disposable C-Vacuum
 Sample Tube Type: D A-Teflon C-PVC X-Other: _____
 B-Pressure B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC): _____ (ft/msl)
 Depth to Water (DTW) (from TOC): 1468 (ft)
 Groundwater Elevation (site datum, from TOC): _____ (ft/msl)
 Total Well Depth (from TOC): _____ (ft)
 Stick Up (from ground elevation): _____ (ft)
 Casing ID: _____ (in)
 Casing Material: _____
 Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (µmhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
121219		6.88	183	11.27	41.52	12.36	62.11	
121312		6.79	186	11.27	11.19	10.89	60.7	
121315		6.84	187	11.29	10.87		53.8	
121318		6.94	186	11.26	11.00	10.31	48.2	
121411		6.94	187	11.34	8.84	10.23	47.8	
121414		6.96	187	11.34	8.87	10.23	45.6	

Suggested range for 3 conseq. readings or no. Permit/State requirements:
 pH: +/- 0.2 Conductance: +/- 3% Temp: -- Turbidity: -- D.O.: +/- 10% eH/ORP: +/- 25 mV DTW: Stabilize

FIELD DATA
 SAMPLE DATE (MM DD YY): 11/14/16
 pH (std): 6.96
 CONDUCTANCE (µmhos/cm @ 25°C): 87
 TEMP. (°C): 11.34
 TURBIDITY (ntu): 8.87
 DO (mg/L-ppm): 0.23
 eH/ORP (mV): 45.6
 Other: Time
 Units: 1244
 Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: _____ Odor: _____ Color: _____ Other: _____
 Weather Conditions (required daily, or as conditions change): _____ Direction/Speed: _____ Outlook: OVERCAST Precipitation: Y or N
 Specific Comments (including purge/well volume calculations if required): _____

FIELD COMMENTS
WATER LEVEL FLUCTUATING INCONSISTENTLY DURING PURGE.
POTENTIAL ISSUE w/ LOW CONDUCTIVITY & WATER LEVEL METER.
2 x 1000ml Poly, 3 x 500ml HNO3 (FILTERED), 1 x 500ml H2SO4 AMBER
6xVOA

I certify that sampling procedures were in accordance with applicable EPA, State, and WMA protocols (if more than one sampler, all should sign):
11/14/16 SAM ADONIZON [Signature] SOS ENGINEERS
 Date Name Signature Company

Chain of Custody Record 8104 R51 6916
8104 B151 6927

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

Carrier Tracking No(s): 8104 B151 6890
8104 B151 6905

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

Sampler: Sam B. + Sam A.
Phone: 612-940-2980

Due Date Requested: Standard
TAT Requested (days):

PO #: WO #:

Project #: 28002692
SSOW#:

Project Name: WA02(Olympic View Sanitary) LF
Event Desc: Quarterly GW Appl/II - Mar Jun Sep Dec
Site: Washington

Client Information
Mr. Patrick Madej
Waste Management
2615 Davis Street
San Leandro
CA, 94577
612-940-2980
SGrabner@sscengineers.com

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastewater, BT=Testum, AA=Air)	Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		TDS/AiKs/Cl/SO4/NO3/cad		Dissolved Metals		Ammonia/TOC		8260B - long list (TA Buffalo)		8260B SIM (TA Buffalo)		Total Metals		TSS		Total Arsenic (direct sub to ARI)		Total Number of containers	Special Instructions/Note:
					Y	N	Y	N	N	D	S	A	A	D	N	D	X	X	X	X	X	X	X	X		
MW-13A	11/14/16	1043	G	W	Y	N	Y	N	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	11	Short Hold: NO3(cad)
MW-13B	11/14/16	1135																								Arsenic - Direct sub to ARI
MW-16		1248																								
MW-39		1354																								
MW-4		1500																								
MW-43		1158																								
MW-29A		1244																								
MW-20		1329																								
Dup 2		1339																								
MW-19C		1428																								
Trip blank																										

Barcode: 280-90968 Chain of Custody

Analysis Requested: Return To Client Disposal By Lab Archive For _____ Months

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Special Instructions/QC Requirements:

Empty Kit Relinquished by: _____ Date: _____

Relinquished by: _____ Date: 11/14/16 1600 Company: SES

Relinquished by: _____ Date: _____ Company: _____

Relinquished by: _____ Date: _____ Company: _____

Custody Seal No: 876317, 876318, 876315, 876316
Custody Seal Intact: _____

Company: F47
Company: _____
Company: _____

Received by: _____ Date: 11/15/16 0850
Received by: _____ Date: _____
Received by: _____ Date: _____

Cooler Temperature(s): _____
612-940-2980 #5 transferred by SA 11/15/16

Chain of Custody Record



Client Information (Sub Contract Lab)		Lab PM: Sara, Betsy A	Carrier Tracking No(s):	COC No: 280-377778-1						
Client Contact: Shipping/Receiving		E-Mail: betsy.sara@testamericainc.com	State of Origin: Washington	Page: Page 1 of 2						
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Oregon	Job #: 280-90968-1	Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NH4SO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:						
Address: 10 Hazelwood Drive, Anthrherst, NY, 14228-2298		Due Date Requested: 12/2/2016	Analysis Requested:							
Phone: 716-691-2600(Tel) 716-691-7991(Fax)		TAT Requested (days):	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)							
Email:		PO #:	Total Number of Containers							
WO #:		Project #:	Special Instructions/Note:							
Project Name: WA02 Olympic View Sanitary LF		SSOW#:								
Site: WA02 Olympic View Sanitary LF										
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=water/soil, BT=Tissue, As=Air)	Field Filled Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C/5030C (MOD) Appendix II Volatiles	8260C SIM/5030C (MOD) Local Method	Total Number of Containers	Special Instructions/Note:
MW-13A (280-90968-1)	11/14/16	10:04 Pacific	Water	Water	X	X	X	X	6	
MW-13B (280-90968-2)	11/14/16	11:35 Pacific	Water	Water	X	X	X	X	6	
MW-16 (280-90968-3)	11/14/16	12:48 Pacific	Water	Water	X	X	X	X	6	
MW-39 (280-90968-4)	11/14/16	13:54 Pacific	Water	Water	X	X	X	X	6	
MW-4 (280-90968-5)	11/14/16	15:00 Pacific	Water	Water	X	X	X	X	6	
MW-43 (280-90968-6)	11/14/16	11:58 Pacific	Water	Water	X	X	X	X	6	
MW-20 (280-90968-7)	11/14/16	13:29 Pacific	Water	Water	X	X	X	X	6	
DUP2 (280-90968-8)	11/14/16	13:39 Pacific	Water	Water	X	X	X	X	6	
MW-19C (280-90968-9)	11/14/16	14:28 Pacific	Water	Water	X	X	X	X	6	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon our 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/test/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 compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification
 Unconfirmed
 Deliverable Requested: I, II, III, IV, Other (specify) _____ Primary Deliverable Rank: 2
 Empty Kit Relinquished by: _____ Date: _____
 Relinquished by: *Se* Date/Time: 11-15-16 15:30 Company: TAD
 Relinquished by: _____ Date/Time: _____ Company: _____
 Relinquished by: _____ Date/Time: _____ Company: _____
 Custody Seals Intact: _____ Custody Seal No.: _____
 Δ Yes Δ No

Received by: *ASD-TAS* Date/Time: 11/16/16 09:30 Company: TABUR
 Received by: _____ Date/Time: _____ Company: _____
 Received by: _____ Date/Time: _____ Company: _____
 Cooler Temperature(s) °C and Other Remarks: *1 2 7 6*

Special Instructions/QC Requirements:
 Return To Client Disposal By Lab Archive For _____ Months
 Method of Shipment: _____

Chain of Custody Record

Client Information (Sub Contract Lab)		Sampler:	Lab PM:	Carrier Tracking No(s):	COC No:																																																																																																														
Client Contact:		Phone:	Sara, Betsy A	State of Origin:	280-37778-2																																																																																																														
Shipping/Receiving		E-Mail:	betsy.sara@testamericainc.com	Washington	Page 2 of 2																																																																																																														
Company:		Accreditations Required (See note):		Job #:	280-90968-1																																																																																																														
TestAmerica Laboratories, Inc.		NELAP - Oregon		Preservation Codes:																																																																																																															
Address:		Due Date Requested:	Analysis Requested																																																																																																																
10 Hazelwood Drive,		12/2/2016																																																																																																																	
City:	Amherst	TAT Requested (days):	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Sample ID (Lab ID)</th> <th>Sample Date</th> <th>Sample Time</th> <th>Sample Type (C=Comp, G=grab)</th> <th>Matrix (W=water, S=solid, O=wastewater, BT=Tissue, AA=Air)</th> <th>Field Filtered Sample (Yes or No)</th> <th>Perform MS/MSD (Yes or No)</th> <th>8260C/5030C (MOD) Appendix II Volatiles</th> <th>8260C_SIM/5030C (MOD) Local Method</th> <th>Total Number of Containers</th> <th>Special Instructions/Note:</th> </tr> </thead> <tbody> <tr> <td>TRIP BLANK (280-90968-10)</td> <td>11/14/16</td> <td>Pacific</td> <td></td> <td>Water</td> <td>X</td> <td></td> <td>X</td> <td>X</td> <td>4</td> <td></td> </tr> <tr> <td>MW-29A (280-90968-11)</td> <td>11/14/16</td> <td>12:44 Pacific</td> <td></td> <td>Water</td> <td>X</td> <td></td> <td>X</td> <td>X</td> <td>6</td> <td></td> </tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>			Sample ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastewater, BT=Tissue, AA=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C/5030C (MOD) Appendix II Volatiles	8260C_SIM/5030C (MOD) Local Method	Total Number of Containers	Special Instructions/Note:	TRIP BLANK (280-90968-10)	11/14/16	Pacific		Water	X		X	X	4		MW-29A (280-90968-11)	11/14/16	12:44 Pacific		Water	X		X	X	6																																																																														
Sample ID (Lab ID)	Sample Date	Sample Time				Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastewater, BT=Tissue, AA=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C/5030C (MOD) Appendix II Volatiles	8260C_SIM/5030C (MOD) Local Method	Total Number of Containers	Special Instructions/Note:																																																																																																						
TRIP BLANK (280-90968-10)	11/14/16	Pacific					Water	X		X	X	4																																																																																																							
MW-29A (280-90968-11)	11/14/16	12:44 Pacific					Water	X		X	X	6																																																																																																							
State, Zip:	NY, 14228-2298	PO #:	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2">Preservation Codes:</th> </tr> <tr> <td>A - HCL</td> <td>M - Hexane</td> </tr> <tr> <td>B - NaOH</td> <td>N - None</td> </tr> <tr> <td>C - Zn Acetate</td> <td>O - AshNaO2</td> </tr> <tr> <td>D - Nitric Acid</td> <td>P - Na2O4S</td> </tr> <tr> <td>E - NaHSO4</td> <td>Q - Na2SO3</td> </tr> <tr> <td>F - MeOH</td> <td>R - Na2S2O3</td> </tr> <tr> <td>G - Amchlor</td> <td>S - H2SO4</td> </tr> <tr> <td>H - Ascorbic Acid</td> <td>T - TSP Dodecahydrate</td> </tr> <tr> <td>I - Ice</td> <td>U - Acetone</td> </tr> <tr> <td>J - DI Water</td> <td>V - MCAA</td> </tr> <tr> <td>K - EDTA</td> <td>W - pH 4-5</td> </tr> <tr> <td>L - EDA</td> <td>Z - other (specify)</td> </tr> <tr> <td>Other:</td> <td></td> </tr> </thead> </table>			Preservation Codes:		A - HCL	M - Hexane	B - NaOH	N - None	C - Zn Acetate	O - AshNaO2	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:																																																																																			
Preservation Codes:																																																																																																																			
A - HCL	M - Hexane																																																																																																																		
B - NaOH	N - None																																																																																																																		
C - Zn Acetate	O - AshNaO2																																																																																																																		
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:																																																																																																																			
Project #:	28002692	WO #:																																																																																																																	
Site:	WA02(Olympic View Sanitary LF)	Project Name:	WA02(Olympic View Sanitary LF)																																																																																																																
		Site:	WA02(Olympic View Sanitary LF)																																																																																																																

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon our 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/test/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 compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification

Unconfirmed Return To Client Disposal By Lab Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2

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

Relinquished by: *SR* Date/Time: 11-15-16 15:30 Company: TAP
 Relinquished by: _____ Date/Time: _____ Company: _____
 Relinquished by: _____ Date/Time: _____ Company: _____

Custody Seals Intact: Yes No Δ No Δ No Δ No
 Cooler Temperature(s) °C and Other Remarks: *AI 27°C*

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-90968-1

Login Number: 90968
List Number: 1
Creator: True, Joshua A

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.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-90968-1

Login Number: 90968
List Number: 2
Creator: Hulbert, Michael J

List Source: TestAmerica Buffalo
List Creation: 11/16/16 05:36 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	2.7 #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.	False	Two samples received broken- G-4 & H-6
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

ANALYTICAL REPORT

Job Number: 280-91129-1

Job Description: WA02|Olympic View Sanitary LF

For:

Waste Management
Sun Valley Hauling
9081 Tujunga Avenue
Sun Valley, CA 91352

Attention: Mr. Phil Perley



Approved for release.
Betsy A Sara
Project Manager II
12/15/2016 12:51 PM

Betsy A Sara, Project Manager II
4955 Yarrow Street, Arvada, CO, 80002
(303)736-0189
betsy.sara@testamericainc.com
12/15/2016

cc: Mr. Dan Venchiarutti

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.

TestAmerica Laboratories, Inc.

TestAmerica Denver 4955 Yarrow Street, Arvada, CO 80002
Tel (303) 736-0100 Fax (303) 431-7171 www.testamericainc.com



Table of Contents

Cover Title Page	1
Report Narrative	3
Executive Summary	5
Method Summary	8
Method / Analyst Summary	9
Sample Summary	10
Sample Results	11
Sample Datasheets	12
Data Qualifiers	44
QC Results	45
Qc Association Summary	46
Surrogate Recovery Report	52
Qc Reports	54
Laboratory Chronicle	102
Client Chain of Custody	110
Sample Receipt Checklist	115

CASE NARRATIVE

Client: Waste Management

Project: WA02|Olympic View Sanitary LF

Report Number: 280-91129-1

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

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

Sample Receiving

The samples were received on 11/17/2016; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 0.6 C.

Holding Times

All holding times were within established control limits.

Method Blanks

Vinyl chloride Method 8260C SIM was detected in the Method Blanks below the project established reporting limits. No corrective action is taken for any values in Method Blanks that are below the requested reporting limits.

Sulfate Method 300.0 was detected in the Method Blank above the reporting limit. Because the associated sample MW-23A exhibited a detection of Sulfate below the TestAmerica Denver reporting limit, 5 mg/L, reanalysis was not performed.

All other Method Blank recoveries were within established control limits.

Laboratory Control Samples (LCS)

The Method 8260C LCS exhibited recoveries of n-Butyl alcohol and tert-Butyl alcohol below the lower control limits. A full list spike was utilized for Method 8260C, however a short list spike was reported. The laboratory's SOP for Method 8260C allows for three analytes to recover outside criteria when a full list spike is utilized, and therefore reanalysis was deemed unnecessary.

All other Laboratory Control Samples were within established control limits.

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

The Matrix Spikes and Matrix Spike Duplicates performed on samples from other clients exhibited recoveries outside control limits for Vinyl chloride Method and Methyl acetate 8260C. Because the corresponding Laboratory Control Samples and the Method Blank samples were within control limits, these anomalies may be due to matrix interference and no corrective action was taken.

The percent recoveries and/or relative percent difference of the MS/MSD performed on a sample from another client were outside control limits for Dissolved Manganese Method 6020 because the sample concentration was greater than four times the spike amount. Because the corresponding Laboratory Control Sample and the Method Blank sample were within control limits, no corrective action was taken.

Sample MW-42 was selected to fulfill the laboratory batch quality control requirements for Method 6020. Analysis of the laboratory generated MS/MSD for this sample exhibited recoveries of Total Barium above the upper control limit. 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.

The percent recoveries and/or relative percent difference of the MS/MSD performed on sample MW-42 were outside control limits for Total Manganese Method 6020 because the sample concentration was greater than four times the spike amount. Because the corresponding Laboratory Control Sample and the Method Blank sample were within control limits, no corrective action was taken.

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

Organics

The analytes Acrolein, Acrylonitrile and 2-chloroethyl vinyl ether cannot be reliably quantitated in acid preserved samples, therefore, the reporting limits for the analytes Acrolein, Acrylonitrile and 2-chloroethyl vinyl ether is not reliable or defensible.

General Comments

The analyses for Volatile Organics by Method 8260C and Volatile Organics by Method 8260C SIM were performed by TestAmerica Buffalo. Their address and phone number are:

TestAmerica Buffalo

10 Hazelwood Drive, Suite 106

Amherst, NY 14228

716-691-2600

EXECUTIVE SUMMARY - Detections

Client: Waste Management

Job Number: 280-91129-1

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-91129-1	MW-23A					
Depth to water		12.06			ft	Field Sampling
Specific Conductivity		88			umhos/cm	Field Sampling
Dissolved Oxygen		4.02			mg/L	Field Sampling
eH		145.0			millivolts	Field Sampling
Turbidity		1.64			NTU	Field Sampling
Temperature		12.49			Degrees C	Field Sampling
pH		6.11			SU	Field Sampling
Sulfate		2.3	B	1.0	mg/L	300.0
Nitrate as N		0.24		0.050	mg/L	353.2
Alkalinity, Total (As CaCO3)		40		5.0	mg/L	SM 2320B
Alkalinity, Bicarbonate (As CaCO3)		40		5.0	mg/L	SM 2320B
Total Dissolved Solids (TDS)		87		5.0	mg/L	SM 2540C
Total Suspended Solids		26		4.0	mg/L	SM 2540D
<i>Dissolved</i>						
Calcium, Dissolved		7.8		0.040	mg/L	6010B
Magnesium, Dissolved		3.4		0.050	mg/L	6010B
Sodium, Dissolved		3.5		1.0	mg/L	6010B
Manganese, Dissolved		0.035		0.0010	mg/L	6020
<i>Total Recoverable</i>						
Iron, Total		0.098		0.060	mg/L	6010B
Barium, Total		0.0078		0.0010	mg/L	6020
Manganese, Total		0.065		0.0010	mg/L	6020

EXECUTIVE SUMMARY - Detections

Client: Waste Management

Job Number: 280-91129-1

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-91129-2	MW-32					
Vinyl chloride		0.46	B	0.020	ug/L	8260C SIM
Depth to water		1.08			ft	Field Sampling
Specific Conductivity		251			umhos/cm	Field Sampling
Dissolved Oxygen		1.18			mg/L	Field Sampling
eH		-2.3			millivolts	Field Sampling
Turbidity		1.50			NTU	Field Sampling
Temperature		12.13			Degrees C	Field Sampling
pH		7.60			SU	Field Sampling
Chloride		7.0		1.0	mg/L	300.0
Sulfate		8.3		1.0	mg/L	300.0
Alkalinity, Total (As CaCO3)		110		5.0	mg/L	SM 2320B
Alkalinity, Bicarbonate (As CaCO3)		110		5.0	mg/L	SM 2320B
Total Dissolved Solids (TDS)		150		5.0	mg/L	SM 2540C
Total Suspended Solids		9.6		4.0	mg/L	SM 2540D
<i>Dissolved</i>						
Calcium, Dissolved		20		0.040	mg/L	6010B
Iron, Dissolved		0.50		0.060	mg/L	6010B
Magnesium, Dissolved		10		0.050	mg/L	6010B
Potassium, Dissolved		1.0		1.0	mg/L	6010B
Sodium, Dissolved		12		1.0	mg/L	6010B
Manganese, Dissolved		1.7		0.0010	mg/L	6020
<i>Total Recoverable</i>						
Iron, Total		0.61		0.060	mg/L	6010B
Barium, Total		0.0032		0.0010	mg/L	6020
Manganese, Total		1.8		0.0010	mg/L	6020

EXECUTIVE SUMMARY - Detections

Client: Waste Management

Job Number: 280-91129-1

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-91129-3	MW-42					
Vinyl chloride		0.026	B	0.020	ug/L	8260C SIM
Depth to water		26.41			ft	Field Sampling
Specific Conductivity		550			umhos/cm	Field Sampling
Dissolved Oxygen		0.30			mg/L	Field Sampling
eH		-53.5			millivolts	Field Sampling
Turbidity		3.75			NTU	Field Sampling
Temperature		12.57			Degrees C	Field Sampling
pH		7.49			SU	Field Sampling
Chloride		12		1.0	mg/L	300.0
Sulfate		6.3		1.0	mg/L	300.0
Ammonia (as N)		5.4		0.060	mg/L	350.1
Alkalinity, Total (As CaCO3)		220		5.0	mg/L	SM 2320B
Alkalinity, Bicarbonate (As CaCO3)		220		5.0	mg/L	SM 2320B
Total Dissolved Solids (TDS)		250		5.0	mg/L	SM 2540C
Total Suspended Solids		31		4.0	mg/L	SM 2540D
Total Organic Carbon - Average		7.2		1.0	mg/L	SM 5310B
<i>Dissolved</i>						
Calcium, Dissolved		42		0.040	mg/L	6010B
Iron, Dissolved		27		0.060	mg/L	6010B
Magnesium, Dissolved		14		0.050	mg/L	6010B
Potassium, Dissolved		8.7		1.0	mg/L	6010B
Sodium, Dissolved		21		1.0	mg/L	6010B
Manganese, Dissolved		4.5		0.0010	mg/L	6020
<i>Total Recoverable</i>						
Iron, Total		27		0.060	mg/L	6010B
Barium, Total		0.11	F1	0.0010	mg/L	6020
Manganese, Total		4.4		0.0010	mg/L	6020

METHOD SUMMARY

Client: Waste Management

Job Number: 280-91129-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Metals (ICP)	TAL DEN	SW846 6010B	
Preparation, Total Recoverable or Dissolved Metals	TAL DEN		SW846 3005A
Metals (ICP)	TAL DEN	SW846 6010B	
Preparation, Total Recoverable or Dissolved Metals	TAL DEN		SW846 3005A
Sample Filtration, Field			FIELD_FLTRD
Metals (ICP/MS)	TAL DEN	SW846 6020	
Preparation, Total Recoverable or Dissolved Metals	TAL DEN		SW846 3005A
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	
Nitrogen, Ammonia	TAL DEN	MCAWW 350.1	
Nitrate	TAL DEN	EPA 353.2	
Alkalinity	TAL DEN	SM SM 2320B	
Solids, Total Dissolved (TDS)	TAL DEN	SM SM 2540C	
Solids, Total Suspended (TSS)	TAL DEN	SM SM 2540D	
Organic Carbon, Total (TOC)	TAL DEN	SM SM 5310B	
Field Sampling	TAL DEN	EPA Field Sampling	
Volatile Organic Compounds by GC/MS	TAL BUF	SW846 8260C	
Purge and Trap	TAL BUF		SW846 5030C
Volatile Organic Compounds (GC/MS)	TAL BUF	SW846 8260C SIM	
Purge and Trap	TAL BUF		SW846 5030C

Lab References:

TAL BUF = TestAmerica Buffalo

TAL DEN = TestAmerica Denver

Method References:

EPA = US Environmental Protection Agency

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: Waste Management

Job Number: 280-91129-1

Method	Analyst	Analyst ID
SW846 8260C	Archer, Nicholas E	NEA
SW846 8260C SIM	Archer, Nicholas E	NEA
SW846 8260C SIM	Cwiklinski, Charles D	CDC
SW846 6010B	Lackey, Cara M	CML
SW846 6010B	Scott, Samantha J	SJS
SW846 6020	Trudell, Lynn-Anne M	LMT
EPA Field Sampling	Krisorn, Chamaiporn 1	C1K
MCAWW 300.0	Benson, Alex F	AFB
MCAWW 350.1	Spedale, Morgan A	MAS
EPA 353.2	Allen, Andrew J	AJA
SM SM 2320B	Carter, Melynda M	MMC
SM SM 2540C	Pedrick, Joshua A	JAP
SM SM 2540D	Cherry, Scott V	SVC
SM SM 5310B	Jewell, Connie C	CCJ

SAMPLE SUMMARY

Client: Waste Management

Job Number: 280-91129-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-91129-1	MW-23A	Water	11/16/2016 1305	11/17/2016 1705
280-91129-2	MW-32	Water	11/16/2016 1405	11/17/2016 1705
280-91129-3	MW-42	Water	11/16/2016 1500	11/17/2016 1705
280-91129-4TB	TRIP BLANK	Water	11/16/2016 0000	11/17/2016 1705

SAMPLE RESULTS

Analytical Data

Client: Waste Management

Job Number: 280-91129-1

Client Sample ID: MW-23A

Lab Sample ID: 280-91129-1

Date Sampled: 11/16/2016 1305

Client Matrix: Water

Date Received: 11/17/2016 1705

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333598	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S0009.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/27/2016 1623		Final Weight/Volume: 5 mL
Prep Date: 11/27/2016 1623		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	ND		0.35	1.0
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,1-Dichloropropene	ND		0.72	1.0
1,2,3-Trichlorobenzene	ND		0.41	1.0
1,2,3-Trichloropropane	ND		0.89	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2,4-Trimethylbenzene	ND		0.75	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane (EDB)	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloroethene, Total	ND		0.81	2.0
1,2-Dichloropropane	ND		0.72	1.0
1,3,5-Trichlorobenzene	ND		0.23	1.0
1,3,5-Trimethylbenzene	ND		0.77	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,3-Dichloropropane	ND		0.75	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
1,4-Dioxane	ND		9.3	40
2,2-Dichloropropane	ND		0.40	1.0
2-Butanone (MEK)	ND		1.3	10
2-Chloroethyl vinyl ether	ND		0.96	5.0
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Acetonitrile	ND		4.9	15
Acrolein	ND		0.91	20
Acrylonitrile	ND		0.83	5.0
Benzene	ND		0.41	1.0
Bromobenzene	ND		0.80	1.0
Bromochloromethane	ND		0.87	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Butyl alcohol, n-	ND		8.9	40
Butyl alcohol, tert-	ND		3.3	10
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Chlorodifluoromethane	ND		0.26	1.0
Chloroethane	ND		0.32	1.0

Analytical Data

Client: Waste Management

Job Number: 280-91129-1

Client Sample ID: MW-23A

Lab Sample ID: 280-91129-1

Date Sampled: 11/16/2016 1305

Client Matrix: Water

Date Received: 11/17/2016 1705

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333598	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S0009.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/27/2016 1623		Final Weight/Volume: 5 mL
Prep Date: 11/27/2016 1623		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dibromochloromethane	ND		0.32	1.0
Dibromomethane	ND		0.41	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Dichlorofluoromethane	ND		0.34	1.0
Ethyl acetate	ND		0.66	1.0
Ethyl ether	ND		0.72	1.0
Ethyl tert-butyl ether	ND		0.29	1.0
Ethylbenzene	ND		0.74	1.0
Hexachlorobutadiene	ND		0.28	1.0
Hexane	ND		0.40	10
Iodomethane	ND		0.30	1.0
Isobutanol	ND		4.8	25
Isopropyl ether	ND		0.59	1.0
Isopropylbenzene	ND		0.79	1.0
Methacrylonitrile	ND		0.69	5.0
Methyl acetate	ND		1.3	2.5
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
Naphthalene	ND		0.43	1.0
n-Butylbenzene	ND		0.64	1.0
N-Propylbenzene	ND		0.69	1.0
o-Chlorotoluene	ND		0.86	1.0
o-Xylene	ND		0.76	1.0
p-Chlorotoluene	ND		0.84	1.0
p-Cymene	ND		0.31	1.0
sec-Butylbenzene	ND		0.75	1.0
Styrene	ND		0.73	1.0
Tert-amyl methyl ether	ND		0.27	1.0
tert-Butylbenzene	ND		0.81	1.0
Tetrachloroethene	ND		0.36	1.0
Tetrahydrofuran	ND		1.3	5.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
trans-1,4-Dichloro-2-butene	ND		0.22	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0
Vinyl acetate	ND		0.85	5.0
Vinyl chloride	ND		0.90	1.0

Analytical Data

Client: Waste Management

Job Number: 280-91129-1

Client Sample ID: MW-23A

Lab Sample ID: 280-91129-1

Date Sampled: 11/16/2016 1305

Client Matrix: Water

Date Received: 11/17/2016 1705

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333598	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S0009.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/27/2016 1623		Final Weight/Volume: 5 mL
Prep Date: 11/27/2016 1623		

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	100		77 - 120
4-Bromofluorobenzene (Surr)	94		73 - 120
Toluene-d8 (Surr)	99		80 - 120

Analytical Data

Client: Waste Management

Job Number: 280-91129-1

Client Sample ID: MW-23A

Lab Sample ID: 280-91129-1

Date Sampled: 11/16/2016 1305

Client Matrix: Water

Date Received: 11/17/2016 1705

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333598	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S0009.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/27/2016 1623		Final Weight/Volume: 5 mL
Prep Date: 11/27/2016 1623		

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
67-72-1	Hexachloroethane TIC	ND	

Analytical Data

Client: Waste Management

Job Number: 280-91129-1

Client Sample ID: MW-32

Lab Sample ID: 280-91129-2

Date Sampled: 11/16/2016 1405

Client Matrix: Water

Date Received: 11/17/2016 1705

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333598	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S0010.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/27/2016 1646		Final Weight/Volume: 5 mL
Prep Date: 11/27/2016 1646		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	ND		0.35	1.0
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,1-Dichloropropene	ND		0.72	1.0
1,2,3-Trichlorobenzene	ND		0.41	1.0
1,2,3-Trichloropropane	ND		0.89	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2,4-Trimethylbenzene	ND		0.75	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane (EDB)	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloroethene, Total	ND		0.81	2.0
1,2-Dichloropropane	ND		0.72	1.0
1,3,5-Trichlorobenzene	ND		0.23	1.0
1,3,5-Trimethylbenzene	ND		0.77	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,3-Dichloropropane	ND		0.75	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
1,4-Dioxane	ND		9.3	40
2,2-Dichloropropane	ND		0.40	1.0
2-Butanone (MEK)	ND		1.3	10
2-Chloroethyl vinyl ether	ND		0.96	5.0
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Acetonitrile	ND		4.9	15
Acrolein	ND		0.91	20
Acrylonitrile	ND		0.83	5.0
Benzene	ND		0.41	1.0
Bromobenzene	ND		0.80	1.0
Bromochloromethane	ND		0.87	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Butyl alcohol, n-	ND		8.9	40
Butyl alcohol, tert-	ND		3.3	10
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Chlorodifluoromethane	ND		0.26	1.0
Chloroethane	ND		0.32	1.0

Analytical Data

Client: Waste Management

Job Number: 280-91129-1

Client Sample ID: MW-32

Lab Sample ID: 280-91129-2

Date Sampled: 11/16/2016 1405

Client Matrix: Water

Date Received: 11/17/2016 1705

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-333598	Instrument ID:	HP5973S
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	S0010.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	11/27/2016 1646			Final Weight/Volume:	5 mL
Prep Date:	11/27/2016 1646				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dibromochloromethane	ND		0.32	1.0
Dibromomethane	ND		0.41	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Dichlorofluoromethane	ND		0.34	1.0
Ethyl acetate	ND		0.66	1.0
Ethyl ether	ND		0.72	1.0
Ethyl tert-butyl ether	ND		0.29	1.0
Ethylbenzene	ND		0.74	1.0
Hexachlorobutadiene	ND		0.28	1.0
Hexane	ND		0.40	10
Iodomethane	ND		0.30	1.0
Isobutanol	ND		4.8	25
Isopropyl ether	ND		0.59	1.0
Isopropylbenzene	ND		0.79	1.0
Methacrylonitrile	ND		0.69	5.0
Methyl acetate	ND		1.3	2.5
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
Naphthalene	ND		0.43	1.0
n-Butylbenzene	ND		0.64	1.0
N-Propylbenzene	ND		0.69	1.0
o-Chlorotoluene	ND		0.86	1.0
o-Xylene	ND		0.76	1.0
p-Chlorotoluene	ND		0.84	1.0
p-Cymene	ND		0.31	1.0
sec-Butylbenzene	ND		0.75	1.0
Styrene	ND		0.73	1.0
Tert-amyl methyl ether	ND		0.27	1.0
tert-Butylbenzene	ND		0.81	1.0
Tetrachloroethene	ND		0.36	1.0
Tetrahydrofuran	ND		1.3	5.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
trans-1,4-Dichloro-2-butene	ND		0.22	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0
Vinyl acetate	ND		0.85	5.0
Vinyl chloride	ND		0.90	1.0

Analytical Data

Client: Waste Management

Job Number: 280-91129-1

Client Sample ID: MW-32

Lab Sample ID: 280-91129-2

Date Sampled: 11/16/2016 1405

Client Matrix: Water

Date Received: 11/17/2016 1705

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333598	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S0010.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/27/2016 1646		Final Weight/Volume: 5 mL
Prep Date: 11/27/2016 1646		

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	102		77 - 120
4-Bromofluorobenzene (Surr)	95		73 - 120
Toluene-d8 (Surr)	100		80 - 120

Analytical Data

Client: Waste Management

Job Number: 280-91129-1

Client Sample ID: MW-32

Lab Sample ID: 280-91129-2

Date Sampled: 11/16/2016 1405

Client Matrix: Water

Date Received: 11/17/2016 1705

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333598	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S0010.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/27/2016 1646		Final Weight/Volume: 5 mL
Prep Date: 11/27/2016 1646		

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
67-72-1	Hexachloroethane TIC	ND	

Analytical Data

Client: Waste Management

Job Number: 280-91129-1

Client Sample ID: MW-42

Lab Sample ID: 280-91129-3

Date Sampled: 11/16/2016 1500

Client Matrix: Water

Date Received: 11/17/2016 1705

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333730	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S0066.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/28/2016 2353		Final Weight/Volume: 5 mL
Prep Date: 11/28/2016 2353		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	ND		0.35	1.0
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,1-Dichloropropene	ND		0.72	1.0
1,2,3-Trichlorobenzene	ND		0.41	1.0
1,2,3-Trichloropropane	ND		0.89	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2,4-Trimethylbenzene	ND		0.75	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane (EDB)	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloroethene, Total	ND		0.81	2.0
1,2-Dichloropropane	ND		0.72	1.0
1,3,5-Trichlorobenzene	ND		0.23	1.0
1,3,5-Trimethylbenzene	ND		0.77	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,3-Dichloropropane	ND		0.75	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
1,4-Dioxane	ND		9.3	40
2,2-Dichloropropane	ND		0.40	1.0
2-Butanone (MEK)	ND		1.3	10
2-Chloroethyl vinyl ether	ND		0.96	5.0
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Acetonitrile	ND		4.9	15
Acrolein	ND		0.91	20
Acrylonitrile	ND		0.83	5.0
Benzene	ND		0.41	1.0
Bromobenzene	ND		0.80	1.0
Bromochloromethane	ND		0.87	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Butyl alcohol, n-	ND	*	8.9	40
Butyl alcohol, tert-	ND	*	3.3	10
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Chlorodifluoromethane	ND		0.26	1.0
Chloroethane	ND		0.32	1.0

Analytical Data

Client: Waste Management

Job Number: 280-91129-1

Client Sample ID: MW-42

Lab Sample ID: 280-91129-3

Date Sampled: 11/16/2016 1500

Client Matrix: Water

Date Received: 11/17/2016 1705

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-333730	Instrument ID:	HP5973S
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	S0066.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	11/28/2016 2353			Final Weight/Volume:	5 mL
Prep Date:	11/28/2016 2353				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dibromochloromethane	ND		0.32	1.0
Dibromomethane	ND		0.41	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Dichlorofluoromethane	ND		0.34	1.0
Ethyl acetate	ND		0.66	1.0
Ethyl ether	ND		0.72	1.0
Ethyl tert-butyl ether	ND		0.29	1.0
Ethylbenzene	ND		0.74	1.0
Hexachlorobutadiene	ND		0.28	1.0
Hexane	ND		0.40	10
Iodomethane	ND		0.30	1.0
Isobutanol	ND		4.8	25
Isopropyl ether	ND		0.59	1.0
Isopropylbenzene	ND		0.79	1.0
Methacrylonitrile	ND		0.69	5.0
Methyl acetate	ND		1.3	2.5
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
Naphthalene	ND		0.43	1.0
n-Butylbenzene	ND		0.64	1.0
N-Propylbenzene	ND		0.69	1.0
o-Chlorotoluene	ND		0.86	1.0
o-Xylene	ND		0.76	1.0
p-Chlorotoluene	ND		0.84	1.0
p-Cymene	ND		0.31	1.0
sec-Butylbenzene	ND		0.75	1.0
Styrene	ND		0.73	1.0
Tert-amyl methyl ether	ND		0.27	1.0
tert-Butylbenzene	ND		0.81	1.0
Tetrachloroethene	ND		0.36	1.0
Tetrahydrofuran	ND		1.3	5.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
trans-1,4-Dichloro-2-butene	ND		0.22	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0
Vinyl acetate	ND		0.85	5.0
Vinyl chloride	ND		0.90	1.0

Analytical Data

Client: Waste Management

Job Number: 280-91129-1

Client Sample ID: MW-42

Lab Sample ID: 280-91129-3

Client Matrix: Water

Date Sampled: 11/16/2016 1500

Date Received: 11/17/2016 1705

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333730	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S0066.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/28/2016 2353		Final Weight/Volume: 5 mL
Prep Date: 11/28/2016 2353		

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	98		77 - 120
4-Bromofluorobenzene (Surr)	95		73 - 120
Toluene-d8 (Surr)	100		80 - 120

Analytical Data

Client: Waste Management

Job Number: 280-91129-1

Client Sample ID: MW-42

Lab Sample ID: 280-91129-3

Date Sampled: 11/16/2016 1500

Client Matrix: Water

Date Received: 11/17/2016 1705

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analysis Batch: 480-333730

Instrument ID: HP5973S

Prep Method: 5030C

Prep Batch: N/A

Lab File ID: S0066.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Analysis Date: 11/28/2016 2353

Final Weight/Volume: 5 mL

Prep Date: 11/28/2016 2353

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
67-72-1	Hexachloroethane TIC	ND	

Analytical Data

Client: Waste Management

Job Number: 280-91129-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 280-91129-4TB

Date Sampled: 11/16/2016 0000

Client Matrix: Water

Date Received: 11/17/2016 1705

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333598	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S0012.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/27/2016 1732		Final Weight/Volume: 5 mL
Prep Date: 11/27/2016 1732		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	ND		0.35	1.0
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,1-Dichloropropene	ND		0.72	1.0
1,2,3-Trichlorobenzene	ND		0.41	1.0
1,2,3-Trichloropropane	ND		0.89	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2,4-Trimethylbenzene	ND		0.75	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane (EDB)	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloroethene, Total	ND		0.81	2.0
1,2-Dichloropropane	ND		0.72	1.0
1,3,5-Trichlorobenzene	ND		0.23	1.0
1,3,5-Trimethylbenzene	ND		0.77	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,3-Dichloropropane	ND		0.75	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
1,4-Dioxane	ND		9.3	40
2,2-Dichloropropane	ND		0.40	1.0
2-Butanone (MEK)	ND		1.3	10
2-Chloroethyl vinyl ether	ND		0.96	5.0
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Acetonitrile	ND		4.9	15
Acrolein	ND		0.91	20
Acrylonitrile	ND		0.83	5.0
Benzene	ND		0.41	1.0
Bromobenzene	ND		0.80	1.0
Bromochloromethane	ND		0.87	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Butyl alcohol, n-	ND		8.9	40
Butyl alcohol, tert-	ND		3.3	10
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Chlorodifluoromethane	ND		0.26	1.0
Chloroethane	ND		0.32	1.0

Analytical Data

Client: Waste Management

Job Number: 280-91129-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 280-91129-4TB

Date Sampled: 11/16/2016 0000

Client Matrix: Water

Date Received: 11/17/2016 1705

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-333598	Instrument ID:	HP5973S
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	S0012.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	11/27/2016 1732			Final Weight/Volume:	5 mL
Prep Date:	11/27/2016 1732				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dibromochloromethane	ND		0.32	1.0
Dibromomethane	ND		0.41	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Dichlorofluoromethane	ND		0.34	1.0
Ethyl acetate	ND		0.66	1.0
Ethyl ether	ND		0.72	1.0
Ethyl tert-butyl ether	ND		0.29	1.0
Ethylbenzene	ND		0.74	1.0
Hexachlorobutadiene	ND		0.28	1.0
Hexane	ND		0.40	10
Iodomethane	ND		0.30	1.0
Isobutanol	ND		4.8	25
Isopropyl ether	ND		0.59	1.0
Isopropylbenzene	ND		0.79	1.0
Methacrylonitrile	ND		0.69	5.0
Methyl acetate	ND		1.3	2.5
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
Naphthalene	ND		0.43	1.0
n-Butylbenzene	ND		0.64	1.0
N-Propylbenzene	ND		0.69	1.0
o-Chlorotoluene	ND		0.86	1.0
o-Xylene	ND		0.76	1.0
p-Chlorotoluene	ND		0.84	1.0
p-Cymene	ND		0.31	1.0
sec-Butylbenzene	ND		0.75	1.0
Styrene	ND		0.73	1.0
Tert-amyl methyl ether	ND		0.27	1.0
tert-Butylbenzene	ND		0.81	1.0
Tetrachloroethene	ND		0.36	1.0
Tetrahydrofuran	ND		1.3	5.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
trans-1,4-Dichloro-2-butene	ND		0.22	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0
Vinyl acetate	ND		0.85	5.0
Vinyl chloride	ND		0.90	1.0

Analytical Data

Client: Waste Management

Job Number: 280-91129-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 280-91129-4TB

Date Sampled: 11/16/2016 0000

Client Matrix: Water

Date Received: 11/17/2016 1705

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333598	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S0012.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/27/2016 1732		Final Weight/Volume: 5 mL
Prep Date: 11/27/2016 1732		

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	99		77 - 120
4-Bromofluorobenzene (Surr)	94		73 - 120
Toluene-d8 (Surr)	99		80 - 120

Analytical Data

Client: Waste Management

Job Number: 280-91129-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 280-91129-4TB

Date Sampled: 11/16/2016 0000

Client Matrix: Water

Date Received: 11/17/2016 1705

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analysis Batch: 480-333598

Instrument ID: HP5973S

Prep Method: 5030C

Prep Batch: N/A

Lab File ID: S0012.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Analysis Date: 11/27/2016 1732

Final Weight/Volume: 5 mL

Prep Date: 11/27/2016 1732

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
67-72-1	Hexachloroethane TIC	ND	

Analytical Data

Client: Waste Management

Job Number: 280-91129-1

Client Sample ID: MW-23A

Lab Sample ID: 280-91129-1

Date Sampled: 11/16/2016 1305

Client Matrix: Water

Date Received: 11/17/2016 1705

8260C SIM Volatile Organic Compounds (GC/MS)

Analysis Method: 8260C SIM	Analysis Batch: 480-332686	Instrument ID: HP5973J
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: J1489.D
Dilution: 1.0		Initial Weight/Volume: 25 mL
Analysis Date: 11/20/2016 0113		Final Weight/Volume: 25 mL
Prep Date: 11/20/2016 0113		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		0.0040	0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	98		50 - 150
TBA-d9 (Surr)	122		50 - 150

Analytical Data

Client: Waste Management

Job Number: 280-91129-1

Client Sample ID: MW-32

Lab Sample ID: 280-91129-2

Date Sampled: 11/16/2016 1405

Client Matrix: Water

Date Received: 11/17/2016 1705

8260C SIM Volatile Organic Compounds (GC/MS)

Analysis Method:	8260C SIM	Analysis Batch:	480-332790	Instrument ID:	HP5973J
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	J1518.D
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	11/21/2016 1527			Final Weight/Volume:	25 mL
Prep Date:	11/21/2016 1527				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	0.46	B	0.0040	0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	97		50 - 150
TBA-d9 (Surr)	137		50 - 150

Analytical Data

Client: Waste Management

Job Number: 280-91129-1

Client Sample ID: MW-42

Lab Sample ID: 280-91129-3

Date Sampled: 11/16/2016 1500

Client Matrix: Water

Date Received: 11/17/2016 1705

8260C SIM Volatile Organic Compounds (GC/MS)

Analysis Method:	8260C SIM	Analysis Batch:	480-332790	Instrument ID:	HP5973J
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	J1519.D
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	11/21/2016 1552			Final Weight/Volume:	25 mL
Prep Date:	11/21/2016 1552				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	0.026	B	0.0040	0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	100		50 - 150
TBA-d9 (Surr)	134		50 - 150

Analytical Data

Client: Waste Management

Job Number: 280-91129-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 280-91129-4TB

Date Sampled: 11/16/2016 0000

Client Matrix: Water

Date Received: 11/17/2016 1705

8260C SIM Volatile Organic Compounds (GC/MS)

Analysis Method:	8260C SIM	Analysis Batch:	480-332686	Instrument ID:	HP5973J
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	J1492.D
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	11/20/2016 0227			Final Weight/Volume:	25 mL
Prep Date:	11/20/2016 0227				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		0.0040	0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	98		50 - 150
TBA-d9 (Surr)	115		50 - 150

Analytical Data

Client: Waste Management

Job Number: 280-91129-1

Client Sample ID: MW-23A

Lab Sample ID: 280-91129-1

Date Sampled: 11/16/2016 1305

Client Matrix: Water

Date Received: 11/17/2016 1705

6010B Metals (ICP)-Total Recoverable

Analysis Method: 6010B Analysis Batch: 280-354736 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-352797 Lab File ID: 25A120716E.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 12/07/2016 2121 Final Weight/Volume: 50 mL
Prep Date: 11/29/2016 1435

Analyte	Result (mg/L)	Qualifier	RL	RL
Cobalt, Total	ND		0.0030	0.0030
Iron, Total	0.098		0.060	0.060

6010B Metals (ICP)-Dissolved

Analysis Method: 6010B Analysis Batch: 280-354579 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-352793 Lab File ID: 25C120616.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 12/06/2016 2017 Final Weight/Volume: 50 mL
Prep Date: 11/30/2016 0735

Analyte	Result (mg/L)	Qualifier	RL	RL
Calcium, Dissolved	7.8		0.040	0.040
Magnesium, Dissolved	3.4		0.050	0.050
Potassium, Dissolved	ND		1.0	1.0
Sodium, Dissolved	3.5		1.0	1.0

Analysis Method: 6010B Analysis Batch: 280-354656 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-352793 Lab File ID: 25A120716A.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 12/07/2016 1117 Final Weight/Volume: 50 mL
Prep Date: 11/30/2016 0735

Analyte	Result (mg/L)	Qualifier	RL	RL
Iron, Dissolved	ND		0.060	0.060

6020 Metals (ICP/MS)-Total Recoverable

Analysis Method: 6020 Analysis Batch: 280-353847 Instrument ID: MT_077
Prep Method: 3005A Prep Batch: 280-352798 Lab File ID: 153SMPL.d
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 11/30/2016 2212 Final Weight/Volume: 50 mL
Prep Date: 11/30/2016 0735

Analyte	Result (mg/L)	Qualifier	RL	RL
Antimony, Total	ND		0.0010	0.0010
Barium, Total	0.0078		0.0010	0.0010
Beryllium, Total	ND		0.0010	0.0010
Cadmium, Total	ND		0.00020	0.00020
Chromium, Total	ND		0.0030	0.0030
Copper, Total	ND		0.0020	0.0020
Lead, Total	ND		0.0010	0.0010

Analytical Data

Client: Waste Management

Job Number: 280-91129-1

Client Sample ID: MW-23A

Lab Sample ID: 280-91129-1

Date Sampled: 11/16/2016 1305

Client Matrix: Water

Date Received: 11/17/2016 1705

6020 Metals (ICP/MS)-Total Recoverable

Analyte	Result (mg/L)	Qualifier	RL	RL
Manganese, Total	0.065		0.0010	0.0010
Nickel, Total	ND		0.0040	0.0040
Selenium, Total	ND		0.0010	0.0010
Silver, Total	ND		0.0020	0.0020
Thallium, Total	ND		0.0010	0.0010
Vanadium, Total	ND		0.0020	0.0020
Zinc, Total	ND		0.0050	0.0050

6020 Metals (ICP/MS)-Dissolved

Analysis Method: 6020	Analysis Batch: 280-353847	Instrument ID: MT_077
Prep Method: 3005A	Prep Batch: 280-352792	Lab File ID: 219SMPL.d
Dilution: 1.0		Initial Weight/Volume: 50 mL
Analysis Date: 12/01/2016 0225		Final Weight/Volume: 50 mL
Prep Date: 11/29/2016 1435		

Analyte	Result (mg/L)	Qualifier	RL	RL
Manganese, Dissolved	0.035		0.0010	0.0010

Analytical Data

Client: Waste Management

Job Number: 280-91129-1

Client Sample ID: MW-32

Lab Sample ID: 280-91129-2

Date Sampled: 11/16/2016 1405

Client Matrix: Water

Date Received: 11/17/2016 1705

6010B Metals (ICP)-Total Recoverable

Analysis Method: 6010B Analysis Batch: 280-354736 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-352797 Lab File ID: 25A120716E.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 12/07/2016 2123 Final Weight/Volume: 50 mL
Prep Date: 11/29/2016 1435

Analyte	Result (mg/L)	Qualifier	RL	RL
Cobalt, Total	ND		0.0030	0.0030
Iron, Total	0.61		0.060	0.060

6010B Metals (ICP)-Dissolved

Analysis Method: 6010B Analysis Batch: 280-354579 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-352793 Lab File ID: 25C120616.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 12/06/2016 2019 Final Weight/Volume: 50 mL
Prep Date: 11/30/2016 0735

Analyte	Result (mg/L)	Qualifier	RL	RL
Calcium, Dissolved	20		0.040	0.040
Magnesium, Dissolved	10		0.050	0.050
Potassium, Dissolved	1.0		1.0	1.0
Sodium, Dissolved	12		1.0	1.0

Analysis Method: 6010B Analysis Batch: 280-354656 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-352793 Lab File ID: 25A120716A.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 12/07/2016 1119 Final Weight/Volume: 50 mL
Prep Date: 11/30/2016 0735

Analyte	Result (mg/L)	Qualifier	RL	RL
Iron, Dissolved	0.50		0.060	0.060

6020 Metals (ICP/MS)-Total Recoverable

Analysis Method: 6020 Analysis Batch: 280-353847 Instrument ID: MT_077
Prep Method: 3005A Prep Batch: 280-352798 Lab File ID: 154SMPL.d
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 11/30/2016 2216 Final Weight/Volume: 50 mL
Prep Date: 11/30/2016 0735

Analyte	Result (mg/L)	Qualifier	RL	RL
Antimony, Total	ND		0.0010	0.0010
Barium, Total	0.0032		0.0010	0.0010
Beryllium, Total	ND		0.0010	0.0010
Cadmium, Total	ND		0.00020	0.00020
Chromium, Total	ND		0.0030	0.0030
Copper, Total	ND		0.0020	0.0020
Lead, Total	ND		0.0010	0.0010

Analytical Data

Client: Waste Management

Job Number: 280-91129-1

Client Sample ID: MW-32

Lab Sample ID: 280-91129-2

Date Sampled: 11/16/2016 1405

Client Matrix: Water

Date Received: 11/17/2016 1705

6020 Metals (ICP/MS)-Total Recoverable

Analyte	Result (mg/L)	Qualifier	RL	RL
Manganese, Total	1.8		0.0010	0.0010
Nickel, Total	ND		0.0040	0.0040
Selenium, Total	ND		0.0010	0.0010
Silver, Total	ND		0.0020	0.0020
Thallium, Total	ND		0.0010	0.0010
Vanadium, Total	ND		0.0020	0.0020
Zinc, Total	ND		0.0050	0.0050

6020 Metals (ICP/MS)-Dissolved

Analysis Method: 6020	Analysis Batch: 280-353847	Instrument ID: MT_077
Prep Method: 3005A	Prep Batch: 280-352792	Lab File ID: 220SMPL.d
Dilution: 1.0		Initial Weight/Volume: 50 mL
Analysis Date: 12/01/2016 0229		Final Weight/Volume: 50 mL
Prep Date: 11/29/2016 1435		

Analyte	Result (mg/L)	Qualifier	RL	RL
Manganese, Dissolved	1.7		0.0010	0.0010

Analytical Data

Client: Waste Management

Job Number: 280-91129-1

Client Sample ID: MW-42

Lab Sample ID: 280-91129-3
Client Matrix: Water

Date Sampled: 11/16/2016 1500
Date Received: 11/17/2016 1705

6010B Metals (ICP)-Total Recoverable

Analysis Method: 6010B	Analysis Batch: 280-354736	Instrument ID: MT_025
Prep Method: 3005A	Prep Batch: 280-352797	Lab File ID: 25A120716E.asc
Dilution: 1.0		Initial Weight/Volume: 50 mL
Analysis Date: 12/07/2016 2126		Final Weight/Volume: 50 mL
Prep Date: 11/29/2016 1435		

Analyte	Result (mg/L)	Qualifier	RL	RL
Cobalt, Total	ND		0.0030	0.0030
Iron, Total	27		0.060	0.060

6010B Metals (ICP)-Dissolved

Analysis Method: 6010B	Analysis Batch: 280-354579	Instrument ID: MT_025
Prep Method: 3005A	Prep Batch: 280-352793	Lab File ID: 25C120616.asc
Dilution: 1.0		Initial Weight/Volume: 50 mL
Analysis Date: 12/06/2016 2022		Final Weight/Volume: 50 mL
Prep Date: 11/30/2016 0735		

Analyte	Result (mg/L)	Qualifier	RL	RL
Calcium, Dissolved	42		0.040	0.040
Magnesium, Dissolved	14		0.050	0.050
Potassium, Dissolved	8.7		1.0	1.0
Sodium, Dissolved	21		1.0	1.0

Analysis Method: 6010B	Analysis Batch: 280-354656	Instrument ID: MT_025
Prep Method: 3005A	Prep Batch: 280-352793	Lab File ID: 25A120716A.asc
Dilution: 1.0		Initial Weight/Volume: 50 mL
Analysis Date: 12/07/2016 1122		Final Weight/Volume: 50 mL
Prep Date: 11/30/2016 0735		

Analyte	Result (mg/L)	Qualifier	RL	RL
Iron, Dissolved	27		0.060	0.060

6020 Metals (ICP/MS)-Total Recoverable

Analysis Method: 6020	Analysis Batch: 280-353847	Instrument ID: MT_077
Prep Method: 3005A	Prep Batch: 280-352798	Lab File ID: 155SMPL.d
Dilution: 1.0		Initial Weight/Volume: 50 mL
Analysis Date: 11/30/2016 2220		Final Weight/Volume: 50 mL
Prep Date: 11/30/2016 0735		

Analyte	Result (mg/L)	Qualifier	RL	RL
Antimony, Total	ND		0.0010	0.0010
Barium, Total	0.11	F1	0.0010	0.0010
Beryllium, Total	ND		0.0010	0.0010
Cadmium, Total	ND		0.00020	0.00020
Chromium, Total	ND		0.0030	0.0030
Copper, Total	ND		0.0020	0.0020
Lead, Total	ND		0.0010	0.0010

Analytical Data

Client: Waste Management

Job Number: 280-91129-1

Client Sample ID: MW-42

Lab Sample ID: 280-91129-3

Date Sampled: 11/16/2016 1500

Client Matrix: Water

Date Received: 11/17/2016 1705

6020 Metals (ICP/MS)-Total Recoverable

Analyte	Result (mg/L)	Qualifier	RL	RL
Manganese, Total	4.4		0.0010	0.0010
Nickel, Total	ND		0.0040	0.0040
Selenium, Total	ND		0.0010	0.0010
Silver, Total	ND		0.0020	0.0020
Thallium, Total	ND		0.0010	0.0010
Vanadium, Total	ND		0.0020	0.0020
Zinc, Total	ND		0.0050	0.0050

6020 Metals (ICP/MS)-Dissolved

Analysis Method: 6020	Analysis Batch: 280-353847	Instrument ID: MT_077
Prep Method: 3005A	Prep Batch: 280-352792	Lab File ID: 221SMPL.d
Dilution: 1.0		Initial Weight/Volume: 50 mL
Analysis Date: 12/01/2016 0233		Final Weight/Volume: 50 mL
Prep Date: 11/29/2016 1435		

Analyte	Result (mg/L)	Qualifier	RL	RL
Manganese, Dissolved	4.5		0.0010	0.0010

Client: Waste Management

Job Number: 280-91129-1

General Chemistry

Client Sample ID: MW-23A

Lab Sample ID: 280-91129-1

Date Sampled: 11/16/2016 1305

Client Matrix: Water

Date Received: 11/17/2016 1705

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Chloride	ND		mg/L	1.0	1.0	1.0	300.0
	Analysis Batch: 280-354600		Analysis Date: 12/08/2016 0858				
Sulfate	2.3	B	mg/L	1.0	1.0	1.0	300.0
	Analysis Batch: 280-354600		Analysis Date: 12/08/2016 0858				
Ammonia (as N)	ND		mg/L	0.030	0.030	1.0	350.1
	Analysis Batch: 280-353099		Analysis Date: 11/25/2016 1231				
Nitrate as N	0.24		mg/L	0.050	0.050	1.0	353.2
	Analysis Batch: 280-354812		Analysis Date: 12/08/2016 1039				
Alkalinity, Total (As CaCO3)	40		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-352831		Analysis Date: 11/22/2016 1349				
Alkalinity, Bicarbonate (As CaCO3)	40		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-352831		Analysis Date: 11/22/2016 1349				
Total Dissolved Solids (TDS)	87		mg/L	5.0	5.0	1.0	SM 2540C
	Analysis Batch: 280-352631		Analysis Date: 11/22/2016 1053				
Total Suspended Solids	26		mg/L	4.0	4.0	1.0	SM 2540D
	Analysis Batch: 280-352743		Analysis Date: 11/22/2016 1849				
Total Organic Carbon - Average	ND		mg/L	1.0	1.0	1.0	SM 5310B
	Analysis Batch: 280-354209		Analysis Date: 12/02/2016 1825				

Client: Waste Management

Job Number: 280-91129-1

General Chemistry

Client Sample ID: MW-32

Lab Sample ID: 280-91129-2

Date Sampled: 11/16/2016 1405

Client Matrix: Water

Date Received: 11/17/2016 1705

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Chloride	7.0		mg/L	1.0	1.0	1.0	300.0
	Analysis Batch: 280-354600		Analysis Date: 12/08/2016 0916				
Sulfate	8.3		mg/L	1.0	1.0	1.0	300.0
	Analysis Batch: 280-355349		Analysis Date: 12/13/2016 1229				
Ammonia (as N)	ND		mg/L	0.030	0.030	1.0	350.1
	Analysis Batch: 280-353099		Analysis Date: 11/25/2016 1233				
Nitrate as N	ND		mg/L	0.050	0.050	1.0	353.2
	Analysis Batch: 280-354812		Analysis Date: 12/08/2016 1039				
Alkalinity, Total (As CaCO3)	110		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-352831		Analysis Date: 11/22/2016 1353				
Alkalinity, Bicarbonate (As CaCO3)	110		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-352831		Analysis Date: 11/22/2016 1353				
Total Dissolved Solids (TDS)	150		mg/L	5.0	5.0	1.0	SM 2540C
	Analysis Batch: 280-352631		Analysis Date: 11/22/2016 1053				
Total Suspended Solids	9.6		mg/L	4.0	4.0	1.0	SM 2540D
	Analysis Batch: 280-352743		Analysis Date: 11/22/2016 1849				
Total Organic Carbon - Average	ND		mg/L	1.0	1.0	1.0	SM 5310B
	Analysis Batch: 280-354209		Analysis Date: 12/02/2016 1840				

Client: Waste Management

Job Number: 280-91129-1

General Chemistry

Client Sample ID: MW-42

Lab Sample ID: 280-91129-3

Date Sampled: 11/16/2016 1500

Client Matrix: Water

Date Received: 11/17/2016 1705

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Chloride	12		mg/L	1.0	1.0	1.0	300.0
	Analysis Batch: 280-354600		Analysis Date: 12/08/2016 1027				
Sulfate	6.3		mg/L	1.0	1.0	1.0	300.0
	Analysis Batch: 280-355349		Analysis Date: 12/13/2016 1330				
Ammonia (as N)	5.4		mg/L	0.060	0.060	2.0	350.1
	Analysis Batch: 280-353099		Analysis Date: 11/25/2016 1253				
Nitrate as N	ND		mg/L	0.050	0.050	1.0	353.2
	Analysis Batch: 280-354812		Analysis Date: 12/08/2016 1039				
Alkalinity, Total (As CaCO3)	220		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-352831		Analysis Date: 11/22/2016 1358				
Alkalinity, Bicarbonate (As CaCO3)	220		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-352831		Analysis Date: 11/22/2016 1358				
Total Dissolved Solids (TDS)	250		mg/L	5.0	5.0	1.0	SM 2540C
	Analysis Batch: 280-352631		Analysis Date: 11/22/2016 1053				
Total Suspended Solids	31		mg/L	4.0	4.0	1.0	SM 2540D
	Analysis Batch: 280-352743		Analysis Date: 11/22/2016 1849				
Total Organic Carbon - Average	7.2		mg/L	1.0	1.0	1.0	SM 5310B
	Analysis Batch: 280-354209		Analysis Date: 12/02/2016 1854				

Analytical Data

Client: Waste Management

Job Number: 280-91129-1

Field Service / Mobile Lab

Client Sample ID: MW-23A

Lab Sample ID: 280-91129-1

Client Matrix: Water

Date Sampled: 11/16/2016 1305

Date Received: 11/17/2016 1705

Analyte	Result	Qual	Units	Dil	Method	Analysis Batch	Date Analyzed	Date Prepared
Depth to water	12.06		ft	1.0	Field Sampling	280-352756	11/16/2016	1405
Specific Conductivity	88		umhos/cm	1.0	Field Sampling	280-352756	11/16/2016	1405
Dissolved Oxygen	4.02		mg/L	1.0	Field Sampling	280-352756	11/16/2016	1405
eH	145.0		millivolts	1.0	Field Sampling	280-352756	11/16/2016	1405
Turbidity	1.64		NTU	1.0	Field Sampling	280-352756	11/16/2016	1405
Temperature	12.49		Degrees C	1.0	Field Sampling	280-352756	11/16/2016	1405
pH	6.11		SU	1.0	Field Sampling	280-352756	11/16/2016	1405

Client: Waste Management

Job Number: 280-91129-1

Field Service / Mobile Lab

Client Sample ID: MW-32

Lab Sample ID: 280-91129-2

Client Matrix: Water

Date Sampled: 11/16/2016 1405

Date Received: 11/17/2016 1705

Analyte	Result	Qual	Units	Dil	Method	Analysis Batch	Date Analyzed	Date Prepared
Depth to water	1.08		ft	1.0	Field Sampling	280-352756	11/16/2016	1505
Specific Conductivity	251		umhos/cm	1.0	Field Sampling	280-352756	11/16/2016	1505
Dissolved Oxygen	1.18		mg/L	1.0	Field Sampling	280-352756	11/16/2016	1505
eH	-2.3		millivolts	1.0	Field Sampling	280-352756	11/16/2016	1505
Turbidity	1.50		NTU	1.0	Field Sampling	280-352756	11/16/2016	1505
Temperature	12.13		Degrees C	1.0	Field Sampling	280-352756	11/16/2016	1505
pH	7.60		SU	1.0	Field Sampling	280-352756	11/16/2016	1505

Analytical Data

Client: Waste Management

Job Number: 280-91129-1

Field Service / Mobile Lab

Client Sample ID: MW-42

Lab Sample ID: 280-91129-3

Client Matrix: Water

Date Sampled: 11/16/2016 1500

Date Received: 11/17/2016 1705

Analyte	Result	Qual	Units	Dil	Method	Analysis Batch	Date Analyzed	Date Prepared
Depth to water	26.41		ft	1.0	Field Sampling	280-352756	11/16/2016	1600
Specific Conductivity	550		umhos/cm	1.0	Field Sampling	280-352756	11/16/2016	1600
Dissolved Oxygen	0.30		mg/L	1.0	Field Sampling	280-352756	11/16/2016	1600
eH	-53.5		millivolts	1.0	Field Sampling	280-352756	11/16/2016	1600
Turbidity	3.75		NTU	1.0	Field Sampling	280-352756	11/16/2016	1600
Temperature	12.57		Degrees C	1.0	Field Sampling	280-352756	11/16/2016	1600
pH	7.49		SU	1.0	Field Sampling	280-352756	11/16/2016	1600

DATA REPORTING QUALIFIERS

Client: Waste Management

Job Number: 280-91129-1

Lab Section	Qualifier	Description
GC/MS VOA	B	Compound was found in the blank and sample.
	*	LCS or LCSD is outside acceptance limits.
	F1	MS and/or MSD Recovery is outside acceptance limits.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
Metals	F1	MS and/or MSD Recovery is outside acceptance limits.
	4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
General Chemistry	B	Compound was found in the blank and sample.
	E	Result exceeded calibration range.

QUALITY CONTROL RESULTS

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:480-332686					
LCS 480-332686/4	Lab Control Sample	T	Water	8260C SIM	
LCSD 480-332686/5	Lab Control Sample Duplicate	T	Water	8260C SIM	
MB 480-332686/7	Method Blank	T	Water	8260C SIM	
280-91129-1	MW-23A	T	Water	8260C SIM	
280-91129-4TB	TRIP BLANK	T	Water	8260C SIM	
Analysis Batch:480-332790					
LCS 480-332790/4	Lab Control Sample	T	Water	8260C SIM	
LCSD 480-332790/5	Lab Control Sample Duplicate	T	Water	8260C SIM	
MB 480-332790/7	Method Blank	T	Water	8260C SIM	
280-91129-2	MW-32	T	Water	8260C SIM	
280-91129-3	MW-42	T	Water	8260C SIM	
Analysis Batch:480-333598					
LCS 480-333598/5	Lab Control Sample	T	Water	8260C	
MB 480-333598/7	Method Blank	T	Water	8260C	
280-91129-1	MW-23A	T	Water	8260C	
280-91129-2	MW-32	T	Water	8260C	
280-91129-4TB	TRIP BLANK	T	Water	8260C	
480-109772-D-4 MS	Matrix Spike	T	Water	8260C	
480-109772-D-4 MSD	Matrix Spike Duplicate	T	Water	8260C	
Analysis Batch:480-333730					
LCS 480-333730/4	Lab Control Sample	T	Water	8260C	
MB 480-333730/6	Method Blank	T	Water	8260C	
280-91129-3	MW-42	T	Water	8260C	
480-109807-G-6 MS	Matrix Spike	T	Water	8260C	
480-109807-H-6 MSD	Matrix Spike Duplicate	T	Water	8260C	

Report Basis

T = Total

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 280-352792					
LCS 280-352792/2-A	Lab Control Sample	R	Water	3005A	
MB 280-352792/1-A	Method Blank	R	Water	3005A	
280-91117-E-1-B MS	Matrix Spike	D	Water	3005A	
280-91117-E-1-C MSD	Matrix Spike Duplicate	D	Water	3005A	
280-91129-1	MW-23A	D	Water	3005A	
280-91129-2	MW-32	D	Water	3005A	
280-91129-3	MW-42	D	Water	3005A	
Prep Batch: 280-352793					
LCS 280-352793/2-A	Lab Control Sample	R	Water	3005A	
MB 280-352793/1-A	Method Blank	R	Water	3005A	
280-91117-E-2-C MS	Matrix Spike	D	Water	3005A	
280-91117-E-2-D MSD	Matrix Spike Duplicate	D	Water	3005A	
280-91129-1	MW-23A	D	Water	3005A	
280-91129-2	MW-32	D	Water	3005A	
280-91129-3	MW-42	D	Water	3005A	
Prep Batch: 280-352797					
LCS 280-352797/2-A	Lab Control Sample	R	Water	3005A	
MB 280-352797/1-A	Method Blank	R	Water	3005A	
280-91129-1	MW-23A	R	Water	3005A	
280-91129-2	MW-32	R	Water	3005A	
280-91129-3	MW-42	R	Water	3005A	
280-91130-C-1-B MS	Matrix Spike	R	Water	3005A	
280-91130-C-1-C MSD	Matrix Spike Duplicate	R	Water	3005A	
Prep Batch: 280-352798					
LCS 280-352798/2-A	Lab Control Sample	R	Water	3005A	
MB 280-352798/1-A	Method Blank	R	Water	3005A	
280-91129-1	MW-23A	R	Water	3005A	
280-91129-2	MW-32	R	Water	3005A	
280-91129-3	MW-42	R	Water	3005A	
280-91129-3MS	Matrix Spike	R	Water	3005A	
280-91129-3MSD	Matrix Spike Duplicate	R	Water	3005A	

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:280-353847					
LCS 280-352792/2-A	Lab Control Sample	R	Water	6020	280-352792
MB 280-352792/1-A	Method Blank	R	Water	6020	280-352792
LCS 280-352798/2-A	Lab Control Sample	R	Water	6020	280-352798
MB 280-352798/1-A	Method Blank	R	Water	6020	280-352798
280-91117-E-1-B MS	Matrix Spike	D	Water	6020	280-352792
280-91117-E-1-C MSD	Matrix Spike Duplicate	D	Water	6020	280-352792
280-91129-1	MW-23A	D	Water	6020	280-352792
280-91129-1	MW-23A	R	Water	6020	280-352798
280-91129-2	MW-32	D	Water	6020	280-352792
280-91129-2	MW-32	R	Water	6020	280-352798
280-91129-3	MW-42	D	Water	6020	280-352792
280-91129-3	MW-42	R	Water	6020	280-352798
280-91129-3MS	Matrix Spike	R	Water	6020	280-352798
280-91129-3MSD	Matrix Spike Duplicate	R	Water	6020	280-352798
Analysis Batch:280-354579					
LCS 280-352793/2-A	Lab Control Sample	R	Water	6010B	280-352793
MB 280-352793/1-A	Method Blank	R	Water	6010B	280-352793
280-91117-E-2-C MS	Matrix Spike	D	Water	6010B	280-352793
280-91117-E-2-D MSD	Matrix Spike Duplicate	D	Water	6010B	280-352793
280-91129-1	MW-23A	D	Water	6010B	280-352793
280-91129-2	MW-32	D	Water	6010B	280-352793
280-91129-3	MW-42	D	Water	6010B	280-352793
Analysis Batch:280-354656					
LCS 280-352793/2-A	Lab Control Sample	R	Water	6010B	280-352793
MB 280-352793/1-A	Method Blank	R	Water	6010B	280-352793
280-91117-E-2-C MS	Matrix Spike	D	Water	6010B	280-352793
280-91117-E-2-D MSD	Matrix Spike Duplicate	D	Water	6010B	280-352793
280-91129-1	MW-23A	D	Water	6010B	280-352793
280-91129-2	MW-32	D	Water	6010B	280-352793
280-91129-3	MW-42	D	Water	6010B	280-352793
Analysis Batch:280-354736					
LCS 280-352797/2-A	Lab Control Sample	R	Water	6010B	280-352797
MB 280-352797/1-A	Method Blank	R	Water	6010B	280-352797
280-91129-1	MW-23A	R	Water	6010B	280-352797
280-91129-2	MW-32	R	Water	6010B	280-352797
280-91129-3	MW-42	R	Water	6010B	280-352797
280-91130-C-1-B MS	Matrix Spike	R	Water	6010B	280-352797
280-91130-C-1-C MSD	Matrix Spike Duplicate	R	Water	6010B	280-352797

TestAmerica Denver

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
---------------	------------------	--------------	---------------	--------	------------

Report Basis

D = Dissolved

R = Total Recoverable

Field Service / Mobile Lab

Analysis Batch:280-352756

280-91129-1	MW-23A	T	Water	Field Sampling	
280-91129-2	MW-32	T	Water	Field Sampling	
280-91129-3	MW-42	T	Water	Field Sampling	

Report Basis

T = Total

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:280-352631					
LCS 280-352631/2	Lab Control Sample	T	Water	SM 2540C	
MB 280-352631/1	Method Blank	T	Water	SM 2540C	
280-91129-1	MW-23A	T	Water	SM 2540C	
280-91129-2	MW-32	T	Water	SM 2540C	
280-91129-3	MW-42	T	Water	SM 2540C	
280-91170-R-2 DU	Duplicate	T	Water	SM 2540C	
Analysis Batch:280-352743					
LCS 280-352743/1	Lab Control Sample	T	Water	SM 2540D	
MB 280-352743/2	Method Blank	T	Water	SM 2540D	
280-91129-1	MW-23A	T	Water	SM 2540D	
280-91129-2	MW-32	T	Water	SM 2540D	
280-91129-3	MW-42	T	Water	SM 2540D	
280-91129-3DU	Duplicate	T	Water	SM 2540D	
Analysis Batch:280-352831					
LCS 280-352831/4	Lab Control Sample	T	Water	SM 2320B	
MB 280-352831/5	Method Blank	T	Water	SM 2320B	
280-91078-A-2 DU	Duplicate	T	Water	SM 2320B	
280-91129-1	MW-23A	T	Water	SM 2320B	
280-91129-2	MW-32	T	Water	SM 2320B	
280-91129-3	MW-42	T	Water	SM 2320B	
Analysis Batch:280-353099					
LCS 280-353099/62	Lab Control Sample	T	Water	350.1	
LCSD 280-353099/63	Lab Control Sample Duplicate	T	Water	350.1	
MB 280-353099/64	Method Blank	T	Water	350.1	
280-91129-1	MW-23A	T	Water	350.1	
280-91129-2	MW-32	T	Water	350.1	
280-91129-2MS	Matrix Spike	T	Water	350.1	
280-91129-2MSD	Matrix Spike Duplicate	T	Water	350.1	
280-91129-3	MW-42	T	Water	350.1	
Analysis Batch:280-353180					
LCS 280-353180/4	Lab Control Sample	T	Water	SM 2320B	
MB 280-353180/5	Method Blank	T	Water	SM 2320B	
280-91129-1	MW-23A	T	Water	SM 2320B	
280-91292-A-3 DU	Duplicate	T	Water	SM 2320B	

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:280-354209					
LCS 280-354209/3	Lab Control Sample	T	Water	SM 5310B	
MB 280-354209/4	Method Blank	T	Water	SM 5310B	
280-91049-C-3 MS	Matrix Spike	T	Water	SM 5310B	
280-91049-C-3 MSD	Matrix Spike Duplicate	T	Water	SM 5310B	
280-91129-1	MW-23A	T	Water	SM 5310B	
280-91129-2	MW-32	T	Water	SM 5310B	
280-91129-3	MW-42	T	Water	SM 5310B	
Analysis Batch:280-354600					
LCS 280-354600/55	Lab Control Sample	T	Water	300.0	
LCSD 280-354600/56	Lab Control Sample Duplicate	T	Water	300.0	
MB 280-354600/57	Method Blank	T	Water	300.0	
280-91129-1	MW-23A	T	Water	300.0	
280-91129-2	MW-32	T	Water	300.0	
280-91129-2DU	Duplicate	T	Water	300.0	
280-91129-2MS	Matrix Spike	T	Water	300.0	
280-91129-2MSD	Matrix Spike Duplicate	T	Water	300.0	
280-91129-3	MW-42	T	Water	300.0	
Analysis Batch:280-354812					
MB 280-354812/1	Method Blank	T	Water	353.2	
280-91129-1	MW-23A	T	Water	353.2	
280-91129-2	MW-32	T	Water	353.2	
280-91129-3	MW-42	T	Water	353.2	
Analysis Batch:280-355349					
LCS 280-355349/4	Lab Control Sample	T	Water	300.0	
LCSD 280-355349/5	Lab Control Sample Duplicate	T	Water	300.0	
MB 280-355349/6	Method Blank	T	Water	300.0	
280-91129-2	MW-32	T	Water	300.0	
280-91129-3	MW-42	T	Water	300.0	

Report Basis

T = Total

Client: Waste Management

Job Number: 280-91129-1

Surrogate Recovery Report

8260C Volatile Organic Compounds by GC/MS

Client Matrix: Water

Lab Sample ID	Client Sample ID	DCA %Rec	BFB %Rec	TOL %Rec
280-91129-1	MW-23A	100	94	99
280-91129-2	MW-32	102	95	100
280-91129-3	MW-42	98	95	100
280-91129-4	TRIP BLANK	99	94	99
MB 480-333598/7		99	95	101
MB 480-333730/6		97	93	99
LCS 480-333598/5		99	96	102
LCS 480-333730/4		101	93	100
480-109772-D-4 MS		99	94	102
480-109807-G-6 MS		98	96	101
480-109772-D-4 MSD		98	94	101
480-109807-H-6 MSD		98	96	102

Surrogate	Acceptance Limits
DCA = 1,2-Dichloroethane-d4 (Surr)	77-120
BFB = 4-Bromofluorobenzene (Surr)	73-120
TOL = Toluene-d8 (Surr)	80-120

Client: Waste Management

Job Number: 280-91129-1

Surrogate Recovery Report

8260C SIM Volatile Organic Compounds (GC/MS)

Client Matrix: Water

Lab Sample ID	Client Sample ID	DBFM %Rec	TBA %Rec
280-91129-1	MW-23A	98	122
280-91129-2	MW-32	97	137
280-91129-3	MW-42	100	134
280-91129-4	TRIP BLANK	98	115
MB 480-332686/7		99	129
MB 480-332790/7		101	135
LCS 480-332686/4		97	120
LCS 480-332790/4		101	126
LCSD 480-332686/5		92	110
LCSD 480-332790/5		98	135

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

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

Method Blank - Batch: 480-333598

**Method: 8260C
Preparation: 5030C**

Lab Sample ID: MB 480-333598/7
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/27/2016 1416
Prep Date: 11/27/2016 1416
Leach Date: N/A

Analysis Batch: 480-333598
Prep Batch: N/A
Leach Batch: N/A
Units: ug/L

Instrument ID: HP5973S
Lab File ID: S0004.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
1,1,1,2-Tetrachloroethane	ND		0.35	1.0
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,1-Dichloropropene	ND		0.72	1.0
1,2,3-Trichlorobenzene	ND		0.41	1.0
1,2,3-Trichloropropane	ND		0.89	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2,4-Trimethylbenzene	ND		0.75	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane (EDB)	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloroethene, Total	ND		0.81	2.0
1,2-Dichloropropane	ND		0.72	1.0
1,3,5-Trichlorobenzene	ND		0.23	1.0
1,3,5-Trimethylbenzene	ND		0.77	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,3-Dichloropropane	ND		0.75	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
1,4-Dioxane	ND		9.3	40
2,2-Dichloropropane	ND		0.40	1.0
2-Butanone (MEK)	ND		1.3	10
2-Chloroethyl vinyl ether	ND		0.96	5.0
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Acetonitrile	ND		4.9	15
Acrolein	ND		0.91	20
Acrylonitrile	ND		0.83	5.0
Benzene	ND		0.41	1.0
Bromobenzene	ND		0.80	1.0
Bromochloromethane	ND		0.87	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Butyl alcohol, n-	ND		8.9	40
Butyl alcohol, tert-	ND		3.3	10
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Chlorodifluoromethane	ND		0.26	1.0

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

Method Blank - Batch: 480-333598

**Method: 8260C
Preparation: 5030C**

Lab Sample ID: MB 480-333598/7
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/27/2016 1416
 Prep Date: 11/27/2016 1416
 Leach Date: N/A

Analysis Batch: 480-333598
 Prep Batch: N/A
 Leach Batch: N/A
 Units: ug/L

Instrument ID: HP5973S
 Lab File ID: S0004.D
 Initial Weight/Volume: 5 mL
 Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
Chloroethane	ND		0.32	1.0
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dibromochloromethane	ND		0.32	1.0
Dibromomethane	ND		0.41	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Dichlorofluoromethane	ND		0.34	1.0
Ethyl acetate	ND		0.66	1.0
Ethyl ether	ND		0.72	1.0
Ethyl tert-butyl ether	ND		0.29	1.0
Ethylbenzene	ND		0.74	1.0
Hexachlorobutadiene	ND		0.28	1.0
Hexane	ND		0.40	10
Iodomethane	ND		0.30	1.0
Isobutanol	ND		4.8	25
Isopropyl ether	ND		0.59	1.0
Isopropylbenzene	ND		0.79	1.0
Methacrylonitrile	ND		0.69	5.0
Methyl acetate	ND		1.3	2.5
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
Naphthalene	ND		0.43	1.0
n-Butylbenzene	ND		0.64	1.0
N-Propylbenzene	ND		0.69	1.0
o-Chlorotoluene	ND		0.86	1.0
o-Xylene	ND		0.76	1.0
p-Chlorotoluene	ND		0.84	1.0
p-Cymene	ND		0.31	1.0
sec-Butylbenzene	ND		0.75	1.0
Styrene	ND		0.73	1.0
Tert-amyl methyl ether	ND		0.27	1.0
tert-Butylbenzene	ND		0.81	1.0
Tetrachloroethene	ND		0.36	1.0
Tetrahydrofuran	ND		1.3	5.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
trans-1,4-Dichloro-2-butene	ND		0.22	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

Method Blank - Batch: 480-333598

Method: 8260C
Preparation: 5030C

Lab Sample ID: MB 480-333598/7	Analysis Batch: 480-333598	Instrument ID: HP5973S
Client Matrix: Water	Prep Batch: N/A	Lab File ID: S0004.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/27/2016 1416	Units: ug/L	Final Weight/Volume: 5 mL
Prep Date: 11/27/2016 1416		
Leach Date: N/A		

Analyte	Result	Qual	MDL	RL
Vinyl acetate	ND		0.85	5.0
Vinyl chloride	ND		0.90	1.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	99	77 - 120
4-Bromofluorobenzene (Surr)	95	73 - 120
Toluene-d8 (Surr)	101	80 - 120

Method Blank TICs- Batch: 480-333598

Cas Number	Analyte	RT	Est. Result (ug)	Qual
67-72-1	Hexachloroethane TIC	0.00	ND	

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

Lab Control Sample - Batch: 480-333598

**Method: 8260C
Preparation: 5030C**

Lab Sample ID:	LCS 480-333598/5	Analysis Batch:	480-333598	Instrument ID:	HP5973S
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	S0002.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	11/27/2016 1330	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	11/27/2016 1330				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,1,1,2-Tetrachloroethane	25.0	27.7	111	80 - 120	
1,1,1-Trichloroethane	25.0	26.3	105	73 - 126	
1,1,2,2-Tetrachloroethane	25.0	25.7	103	76 - 120	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	25.0	100	61 - 148	
1,1,2-Trichloroethane	25.0	25.9	104	76 - 122	
1,1-Dichloroethane	25.0	25.5	102	77 - 120	
1,1-Dichloroethene	25.0	26.2	105	66 - 127	
1,1-Dichloropropene	25.0	26.4	105	72 - 122	
1,2,3-Trichlorobenzene	25.0	25.5	102	75 - 123	
1,2,3-Trichloropropane	25.0	24.2	97	68 - 122	
1,2,4-Trichlorobenzene	25.0	25.5	102	79 - 122	
1,2,4-Trimethylbenzene	25.0	25.9	103	76 - 121	
1,2-Dibromo-3-Chloropropane	25.0	26.3	105	56 - 134	
1,2-Dibromoethane (EDB)	25.0	25.3	101	77 - 120	
1,2-Dichlorobenzene	25.0	25.4	102	80 - 124	
1,2-Dichloroethane	25.0	23.8	95	75 - 120	
1,2-Dichloropropane	25.0	25.2	101	76 - 120	
1,3,5-Trimethylbenzene	25.0	25.9	103	77 - 121	
1,3-Dichlorobenzene	25.0	26.1	104	77 - 120	
1,3-Dichloropropane	25.0	25.2	101	75 - 120	
1,4-Dichlorobenzene	25.0	25.6	102	80 - 120	
1,4-Dioxane	500	385	77	50 - 150	
2,2-Dichloropropane	25.0	27.4	110	63 - 136	
2-Butanone (MEK)	125	114	91	57 - 140	
2-Chloroethyl vinyl ether	25.0	24.2	97	70 - 129	
2-Hexanone	125	108	86	65 - 127	
4-Methyl-2-pentanone (MIBK)	125	111	89	71 - 125	
Acetone	125	119	95	56 - 142	
Acrolein	125	103	82	52 - 143	
Acrylonitrile	250	237	95	63 - 125	
Benzene	25.0	25.7	103	71 - 124	
Bromobenzene	25.0	24.7	99	78 - 120	
Bromochloromethane	25.0	26.2	105	72 - 130	
Bromodichloromethane	25.0	26.0	104	80 - 122	
Bromoform	25.0	26.3	105	61 - 132	
Bromomethane	25.0	24.7	99	55 - 144	
Butyl alcohol, tert-	250	224	90	75 - 125	
Carbon disulfide	25.0	22.2	89	59 - 134	
Carbon tetrachloride	25.0	27.8	111	72 - 134	
Chlorobenzene	25.0	25.3	101	80 - 120	
Chloroethane	25.0	28.9	115	69 - 136	
Chloroform	25.0	25.2	101	73 - 127	
Chloromethane	25.0	27.0	108	68 - 124	
cis-1,2-Dichloroethene	25.0	26.1	105	74 - 124	
cis-1,3-Dichloropropene	25.0	26.0	104	74 - 124	
Cyclohexane	25.0	26.0	104	59 - 135	

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

Lab Control Sample - Batch: 480-333598

**Method: 8260C
Preparation: 5030C**

Lab Sample ID: LCS 480-333598/5	Analysis Batch: 480-333598	Instrument ID: HP5973S
Client Matrix: Water	Prep Batch: N/A	Lab File ID: S0002.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/27/2016 1330	Units: ug/L	Final Weight/Volume: 5 mL
Prep Date: 11/27/2016 1330		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Dibromochloromethane	25.0	26.5	106	75 - 125	
Dibromomethane	25.0	25.1	100	76 - 127	
Dichlorodifluoromethane	25.0	28.4	114	59 - 135	
Dichlorofluoromethane	25.0	25.0	100	76 - 127	
Ethyl ether	25.0	25.7	103	76 - 123	
Ethylbenzene	25.0	24.6	98	77 - 123	
Hexachlorobutadiene	25.0	25.1	100	68 - 131	
Hexane	25.0	25.4	101	54 - 146	
Iodomethane	25.0	23.5	94	78 - 123	
Isobutanol	625	569	91	51 - 150	
Isopropylbenzene	25.0	25.5	102	77 - 122	
Methyl acetate	125	111	89	74 - 133	
Methyl tert-butyl ether	25.0	25.0	100	77 - 120	
Methylcyclohexane	25.0	26.3	105	68 - 134	
Methylene Chloride	25.0	23.5	94	75 - 124	
m-Xylene & p-Xylene	25.0	24.3	97	76 - 122	
Naphthalene	25.0	24.4	98	66 - 125	
n-Butylbenzene	25.0	26.2	105	71 - 128	
N-Propylbenzene	25.0	25.3	101	75 - 127	
o-Chlorotoluene	25.0	24.8	99	76 - 121	
o-Xylene	25.0	24.5	98	76 - 122	
p-Chlorotoluene	25.0	25.1	100	77 - 121	
p-Cymene	25.0	25.8	103	73 - 120	
sec-Butylbenzene	25.0	25.7	103	74 - 127	
Styrene	25.0	25.0	100	80 - 120	
tert-Butylbenzene	25.0	25.9	103	75 - 123	
Tetrachloroethene	25.0	25.6	102	74 - 122	
Tetrahydrofuran	50.0	43.7	87	62 - 132	
Toluene	25.0	25.3	101	80 - 122	
trans-1,2-Dichloroethene	25.0	25.5	102	73 - 127	
trans-1,3-Dichloropropene	25.0	26.7	107	80 - 120	
trans-1,4-Dichloro-2-butene	25.0	22.7	91	41 - 131	
Trichloroethene	25.0	25.2	101	74 - 123	
Trichlorofluoromethane	25.0	25.5	102	62 - 150	
Vinyl acetate	50.0	49.9	100	50 - 144	
Vinyl chloride	25.0	29.3	117	65 - 133	
Surrogate		% Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		99		77 - 120	
4-Bromofluorobenzene (Surr)		96		73 - 120	
Toluene-d8 (Surr)		102		80 - 120	

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 480-333598**

**Method: 8260C
Preparation: 5030C**

MS Lab Sample ID: 480-109772-D-4 MS	Analysis Batch: 480-333598	Instrument ID: HP5973S
Client Matrix: Water	Prep Batch: N/A	Lab File ID: S0023.D
Dilution: 10	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/27/2016 2151		Final Weight/Volume: 5 mL
Prep Date: 11/27/2016 2151		5 mL
Leach Date: N/A		

MSD Lab Sample ID: 480-109772-D-4 MSD	Analysis Batch: 480-333598	Instrument ID: HP5973S
Client Matrix: Water	Prep Batch: N/A	Lab File ID: S0024.D
Dilution: 10	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/27/2016 2214		Final Weight/Volume: 5 mL
Prep Date: 11/27/2016 2214		5 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
1,1,1,2-Tetrachloroethane	106	104	80 - 120	2	20		
1,1,1-Trichloroethane	110	103	73 - 126	6	15		
1,1,2,2-Tetrachloroethane	103	102	76 - 120	1	15		
1,1,2-Trichloroethane	103	103	76 - 122	1	15		
1,1-Dichloroethane	104	100	77 - 120	4	20		
1,1-Dichloroethene	111	104	66 - 127	6	16		
1,1-Dichloropropene	112	102	72 - 122	9	20		
1,2,3-Trichlorobenzene	103	97	75 - 123	7	20		
1,2,3-Trichloropropane	100	96	68 - 122	4	14		
1,2,4-Trichlorobenzene	101	97	79 - 122	4	20		
1,2,4-Trimethylbenzene	103	100	76 - 121	3	20		
1,2-Dichlorobenzene	102	98	80 - 124	4	20		
1,2-Dichloroethane	95	93	75 - 120	2	20		
1,2-Dichloropropane	104	99	76 - 120	4	20		
1,3,5-Trimethylbenzene	105	100	77 - 121	4	20		
1,3-Dichlorobenzene	102	98	77 - 120	4	20		
1,4-Dichlorobenzene	102	98	78 - 124	4	20		
2,2-Dichloropropane	109	103	63 - 136	6	20		
2-Butanone (MEK)	92	90	57 - 140	3	20		
2-Hexanone	87	84	65 - 127	3	15		
4-Methyl-2-pentanone (MIBK)	91	89	71 - 125	2	35		
Acetone	81	79	56 - 142	3	15		
Benzene	105	101	71 - 124	4	13		
Bromobenzene	97	96	78 - 120	1	15		
Bromochloromethane	105	102	72 - 130	3	15		
Bromodichloromethane	101	97	80 - 122	4	15		
Bromoform	101	99	61 - 132	1	15		
Bromomethane	104	103	55 - 144	1	15		
Butyl alcohol, tert-	93	85	75 - 125	7	15		
Carbon disulfide	94	89	59 - 134	5	15		
Carbon tetrachloride	114	108	72 - 134	6	15		
Chlorobenzene	103	99	80 - 120	4	25		
Chloroethane	126	118	69 - 136	6	15		

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 480-333598**

**Method: 8260C
Preparation: 5030C**

MS Lab Sample ID: 480-109772-D-4 MS	Analysis Batch: 480-333598	Instrument ID: HP5973S
Client Matrix: Water	Prep Batch: N/A	Lab File ID: S0023.D
Dilution: 10	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/27/2016 2151		Final Weight/Volume: 5 mL
Prep Date: 11/27/2016 2151		5 mL
Leach Date: N/A		

MSD Lab Sample ID: 480-109772-D-4 MSD	Analysis Batch: 480-333598	Instrument ID: HP5973S
Client Matrix: Water	Prep Batch: N/A	Lab File ID: S0024.D
Dilution: 10	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/27/2016 2214		Final Weight/Volume: 5 mL
Prep Date: 11/27/2016 2214		5 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Chloroform	102	98	73 - 127	4	20		
Chloromethane	117	112	68 - 124	5	15		
cis-1,2-Dichloroethene	105	100	74 - 124	5	15		
cis-1,3-Dichloropropene	100	98	74 - 124	2	15		
Dibromochloromethane	104	101	75 - 125	2	15		
Dibromomethane	103	98	76 - 127	5	15		
Dichlorodifluoromethane	126	117	59 - 135	7	20		
Ethyl ether	104	98	76 - 123	6	20		
Ethylbenzene	101	97	77 - 123	4	15		
Hexachlorobutadiene	101	96	68 - 131	5	20		
Isopropylbenzene	105	100	77 - 122	4	20		
Methyl tert-butyl ether	98	95	77 - 120	3	37		
Methylene Chloride	93	92	75 - 124	1	15		
m-Xylene & p-Xylene	101	95	76 - 122	6	16		
Naphthalene	100	97	66 - 125	3	20		
n-Butylbenzene	106	101	71 - 128	4	15		
N-Propylbenzene	103	99	75 - 127	4	15		
o-Chlorotoluene	101	98	76 - 121	2	20		
o-Xylene	101	96	76 - 122	5	16		
p-Chlorotoluene	100	98	77 - 121	2	15		
p-Cymene	105	99	73 - 120	6	20		
sec-Butylbenzene	106	100	74 - 127	6	15		
Styrene	100	96	80 - 120	4	20		
tert-Butylbenzene	107	99	75 - 123	7	15		
Tetrachloroethene	106	100	74 - 122	5	20		
Tetrahydrofuran	93	90	62 - 132	3	25		
Toluene	104	100	80 - 122	3	15		
trans-1,2-Dichloroethene	108	102	73 - 127	6	20		
trans-1,3-Dichloropropene	100	98	80 - 120	1	15		
Trichloroethene	105	100	74 - 123	5	16		
Trichlorofluoromethane	113	101	62 - 150	12	20		
Vinyl chloride	135	123	65 - 133	9	15	F1	
Surrogate		MS % Rec	MSD % Rec			Acceptance Limits	

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	99	98	77 - 120
4-Bromofluorobenzene (Surr)	94	94	73 - 120
Toluene-d8 (Surr)	102	101	80 - 120

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 480-333598**

**Method: 8260C
Preparation: 5030C**

MS Lab Sample ID: 480-109772-D-4 MS Units: ug/L
 Client Matrix: Water
 Dilution: 10
 Analysis Date: 11/27/2016 2151
 Prep Date: 11/27/2016 2151
 Leach Date: N/A

MSD Lab Sample ID: 480-109772-D-4 MSD
 Client Matrix: Water
 Dilution: 10
 Analysis Date: 11/27/2016 2214
 Prep Date: 11/27/2016 2214
 Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
1,1,1,2-Tetrachloroethane	ND	250	250	265	259
1,1,1-Trichloroethane	ND	250	250	275	258
1,1,2,2-Tetrachloroethane	ND	250	250	256	255
1,1,2-Trichloroethane	ND	250	250	259	257
1,1-Dichloroethane	ND	250	250	261	250
1,1-Dichloroethene	ND	250	250	277	261
1,1-Dichloropropene	ND	250	250	281	256
1,2,3-Trichlorobenzene	ND	250	250	258	241
1,2,3-Trichloropropane	ND	250	250	249	240
1,2,4-Trichlorobenzene	ND	250	250	252	242
1,2,4-Trimethylbenzene	ND	250	250	258	250
1,2-Dichlorobenzene	ND	250	250	255	246
1,2-Dichloroethane	ND	250	250	238	232
1,2-Dichloropropane	ND	250	250	259	247
1,3,5-Trimethylbenzene	ND	250	250	262	251
1,3-Dichlorobenzene	ND	250	250	256	246
1,4-Dichlorobenzene	ND	250	250	255	244
2,2-Dichloropropane	ND	250	250	273	258
2-Butanone (MEK)	ND	1250	1250	1160	1130
2-Hexanone	ND	1250	1250	1090	1050
4-Methyl-2-pentanone (MIBK)	ND	1250	1250	1140	1110
Acetone	ND	1250	1250	1010	989
Benzene	ND	250	250	263	253
Bromobenzene	ND	250	250	243	241
Bromochloromethane	ND	250	250	262	255
Bromodichloromethane	ND	250	250	253	243
Bromoform	ND	250	250	252	248
Bromomethane	ND	250	250	260	258
Butyl alcohol, tert-	770	2500	2500	3090	2890
Carbon disulfide	ND	250	250	234	223
Carbon tetrachloride	ND	250	250	285	269
Chlorobenzene	ND	250	250	256	247
Chloroethane	ND	250	250	314	296
Chloroform	ND	250	250	256	245
Chloromethane	ND	250	250	293	279
cis-1,2-Dichloroethene	ND	250	250	263	249
cis-1,3-Dichloropropene	ND	250	250	250	246
Dibromochloromethane	ND	250	250	259	254
Dibromomethane	ND	250	250	258	245
Dichlorodifluoromethane	ND	250	250	314	292
Ethyl ether	ND	250	250	260	245
Ethylbenzene	ND	250	250	254	243
Hexachlorobutadiene	ND	250	250	252	241

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 480-333598**

**Method: 8260C
Preparation: 5030C**

MS Lab Sample ID: 480-109772-D-4 MS Units: ug/L
 Client Matrix: Water
 Dilution: 10
 Analysis Date: 11/27/2016 2151
 Prep Date: 11/27/2016 2151
 Leach Date: N/A

MSD Lab Sample ID: 480-109772-D-4 MSD
 Client Matrix: Water
 Dilution: 10
 Analysis Date: 11/27/2016 2214
 Prep Date: 11/27/2016 2214
 Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Isopropylbenzene	ND	250	250	261	251
Methyl tert-butyl ether	ND	250	250	244	238
Methylene Chloride	ND	250	250	233	231
m-Xylene & p-Xylene	ND	250	250	253	237
Naphthalene	ND	250	250	249	242
n-Butylbenzene	ND	250	250	264	253
N-Propylbenzene	ND	250	250	259	248
o-Chlorotoluene	ND	250	250	251	246
o-Xylene	ND	250	250	252	240
p-Chlorotoluene	ND	250	250	250	246
p-Cymene	ND	250	250	263	247
sec-Butylbenzene	ND	250	250	265	250
Styrene	ND	250	250	251	241
tert-Butylbenzene	ND	250	250	266	248
Tetrachloroethene	ND	250	250	264	251
Tetrahydrofuran	ND	500	500	467	452
Toluene	ND	250	250	259	250
trans-1,2-Dichloroethene	ND	250	250	269	254
trans-1,3-Dichloropropene	ND	250	250	249	246
Trichloroethene	ND	250	250	262	250
Trichlorofluoromethane	ND	250	250	284	253
Vinyl chloride	ND	250	250	338	F1 308

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

Method Blank - Batch: 480-333730

**Method: 8260C
Preparation: 5030C**

Lab Sample ID: MB 480-333730/6
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/28/2016 2114
Prep Date: 11/28/2016 2114
Leach Date: N/A

Analysis Batch: 480-333730
Prep Batch: N/A
Leach Batch: N/A
Units: ug/L

Instrument ID: HP5973S
Lab File ID: S0060.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
1,1,1,2-Tetrachloroethane	ND		0.35	1.0
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,1-Dichloropropene	ND		0.72	1.0
1,2,3-Trichlorobenzene	ND		0.41	1.0
1,2,3-Trichloropropane	ND		0.89	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2,4-Trimethylbenzene	ND		0.75	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane (EDB)	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloroethene, Total	ND		0.81	2.0
1,2-Dichloropropane	ND		0.72	1.0
1,3,5-Trichlorobenzene	ND		0.23	1.0
1,3,5-Trimethylbenzene	ND		0.77	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,3-Dichloropropane	ND		0.75	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
1,4-Dioxane	ND		9.3	40
2,2-Dichloropropane	ND		0.40	1.0
2-Butanone (MEK)	ND		1.3	10
2-Chloroethyl vinyl ether	ND		0.96	5.0
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Acetonitrile	ND		4.9	15
Acrolein	ND		0.91	20
Acrylonitrile	ND		0.83	5.0
Benzene	ND		0.41	1.0
Bromobenzene	ND		0.80	1.0
Bromochloromethane	ND		0.87	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Butyl alcohol, n-	ND		8.9	40
Butyl alcohol, tert-	ND		3.3	10
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Chlorodifluoromethane	ND		0.26	1.0

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

Method Blank - Batch: 480-333730

**Method: 8260C
Preparation: 5030C**

Lab Sample ID: MB 480-333730/6
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/28/2016 2114
 Prep Date: 11/28/2016 2114
 Leach Date: N/A

Analysis Batch: 480-333730
 Prep Batch: N/A
 Leach Batch: N/A
 Units: ug/L

Instrument ID: HP5973S
 Lab File ID: S0060.D
 Initial Weight/Volume: 5 mL
 Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
Chloroethane	ND		0.32	1.0
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dibromochloromethane	ND		0.32	1.0
Dibromomethane	ND		0.41	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Dichlorofluoromethane	ND		0.34	1.0
Ethyl acetate	ND		0.66	1.0
Ethyl ether	ND		0.72	1.0
Ethyl tert-butyl ether	ND		0.29	1.0
Ethylbenzene	ND		0.74	1.0
Hexachlorobutadiene	ND		0.28	1.0
Hexane	ND		0.40	10
Iodomethane	ND		0.30	1.0
Isobutanol	ND		4.8	25
Isopropyl ether	ND		0.59	1.0
Isopropylbenzene	ND		0.79	1.0
Methacrylonitrile	ND		0.69	5.0
Methyl acetate	ND		1.3	2.5
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
Naphthalene	ND		0.43	1.0
n-Butylbenzene	ND		0.64	1.0
N-Propylbenzene	ND		0.69	1.0
o-Chlorotoluene	ND		0.86	1.0
o-Xylene	ND		0.76	1.0
p-Chlorotoluene	ND		0.84	1.0
p-Cymene	ND		0.31	1.0
sec-Butylbenzene	ND		0.75	1.0
Styrene	ND		0.73	1.0
Tert-amyl methyl ether	ND		0.27	1.0
tert-Butylbenzene	ND		0.81	1.0
Tetrachloroethene	ND		0.36	1.0
Tetrahydrofuran	ND		1.3	5.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
trans-1,4-Dichloro-2-butene	ND		0.22	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

Method Blank - Batch: 480-333730

Method: 8260C
Preparation: 5030C

Lab Sample ID: MB 480-333730/6	Analysis Batch: 480-333730	Instrument ID: HP5973S
Client Matrix: Water	Prep Batch: N/A	Lab File ID: S0060.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/28/2016 2114	Units: ug/L	Final Weight/Volume: 5 mL
Prep Date: 11/28/2016 2114		
Leach Date: N/A		

Analyte	Result	Qual	MDL	RL
Vinyl acetate	ND		0.85	5.0
Vinyl chloride	ND		0.90	1.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	97	77 - 120
4-Bromofluorobenzene (Surr)	93	73 - 120
Toluene-d8 (Surr)	99	80 - 120

Method Blank TICs- Batch: 480-333730

Cas Number	Analyte	RT	Est. Result (ug)	Qual
67-72-1	Hexachloroethane TIC	0.00	ND	

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

Lab Control Sample - Batch: 480-333730

**Method: 8260C
Preparation: 5030C**

Lab Sample ID:	LCS 480-333730/4	Analysis Batch:	480-333730	Instrument ID:	HP5973S
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	S0058.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	11/28/2016 2028	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	11/28/2016 2028				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,1,1,2-Tetrachloroethane	25.0	25.8	103	80 - 120	
1,1,1-Trichloroethane	25.0	25.1	100	73 - 126	
1,1,2,2-Tetrachloroethane	25.0	25.0	100	76 - 120	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	24.5	98	61 - 148	
1,1,2-Trichloroethane	25.0	24.0	96	76 - 122	
1,1-Dichloroethane	25.0	24.4	97	77 - 120	
1,1-Dichloroethene	25.0	25.9	104	66 - 127	
1,1-Dichloropropene	25.0	25.6	102	72 - 122	
1,2,3-Trichlorobenzene	25.0	25.9	104	75 - 123	
1,2,3-Trichloropropane	25.0	22.9	91	68 - 122	
1,2,4-Trichlorobenzene	25.0	26.4	105	79 - 122	
1,2,4-Trimethylbenzene	25.0	26.0	104	76 - 121	
1,2-Dibromo-3-Chloropropane	25.0	25.9	104	56 - 134	
1,2-Dibromoethane (EDB)	25.0	23.5	94	77 - 120	
1,2-Dichlorobenzene	25.0	25.1	100	80 - 124	
1,2-Dichloroethane	25.0	21.9	87	75 - 120	
1,2-Dichloropropane	25.0	23.9	96	76 - 120	
1,3,5-Trimethylbenzene	25.0	26.0	104	77 - 121	
1,3-Dichlorobenzene	25.0	25.7	103	77 - 120	
1,3-Dichloropropane	25.0	23.5	94	75 - 120	
1,4-Dichlorobenzene	25.0	24.9	100	80 - 120	
1,4-Dioxane	500	267	53	50 - 150	
2,2-Dichloropropane	25.0	26.9	108	63 - 136	
2-Butanone (MEK)	125	92.7	74	57 - 140	
2-Chloroethyl vinyl ether	25.0	23.3	93	70 - 129	
2-Hexanone	125	91.8	73	65 - 127	
4-Methyl-2-pentanone (MIBK)	125	98.9	79	71 - 125	
Acetone	125	81.1	65	56 - 142	
Acrolein	125	89.4	72	52 - 143	
Acrylonitrile	250	210	84	63 - 125	
Benzene	25.0	24.5	98	71 - 124	
Bromobenzene	25.0	24.5	98	78 - 120	
Bromochloromethane	25.0	23.9	96	72 - 130	
Bromodichloromethane	25.0	24.6	98	80 - 122	
Bromoform	25.0	24.7	99	61 - 132	
Bromomethane	25.0	26.1	104	55 - 144	
Butyl alcohol, n-	625	428	68	72 - 150	*
Butyl alcohol, tert-	250	178	71	75 - 125	*
Carbon disulfide	25.0	22.0	88	59 - 134	
Carbon tetrachloride	25.0	26.0	104	72 - 134	
Chlorobenzene	25.0	24.2	97	80 - 120	
Chloroethane	25.0	27.4	110	69 - 136	
Chloroform	25.0	23.7	95	73 - 127	
Chloromethane	25.0	23.9	96	68 - 124	
cis-1,2-Dichloroethene	25.0	24.8	99	74 - 124	
cis-1,3-Dichloropropene	25.0	25.5	102	74 - 124	

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

Lab Control Sample - Batch: 480-333730

**Method: 8260C
Preparation: 5030C**

Lab Sample ID: LCS 480-333730/4	Analysis Batch: 480-333730	Instrument ID: HP5973S
Client Matrix: Water	Prep Batch: N/A	Lab File ID: S0058.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/28/2016 2028	Units: ug/L	Final Weight/Volume: 5 mL
Prep Date: 11/28/2016 2028		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Cyclohexane	25.0	25.2	101	59 - 135	
Dibromochloromethane	25.0	25.5	102	75 - 125	
Dibromomethane	25.0	23.8	95	76 - 127	
Dichlorodifluoromethane	25.0	25.7	103	59 - 135	
Dichlorofluoromethane	25.0	23.7	95	76 - 127	
Ethyl ether	25.0	23.9	96	76 - 123	
Ethylbenzene	25.0	24.0	96	77 - 123	
Hexachlorobutadiene	25.0	27.2	109	68 - 131	
Hexane	25.0	24.1	96	54 - 146	
Iodomethane	25.0	23.2	93	78 - 123	
Isobutanol	625	665	106	51 - 150	
Isopropylbenzene	25.0	25.7	103	77 - 122	
Methyl acetate	125	104	83	74 - 133	
Methyl tert-butyl ether	25.0	24.0	96	77 - 120	
Methylcyclohexane	25.0	25.8	103	68 - 134	
Methylene Chloride	25.0	22.2	89	75 - 124	
m-Xylene & p-Xylene	25.0	23.3	93	76 - 122	
Naphthalene	25.0	24.4	97	66 - 125	
n-Butylbenzene	25.0	27.2	109	71 - 128	
N-Propylbenzene	25.0	25.5	102	75 - 127	
o-Chlorotoluene	25.0	24.8	99	76 - 121	
o-Xylene	25.0	23.8	95	76 - 122	
p-Chlorotoluene	25.0	27.8	111	77 - 121	
p-Cymene	25.0	26.5	106	73 - 120	
sec-Butylbenzene	25.0	25.9	103	74 - 127	
Styrene	25.0	23.8	95	80 - 120	
tert-Butylbenzene	25.0	26.2	105	75 - 123	
Tetrachloroethene	25.0	26.0	104	74 - 122	
Tetrahydrofuran	50.0	50.8	102	62 - 132	
Toluene	25.0	24.6	98	80 - 122	
trans-1,2-Dichloroethene	25.0	24.5	98	73 - 127	
trans-1,3-Dichloropropene	25.0	25.0	100	80 - 120	
trans-1,4-Dichloro-2-butene	25.0	23.8	95	41 - 131	
Trichloroethene	25.0	24.3	97	74 - 123	
Trichlorofluoromethane	25.0	23.7	95	62 - 150	
Vinyl acetate	50.0	54.5	109	50 - 144	
Vinyl chloride	25.0	26.8	107	65 - 133	

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	101	77 - 120
4-Bromofluorobenzene (Surr)	93	73 - 120
Toluene-d8 (Surr)	100	80 - 120

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 480-333730**

**Method: 8260C
Preparation: 5030C**

MS Lab Sample ID: 480-109807-G-6 MS	Analysis Batch: 480-333730	Instrument ID: HP5973S
Client Matrix: Water	Prep Batch: N/A	Lab File ID: S0079.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/29/2016 0453		Final Weight/Volume: 5 mL
Prep Date: 11/29/2016 0453		5 mL
Leach Date: N/A		

MSD Lab Sample ID: 480-109807-H-6 MSD	Analysis Batch: 480-333730	Instrument ID: HP5973S
Client Matrix: Water	Prep Batch: N/A	Lab File ID: S0080.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/29/2016 0516		Final Weight/Volume: 5 mL
Prep Date: 11/29/2016 0516		5 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
1,1,1-Trichloroethane	99	104	73 - 126	4	15		
1,1,2,2-Tetrachloroethane	92	93	76 - 120	1	15		
1,1,2-Trichloro-1,2,2-trifluoroethane	88	91	61 - 148	4	20		
1,1,2-Trichloroethane	91	97	76 - 122	6	15		
1,1-Dichloroethane	94	99	77 - 120	5	20		
1,1-Dichloroethene	98	104	66 - 127	6	16		
1,2,4-Trichlorobenzene	96	97	79 - 122	1	20		
1,2-Dibromo-3-Chloropropane	91	103	56 - 134	12	15		
1,2-Dibromoethane (EDB)	92	93	77 - 120	1	15		
1,2-Dichlorobenzene	95	97	80 - 124	2	20		
1,2-Dichloroethane	83	90	75 - 120	8	20		
1,2-Dichloropropane	90	95	76 - 120	6	20		
1,3-Dichlorobenzene	96	98	77 - 120	3	20		
1,4-Dichlorobenzene	93	95	78 - 124	2	20		
2-Butanone (MEK)	75	76	57 - 140	1	20		
2-Hexanone	73	73	65 - 127	0	15		
4-Methyl-2-pentanone (MIBK)	77	79	71 - 125	2	35		
Acetone	69	69	56 - 142	0	15		
Benzene	95	100	71 - 124	4	13		
Bromodichloromethane	92	94	80 - 122	3	15		
Bromoform	80	84	61 - 132	5	15		
Bromomethane	102	99	55 - 144	3	15		
Carbon disulfide	84	86	59 - 134	3	15		
Carbon tetrachloride	100	105	72 - 134	5	15		
Chlorobenzene	92	97	80 - 120	5	25		
Chloroethane	113	111	69 - 136	2	15		
Chloroform	91	95	73 - 127	4	20		
Chloromethane	101	100	68 - 124	1	15		
cis-1,2-Dichloroethene	93	99	74 - 124	6	15		
cis-1,3-Dichloropropene	88	92	74 - 124	3	15		
Cyclohexane	94	99	59 - 135	6	20		
Dibromochloromethane	89	92	75 - 125	3	15		
Dichlorodifluoromethane	98	92	59 - 135	7	20		

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 480-333730**

**Method: 8260C
Preparation: 5030C**

MS Lab Sample ID: 480-109807-G-6 MS	Analysis Batch: 480-333730	Instrument ID: HP5973S
Client Matrix: Water	Prep Batch: N/A	Lab File ID: S0079.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/29/2016 0453		Final Weight/Volume: 5 mL
Prep Date: 11/29/2016 0453		5 mL
Leach Date: N/A		

MSD Lab Sample ID: 480-109807-H-6 MSD	Analysis Batch: 480-333730	Instrument ID: HP5973S
Client Matrix: Water	Prep Batch: N/A	Lab File ID: S0080.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/29/2016 0516		Final Weight/Volume: 5 mL
Prep Date: 11/29/2016 0516		5 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Ethylbenzene	94	97	77 - 123	3	15		
Isopropylbenzene	99	101	77 - 122	2	20		
Methyl acetate	73	75	74 - 133	3	20	F1	
Methyl tert-butyl ether	89	92	77 - 120	4	37		
Methylcyclohexane	97	99	68 - 134	3	20		
Methylene Chloride	84	88	75 - 124	5	15		
m-Xylene & p-Xylene	91	96	76 - 122	5	16		
o-Xylene	91	95	76 - 122	5	16		
Styrene	89	93	80 - 120	5	20		
Tetrachloroethene	99	101	74 - 122	2	20		
Toluene	94	98	80 - 122	4	15		
trans-1,2-Dichloroethene	96	100	73 - 127	4	20		
trans-1,3-Dichloropropene	90	92	80 - 120	2	15		
Trichloroethene	94	100	74 - 123	6	16		
Trichlorofluoromethane	100	102	62 - 150	2	20		
Vinyl chloride	118	116	65 - 133	2	15		
Surrogate		MS % Rec	MSD % Rec			Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		98	98			77 - 120	
4-Bromofluorobenzene (Surr)		96	96			73 - 120	
Toluene-d8 (Surr)		101	102			80 - 120	

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 480-333730**

**Method: 8260C
Preparation: 5030C**

MS Lab Sample ID: 480-109807-G-6 MS Units: ug/L
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/29/2016 0453
 Prep Date: 11/29/2016 0453
 Leach Date: N/A

MSD Lab Sample ID: 480-109807-H-6 MSD
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/29/2016 0516
 Prep Date: 11/29/2016 0516
 Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
1,1,1-Trichloroethane	ND	25.0	25.0	24.9	25.9
1,1,2,2-Tetrachloroethane	ND	25.0	25.0	23.0	23.3
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	25.0	25.0	21.9	22.8
1,1,2-Trichloroethane	ND	25.0	25.0	22.8	24.3
1,1-Dichloroethane	ND	25.0	25.0	23.6	24.9
1,1-Dichloroethene	ND	25.0	25.0	24.5	26.1
1,2,4-Trichlorobenzene	ND	25.0	25.0	23.9	24.2
1,2-Dibromo-3-Chloropropane	ND	25.0	25.0	22.8	25.7
1,2-Dibromoethane (EDB)	ND	25.0	25.0	22.9	23.1
1,2-Dichlorobenzene	ND	25.0	25.0	23.7	24.2
1,2-Dichloroethane	ND	25.0	25.0	20.8	22.5
1,2-Dichloropropane	ND	25.0	25.0	22.4	23.7
1,3-Dichlorobenzene	ND	25.0	25.0	23.9	24.5
1,4-Dichlorobenzene	ND	25.0	25.0	23.2	23.7
2-Butanone (MEK)	ND	125	125	94.1	94.6
2-Hexanone	ND	125	125	91.2	91.5
4-Methyl-2-pentanone (MIBK)	ND	125	125	96.3	98.3
Acetone	ND	125	125	85.9	85.8
Benzene	ND	25.0	25.0	23.8	24.9
Bromodichloromethane	ND	25.0	25.0	22.9	23.6
Bromoform	ND	25.0	25.0	19.9	20.9
Bromomethane	ND	25.0	25.0	25.4	24.7
Carbon disulfide	ND	25.0	25.0	20.9	21.5
Carbon tetrachloride	ND	25.0	25.0	25.0	26.3
Chlorobenzene	ND	25.0	25.0	23.0	24.2
Chloroethane	ND	25.0	25.0	28.2	27.8
Chloroform	ND	25.0	25.0	22.8	23.7
Chloromethane	ND	25.0	25.0	25.2	25.0
cis-1,2-Dichloroethene	ND	25.0	25.0	23.2	24.7
cis-1,3-Dichloropropene	ND	25.0	25.0	22.1	22.9
Cyclohexane	ND	25.0	25.0	23.5	24.9
Dibromochloromethane	ND	25.0	25.0	22.3	23.1
Dichlorodifluoromethane	ND	25.0	25.0	24.5	22.9
Ethylbenzene	ND	25.0	25.0	23.4	24.1
Isopropylbenzene	ND	25.0	25.0	24.8	25.3
Methyl acetate	ND	125	125	91.4	F1 94.3
Methyl tert-butyl ether	ND	25.0	25.0	22.3	23.1
Methylcyclohexane	ND	25.0	25.0	24.1	24.8
Methylene Chloride	ND	25.0	25.0	21.0	22.0
m-Xylene & p-Xylene	ND	25.0	25.0	22.8	23.9
o-Xylene	ND	25.0	25.0	22.7	23.8
Styrene	ND	25.0	25.0	22.2	23.3
Tetrachloroethene	ND	25.0	25.0	24.6	25.2

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 480-333730**

**Method: 8260C
Preparation: 5030C**

MS Lab Sample ID: 480-109807-G-6 MS Units: ug/L
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/29/2016 0453
 Prep Date: 11/29/2016 0453
 Leach Date: N/A

MSD Lab Sample ID: 480-109807-H-6 MSD
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/29/2016 0516
 Prep Date: 11/29/2016 0516
 Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Toluene	ND	25.0	25.0	23.6	24.5
trans-1,2-Dichloroethene	ND	25.0	25.0	24.1	25.1
trans-1,3-Dichloropropene	ND	25.0	25.0	22.5	23.0
Trichloroethene	ND	25.0	25.0	23.5	25.0
Trichlorofluoromethane	ND	25.0	25.0	25.1	25.5
Vinyl chloride	ND	25.0	25.0	29.5	29.0

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

Method Blank - Batch: 480-332686

**Method: 8260C SIM
Preparation: 5030C**

Lab Sample ID: MB 480-332686/7	Analysis Batch: 480-332686	Instrument ID: HP5973J
Client Matrix: Water	Prep Batch: N/A	Lab File ID: J1487.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 25 mL
Analysis Date: 11/20/2016 0006	Units: ug/L	Final Weight/Volume: 25 mL
Prep Date: 11/20/2016 0006		
Leach Date: N/A		

Analyte	Result	Qual	MDL	RL
Vinyl chloride	0.00494	J	0.0040	0.020

Surrogate	% Rec	Acceptance Limits
Dibromofluoromethane (Surr)	99	50 - 150
TBA-d9 (Surr)	129	50 - 150

Lab Control Sample/

**Method: 8260C SIM
Preparation: 5030C**

Lab Control Sample Duplicate Recovery Report - Batch: 480-332686

LCS Lab Sample ID: LCS 480-332686/4	Analysis Batch: 480-332686	Instrument ID: HP5973J
Client Matrix: Water	Prep Batch: N/A	Lab File ID: J1484.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 25 mL
Analysis Date: 11/19/2016 2252	Units: ug/L	Final Weight/Volume: 25 mL
Prep Date: 11/19/2016 2252		25 mL
Leach Date: N/A		

LCSD Lab Sample ID: LCSD 480-332686/5	Analysis Batch: 480-332686	Instrument ID: HP5973J
Client Matrix: Water	Prep Batch: N/A	Lab File ID: J1485.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 25 mL
Analysis Date: 11/19/2016 2316	Units: ug/L	Final Weight/Volume: 25 mL
Prep Date: 11/19/2016 2316		25 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Vinyl chloride	119	113	50 - 150	5	20		
Surrogate	LCS % Rec		LCSD % Rec		Acceptance Limits		
Dibromofluoromethane (Surr)	97		92		50 - 150		
TBA-d9 (Surr)	120		110		50 - 150		

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

**Laboratory Control/
Laboratory Duplicate Data Report - Batch: 480-332686**

**Method: 8260C SIM
Preparation: 5030C**

LCS Lab Sample ID: LCS 480-332686/4 Units: ug/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/19/2016 2252
Prep Date: 11/19/2016 2252
Leach Date: N/A

LCSD Lab Sample ID: LCSD 480-332686/5
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/19/2016 2316
Prep Date: 11/19/2016 2316
Leach Date: N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Vinyl chloride	0.200	0.200	0.239	0.227

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

Method Blank - Batch: 480-332790

**Method: 8260C SIM
Preparation: 5030C**

Lab Sample ID: MB 480-332790/7	Analysis Batch: 480-332790	Instrument ID: HP5973J
Client Matrix: Water	Prep Batch: N/A	Lab File ID: J1515.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 25 mL
Analysis Date: 11/21/2016 1305	Units: ug/L	Final Weight/Volume: 25 mL
Prep Date: 11/21/2016 1305		
Leach Date: N/A		

Analyte	Result	Qual	MDL	RL
Vinyl chloride	0.00569	J	0.0040	0.020

Surrogate	% Rec	Acceptance Limits
Dibromofluoromethane (Surr)	101	50 - 150
TBA-d9 (Surr)	135	50 - 150

Lab Control Sample/

**Method: 8260C SIM
Preparation: 5030C**

Lab Control Sample Duplicate Recovery Report - Batch: 480-332790

LCS Lab Sample ID: LCS 480-332790/4	Analysis Batch: 480-332790	Instrument ID: HP5973J
Client Matrix: Water	Prep Batch: N/A	Lab File ID: J1512.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 25 mL
Analysis Date: 11/21/2016 1152	Units: ug/L	Final Weight/Volume: 25 mL
Prep Date: 11/21/2016 1152		25 mL
Leach Date: N/A		

LCSD Lab Sample ID: LCSD 480-332790/5	Analysis Batch: 480-332790	Instrument ID: HP5973J
Client Matrix: Water	Prep Batch: N/A	Lab File ID: J1513.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 25 mL
Analysis Date: 11/21/2016 1217	Units: ug/L	Final Weight/Volume: 25 mL
Prep Date: 11/21/2016 1217		25 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Vinyl chloride	116	104	50 - 150	11	20		
Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits				
Dibromofluoromethane (Surr)	101	98	50 - 150				
TBA-d9 (Surr)	126	135	50 - 150				

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

**Laboratory Control/
Laboratory Duplicate Data Report - Batch: 480-332790**

**Method: 8260C SIM
Preparation: 5030C**

LCS Lab Sample ID: LCS 480-332790/4 Units: ug/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/21/2016 1152
Prep Date: 11/21/2016 1152
Leach Date: N/A

LCSD Lab Sample ID: LCSD 480-332790/5
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/21/2016 1217
Prep Date: 11/21/2016 1217
Leach Date: N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Vinyl chloride	0.200	0.200	0.231	0.208

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

Method Blank - Batch: 280-352793

Lab Sample ID: MB 280-352793/1-A
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/06/2016 1905
Prep Date: 11/30/2016 0735
Leach Date: N/A

Analysis Batch: 280-354579
Prep Batch: 280-352793
Leach Batch: N/A
Units: mg/L

Method: 6010B Preparation: 3005A Total Recoverable

Instrument ID: MT_025
Lab File ID: 25C120616.asc
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL	RL
Calcium, Dissolved	ND		0.040	0.040
Magnesium, Dissolved	ND		0.050	0.050
Potassium, Dissolved	ND		1.0	1.0
Sodium, Dissolved	ND		1.0	1.0

Method Blank - Batch: 280-352793

Lab Sample ID: MB 280-352793/1-A
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/07/2016 1052
Prep Date: 11/30/2016 0735
Leach Date: N/A

Analysis Batch: 280-354656
Prep Batch: 280-352793
Leach Batch: N/A
Units: mg/L

Method: 6010B Preparation: 3005A Total Recoverable

Instrument ID: MT_025
Lab File ID: 25A120716A.asc
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL	RL
Iron, Dissolved	ND		0.060	0.060

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

Lab Control Sample - Batch: 280-352793

Method: 6010B
Preparation: 3005A
Total Recoverable

Lab Sample ID:	LCS 280-352793/2-A	Analysis Batch:	280-354579	Instrument ID:	MT_025
Client Matrix:	Water	Prep Batch:	280-352793	Lab File ID:	25C120616.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	12/06/2016 1908	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	11/30/2016 0735				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Calcium, Dissolved	50.0	48.8	98	90 - 111	
Magnesium, Dissolved	50.0	48.7	97	90 - 113	
Potassium, Dissolved	50.0	51.8	104	89 - 114	
Sodium, Dissolved	50.0	51.6	103	90 - 115	

Lab Control Sample - Batch: 280-352793

Method: 6010B
Preparation: 3005A
Total Recoverable

Lab Sample ID:	LCS 280-352793/2-A	Analysis Batch:	280-354656	Instrument ID:	MT_025
Client Matrix:	Water	Prep Batch:	280-352793	Lab File ID:	25A120716A.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	12/07/2016 1054	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	11/30/2016 0735				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Iron, Dissolved	1.00	0.978	98	89 - 115	

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-352793**

**Method: 6010B
Preparation: 3005A
Dissolved**

MS Lab Sample ID: 280-91117-E-2-C MS
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/06/2016 1918
Prep Date: 11/30/2016 0735
Leach Date: N/A

Analysis Batch: 280-354579
Prep Batch: 280-352793
Leach Batch: N/A

Instrument ID: MT_025
Lab File ID: 25C120616.asc
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

MSD Lab Sample ID: 280-91117-E-2-D MSD
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/06/2016 1920
Prep Date: 11/30/2016 0735
Leach Date: N/A

Analysis Batch: 280-354579
Prep Batch: 280-352793
Leach Batch: N/A

Instrument ID: MT_025
Lab File ID: 25C120616.asc
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Calcium, Dissolved	93	76	48 - 153	3	20	4	4
Magnesium, Dissolved	86	70	62 - 146	3	20	4	4
Potassium, Dissolved	110	106	76 - 132	3	20		
Sodium, Dissolved	106	101	70 - 203	3	20		

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-352793**

**Method: 6010B
Preparation: 3005A
Dissolved**

MS Lab Sample ID: 280-91117-E-2-C MS
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/07/2016 1102
Prep Date: 11/30/2016 0735
Leach Date: N/A

Analysis Batch: 280-354656
Prep Batch: 280-352793
Leach Batch: N/A

Instrument ID: MT_025
Lab File ID: 25A120716A.asc
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

MSD Lab Sample ID: 280-91117-E-2-D MSD
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/07/2016 1104
Prep Date: 11/30/2016 0735
Leach Date: N/A

Analysis Batch: 280-354656
Prep Batch: 280-352793
Leach Batch: N/A

Instrument ID: MT_025
Lab File ID: 25A120716A.asc
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Iron, Dissolved	90	75	52 - 155	3	20		

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-352793**

**Method: 6010B
Preparation: 3005A
Dissolved**

MS Lab Sample ID: 280-91117-E-2-C MS Units: mg/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/06/2016 1918
Prep Date: 11/30/2016 0735
Leach Date: N/A

MSD Lab Sample ID: 280-91117-E-2-D MSD
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/06/2016 1920
Prep Date: 11/30/2016 0735
Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Calcium, Dissolved	310	50.0	50.0	358 4	349 4
Magnesium, Dissolved	290	50.0	50.0	329 4	321 4
Potassium, Dissolved	12	50.0	50.0	67.5	65.4
Sodium, Dissolved	57	50.0	50.0	110	107

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-352793**

**Method: 6010B
Preparation: 3005A
Dissolved**

MS Lab Sample ID: 280-91117-E-2-C MS Units: mg/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/07/2016 1102
Prep Date: 11/30/2016 0735
Leach Date: N/A

MSD Lab Sample ID: 280-91117-E-2-D MSD
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/07/2016 1104
Prep Date: 11/30/2016 0735
Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Iron, Dissolved	3.8	1.00	1.00	4.67	4.51

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

Method Blank - Batch: 280-352797

Lab Sample ID: MB 280-352797/1-A
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/07/2016 2116
 Prep Date: 11/29/2016 1435
 Leach Date: N/A

Analysis Batch: 280-354736
 Prep Batch: 280-352797
 Leach Batch: N/A
 Units: mg/L

**Method: 6010B
 Preparation: 3005A
 Total Recoverable**

Instrument ID: MT_025
 Lab File ID: 25A120716E.asc
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL	RL
Cobalt, Total	ND		0.0030	0.0030
Iron, Total	ND		0.060	0.060

Lab Control Sample - Batch: 280-352797

Lab Sample ID: LCS 280-352797/2-A
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/07/2016 2119
 Prep Date: 11/29/2016 1435
 Leach Date: N/A

Analysis Batch: 280-354736
 Prep Batch: 280-352797
 Leach Batch: N/A
 Units: mg/L

**Method: 6010B
 Preparation: 3005A
 Total Recoverable**

Instrument ID: MT_025
 Lab File ID: 25A120716E.asc
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Cobalt, Total	0.500	0.505	101	89 - 111	
Iron, Total	1.00	1.04	104	89 - 115	

**Matrix Spike/
 Matrix Spike Duplicate Recovery Report - Batch: 280-352797**

MS Lab Sample ID: 280-91130-C-1-B MS
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/07/2016 2134
 Prep Date: 11/29/2016 1435
 Leach Date: N/A

Analysis Batch: 280-354736
 Prep Batch: 280-352797
 Leach Batch: N/A

**Method: 6010B
 Preparation: 3005A
 Total Recoverable**

Instrument ID: MT_025
 Lab File ID: 25A120716E.asc
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

MSD Lab Sample ID: 280-91130-C-1-C MSD
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/07/2016 2136
 Prep Date: 11/29/2016 1435
 Leach Date: N/A

Analysis Batch: 280-354736
 Prep Batch: 280-352797
 Leach Batch: N/A

Instrument ID: MT_025
 Lab File ID: 25A120716E.asc
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Cobalt, Total	99	101	82 - 119	2	20		
Iron, Total	101	103	52 - 155	2	20		

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-352797**

**Method: 6010B
Preparation: 3005A
Total Recoverable**

MS Lab Sample ID: 280-91130-C-1-B MS Units: mg/L
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/07/2016 2134
 Prep Date: 11/29/2016 1435
 Leach Date: N/A

MSD Lab Sample ID: 280-91130-C-1-C MSD
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/07/2016 2136
 Prep Date: 11/29/2016 1435
 Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Cobalt, Total	ND	0.500	0.500	0.496	0.507
Iron, Total	0.22	1.00	1.00	1.23	1.25

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

Method Blank - Batch: 280-352792

Lab Sample ID: MB 280-352792/1-A
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/01/2016 0049
 Prep Date: 11/29/2016 1435
 Leach Date: N/A

Analysis Batch: 280-353847
 Prep Batch: 280-352792
 Leach Batch: N/A
 Units: mg/L

**Method: 6020
 Preparation: 3005A
 Total Recoverable**

Instrument ID: MT_077
 Lab File ID: 194_BLK.d
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL	RL
Manganese, Dissolved	ND		0.0010	0.0010

Lab Control Sample - Batch: 280-352792

Lab Sample ID: LCS 280-352792/2-A
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/01/2016 0053
 Prep Date: 11/29/2016 1435
 Leach Date: N/A

Analysis Batch: 280-353847
 Prep Batch: 280-352792
 Leach Batch: N/A
 Units: mg/L

**Method: 6020
 Preparation: 3005A
 Total Recoverable**

Instrument ID: MT_077
 Lab File ID: 195_LCS.d
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Manganese, Dissolved	0.0400	0.0409	102	85 - 117	

**Matrix Spike/
 Matrix Spike Duplicate Recovery Report - Batch: 280-352792**

MS Lab Sample ID: 280-91117-E-1-B MS
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/01/2016 0105
 Prep Date: 11/29/2016 1435
 Leach Date: N/A

Analysis Batch: 280-353847
 Prep Batch: 280-352792
 Leach Batch: N/A

**Method: 6020
 Preparation: 3005A
 Dissolved**

Instrument ID: MT_077
 Lab File ID: 198SMPL.d
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

MSD Lab Sample ID: 280-91117-E-1-C MSD
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/01/2016 0109
 Prep Date: 11/29/2016 1435
 Leach Date: N/A

Analysis Batch: 280-353847
 Prep Batch: 280-352792
 Leach Batch: N/A

Instrument ID: MT_077
 Lab File ID: 199SMPL.d
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Manganese, Dissolved	168	56	85 - 117	3	20	4	4

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-352792**

**Method: 6020
Preparation: 3005A
Dissolved**

MS Lab Sample ID: 280-91117-E-1-B MS Units: mg/L
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/01/2016 0105
 Prep Date: 11/29/2016 1435
 Leach Date: N/A

MSD Lab Sample ID: 280-91117-E-1-C MSD
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/01/2016 0109
 Prep Date: 11/29/2016 1435
 Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Manganese, Dissolved	1.5	0.0400	0.0400	1.60 4	1.56 4

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

Method Blank - Batch: 280-352798

Lab Sample ID: MB 280-352798/1-A
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/30/2016 2205
 Prep Date: 11/30/2016 0735
 Leach Date: N/A

Analysis Batch: 280-353847
 Prep Batch: 280-352798
 Leach Batch: N/A
 Units: mg/L

**Method: 6020
 Preparation: 3005A
 Total Recoverable**

Instrument ID: MT_077
 Lab File ID: 151_BLK.d
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL	RL
Antimony, Total	ND		0.0010	0.0010
Barium, Total	ND		0.0010	0.0010
Beryllium, Total	ND		0.0010	0.0010
Cadmium, Total	ND		0.00020	0.00020
Chromium, Total	ND		0.0030	0.0030
Copper, Total	ND		0.0020	0.0020
Lead, Total	ND		0.0010	0.0010
Manganese, Total	ND		0.0010	0.0010
Nickel, Total	ND		0.0040	0.0040
Selenium, Total	ND		0.0010	0.0010
Silver, Total	ND		0.0020	0.0020
Thallium, Total	ND		0.0010	0.0010
Vanadium, Total	ND		0.0020	0.0020
Zinc, Total	ND		0.0050	0.0050

Lab Control Sample - Batch: 280-352798

Lab Sample ID: LCS 280-352798/2-A
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/30/2016 2208
 Prep Date: 11/30/2016 0735
 Leach Date: N/A

Analysis Batch: 280-353847
 Prep Batch: 280-352798
 Leach Batch: N/A
 Units: mg/L

**Method: 6020
 Preparation: 3005A
 Total Recoverable**

Instrument ID: MT_077
 Lab File ID: 152_LCS.d
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Antimony, Total	0.0400	0.0388	97	85 - 115	
Barium, Total	0.0400	0.0424	106	85 - 118	
Beryllium, Total	0.0400	0.0425	106	80 - 125	
Cadmium, Total	0.0400	0.0418	105	85 - 115	
Chromium, Total	0.0400	0.0407	102	84 - 121	
Copper, Total	0.0400	0.0414	103	85 - 119	
Lead, Total	0.0400	0.0427	107	85 - 118	
Manganese, Total	0.0400	0.0417	104	85 - 117	
Nickel, Total	0.0400	0.0415	104	85 - 119	
Selenium, Total	0.0400	0.0410	103	77 - 122	
Silver, Total	0.0400	0.0415	104	85 - 115	
Thallium, Total	0.0400	0.0409	102	85 - 118	
Vanadium, Total	0.0400	0.0395	99	85 - 120	
Zinc, Total	0.0400	0.0467	117	83 - 122	

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-352798**

**Method: 6020
Preparation: 3005A
Total Recoverable**

MS Lab Sample ID: 280-91129-3
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/30/2016 2227
Prep Date: 11/30/2016 0735
Leach Date: N/A

Analysis Batch: 280-353847
Prep Batch: 280-352798
Leach Batch: N/A

Instrument ID: MT_077
Lab File ID: 157SMPL.d
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

MSD Lab Sample ID: 280-91129-3
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/30/2016 2231
Prep Date: 11/30/2016 0735
Leach Date: N/A

Analysis Batch: 280-353847
Prep Batch: 280-352798
Leach Batch: N/A

Instrument ID: MT_077
Lab File ID: 158SMPL.d
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Antimony, Total	104	102	85 - 115	2	20		
Barium, Total	125	108	85 - 118	4	20	F1	
Beryllium, Total	106	104	80 - 125	2	20		
Cadmium, Total	100	99	85 - 115	1	20		
Chromium, Total	104	99	84 - 121	5	20		
Copper, Total	101	97	85 - 119	4	20		
Lead, Total	101	100	85 - 118	1	20		
Manganese, Total	841	574	85 - 117	2	20	4	4
Nickel, Total	101	102	85 - 119	2	20		
Selenium, Total	96	97	77 - 122	1	20		
Silver, Total	101	98	85 - 115	3	20		
Thallium, Total	100	98	85 - 118	1	20		
Vanadium, Total	108	103	85 - 120	4	20		
Zinc, Total	101	108	83 - 122	7	20		

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-352798**

**Method: 6020
Preparation: 3005A
Total Recoverable**

MS Lab Sample ID: 280-91129-3 Units: mg/L
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/30/2016 2227
 Prep Date: 11/30/2016 0735
 Leach Date: N/A

MSD Lab Sample ID: 280-91129-3
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/30/2016 2231
 Prep Date: 11/30/2016 0735
 Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Antimony, Total	ND	0.0400	0.0400	0.0418	0.0409
Barium, Total	0.11	0.0400	0.0400	0.161 F1	0.155
Beryllium, Total	ND	0.0400	0.0400	0.0423	0.0417
Cadmium, Total	ND	0.0400	0.0400	0.0401	0.0396
Chromium, Total	ND	0.0400	0.0400	0.0416	0.0396
Copper, Total	ND	0.0400	0.0400	0.0403	0.0389
Lead, Total	ND	0.0400	0.0400	0.0403	0.0400
Manganese, Total	4.4	0.0400	0.0400	4.72 4	4.61 4
Nickel, Total	ND	0.0400	0.0400	0.0402	0.0409
Selenium, Total	ND	0.0400	0.0400	0.0384	0.0387
Silver, Total	ND	0.0400	0.0400	0.0404	0.0393
Thallium, Total	ND	0.0400	0.0400	0.0399	0.0394
Vanadium, Total	ND	0.0400	0.0400	0.0430	0.0413
Zinc, Total	ND	0.0400	0.0400	0.0405	0.0433

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

Method Blank - Batch: 280-354600

Method: 300.0
Preparation: N/A

Lab Sample ID: MB 280-354600/57	Analysis Batch: 280-354600	Instrument ID: WC_IonChrom6
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 57.0000.d
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 12/08/2016 0840	Units: mg/L	Final Weight/Volume: 5 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	Result	Qual	RL	RL
Chloride	ND		1.0	1.0
Sulfate	20.3		1.0	1.0

Method Reporting Limit Check - Batch: 280-354600

Method: 300.0
Preparation: N/A

Lab Sample ID: MRL 280-354600/3	Analysis Batch: 280-354600	Instrument ID: WC_IonChrom6
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: 12/07/2016 0958	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	100	50 - 150	
Sulfate	2.50	ND	100	50 - 150	

Lab Control Sample/

Method: 300.0
Preparation: N/A

Lab Control Sample Duplicate Recovery Report - Batch: 280-354600

LCS Lab Sample ID: LCS 280-354600/55	Analysis Batch: 280-354600	Instrument ID: WC_IonChrom6
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 55.0000.d
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 12/08/2016 0805	Units: mg/L	Final Weight/Volume: 5 mL
Prep Date: N/A		25 uL
Leach Date: N/A		

LCSD Lab Sample ID: LCSD 280-354600/56	Analysis Batch: 280-354600	Instrument ID: WC_IonChrom6
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 56.0000.d
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 12/08/2016 0823	Units: mg/L	Final Weight/Volume: 5 mL
Prep Date: N/A		25 uL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Chloride	101	100	90 - 110	0	10		
Sulfate	101	101	90 - 110	1	10	B	B

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

**Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-354600**

**Method: 300.0
Preparation: N/A**

LCS Lab Sample ID: LCS 280-354600/55 Units: mg/L
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/08/2016 0805
 Prep Date: N/A
 Leach Date: N/A

LCSD Lab Sample ID: LCSD 280-354600/56
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/08/2016 0823
 Prep Date: N/A
 Leach Date: N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Chloride	100	100	101	100
Sulfate	100	100	101 B	101 B

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-354600**

**Method: 300.0
Preparation: N/A**

MS Lab Sample ID: 280-91129-2
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/08/2016 0951
 Prep Date: N/A
 Leach Date: N/A

Analysis Batch: 280-354600
 Prep Batch: N/A
 Leach Batch: N/A

Instrument ID: WC_IonChrom6
 Lab File ID: 61.0000.d
 Initial Weight/Volume: 5 mL
 Final Weight/Volume: 5 mL
 25 uL

MSD Lab Sample ID: 280-91129-2
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/08/2016 1009
 Prep Date: N/A
 Leach Date: N/A

Analysis Batch: 280-354600
 Prep Batch: N/A
 Leach Batch: N/A

Instrument ID: WC_IonChrom6
 Lab File ID: 62.0000.d
 Initial Weight/Volume: 5 mL
 Final Weight/Volume: 5 mL
 25 uL

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

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-354600**

**Method: 300.0
Preparation: N/A**

MS Lab Sample ID: 280-91129-2
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/08/2016 0951
 Prep Date: N/A
 Leach Date: N/A

Units: mg/L

MSD Lab Sample ID: 280-91129-2
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/08/2016 1009
 Prep Date: N/A
 Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Chloride	7.0	25.0	25.0	34.2	34.4

Duplicate - Batch: 280-354600

**Method: 300.0
Preparation: N/A**

Lab Sample ID: 280-91129-2
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/08/2016 0933
 Prep Date: N/A
 Leach Date: N/A

Analysis Batch: 280-354600
 Prep Batch: N/A
 Leach Batch: N/A
 Units: mg/L

Instrument ID: WC_IonChrom6
 Lab File ID: 60.0000.d
 Initial Weight/Volume: 5 mL
 Final Weight/Volume: 5 mL
 25 uL

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Chloride	7.0	6.97	0.1	15	

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

Method Blank - Batch: 280-355349

Method: 300.0
Preparation: N/A

Lab Sample ID: MB 280-355349/6	Analysis Batch: 280-355349	Instrument ID: WC_IonChrom10
Client Matrix: Water	Prep Batch: N/A	Lab File ID: Info 2_DENPC179_Anic
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 12/13/2016 1046	Units: mg/L	Final Weight/Volume: 5 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	Result	Qual	RL	RL
Sulfate	ND		1.0	1.0

Method Reporting Limit Check - Batch: 280-355349

Method: 300.0
Preparation: N/A

Lab Sample ID: MRL 280-355349/3	Analysis Batch: 280-355349	Instrument ID: WC_IonChrom10
Client Matrix: Water	Prep Batch: N/A	Lab File ID: Info 2_DENPC179_Anic
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 12/13/2016 1000	Units: mg/L	Final Weight/Volume: 5 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Sulfate	2.50	ND	94	50 - 150	

Lab Control Sample/

Lab Control Sample Duplicate Recovery Report - Batch: 280-355349

Method: 300.0
Preparation: N/A

LCS Lab Sample ID: LCS 280-355349/4	Analysis Batch: 280-355349	Instrument ID: WC_IonChrom10
Client Matrix: Water	Prep Batch: N/A	Lab File ID: Info 2_DENPC179_Anic
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 12/13/2016 1015	Units: mg/L	Final Weight/Volume: 5 mL
Prep Date: N/A		5 uL
Leach Date: N/A		

LCSD Lab Sample ID: LCSD 280-355349/5	Analysis Batch: 280-355349	Instrument ID: WC_IonChrom10
Client Matrix: Water	Prep Batch: N/A	Lab File ID: Info 2_DENPC179_Anic
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 12/13/2016 1030	Units: mg/L	Final Weight/Volume: 5 mL
Prep Date: N/A		5 uL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Sulfate	101	101	90 - 110	0	10		

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

**Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-355349**

**Method: 300.0
Preparation: N/A**

LCS Lab Sample ID: LCS 280-355349/4 Units: mg/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/13/2016 1015
Prep Date: N/A
Leach Date: N/A

LCSD Lab Sample ID: LCSD 280-355349/5
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/13/2016 1030
Prep Date: N/A
Leach Date: N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Sulfate	100	100	101	101

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

Method Blank - Batch: 280-353099

Method: 350.1
Preparation: N/A

Lab Sample ID: MB 280-353099/64	Analysis Batch: 280-353099	Instrument ID: WC_Alp 3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: C:\FLOW_4\112516.RS
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 11/25/2016 1153	Units: mg/L	Final Weight/Volume:
Prep Date: N/A		
Leach Date: N/A		

Analyte	Result	Qual	RL	RL
Ammonia (as N)	ND		0.030	0.030

**Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-353099**

Method: 350.1
Preparation: N/A

LCS Lab Sample ID: LCS 280-353099/62	Analysis Batch: 280-353099	Instrument ID: WC_Alp 3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: C:\FLOW_4\112516.RS
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 100 mL
Analysis Date: 11/25/2016 1149	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

LCSD Lab Sample ID: LCSD 280-353099/63	Analysis Batch: 280-353099	Instrument ID: WC_Alp 3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: C:\FLOW_4\112516.RS
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 100 mL
Analysis Date: 11/25/2016 1151	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Ammonia (as N)	100	99	90 - 110	0	10		

**Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-353099**

Method: 350.1
Preparation: N/A

LCS Lab Sample ID: LCS 280-353099/62	Units: mg/L	LCSD Lab Sample ID: LCSD 280-353099/63
Client Matrix: Water		Client Matrix: Water
Dilution: 1.0		Dilution: 1.0
Analysis Date: 11/25/2016 1149		Analysis Date: 11/25/2016 1151
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	2.49	2.49

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-353099**

**Method: 350.1
Preparation: N/A**

MS Lab Sample ID: 280-91129-2
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/25/2016 1249
Prep Date: N/A
Leach Date: N/A

Analysis Batch: 280-353099
Prep Batch: N/A
Leach Batch: N/A

Instrument ID: WC_Alp 3
Lab File ID: C:\FLOW_4\112516.RS
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

MSD Lab Sample ID: 280-91129-2
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/25/2016 1251
Prep Date: N/A
Leach Date: N/A

Analysis Batch: 280-353099
Prep Batch: N/A
Leach Batch: N/A

Instrument ID: WC_Alp 3
Lab File ID: C:\FLOW_4\112516.RS
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Ammonia (as N)	110	104	90 - 110	6	10		

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-353099**

**Method: 350.1
Preparation: N/A**

MS Lab Sample ID: 280-91129-2
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/25/2016 1249
Prep Date: N/A
Leach Date: N/A

Units: mg/L

MSD Lab Sample ID: 280-91129-2
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/25/2016 1251
Prep 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	1.10	1.04

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

Method Blank - Batch: 280-354812

Method: 353.2
Preparation: N/A

Lab Sample ID:	MB 280-354812/1	Analysis Batch:	280-354812	Instrument ID:	No Equipment Assigned
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	12/08/2016 1039	Units:	mg/L	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	RL	RL
Nitrate as N	ND		0.050	0.050

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

Method Blank - Batch: 280-352831

Method: SM 2320B
Preparation: N/A

Lab Sample ID: MB 280-352831/5	Analysis Batch: 280-352831	Instrument ID: WC-AT3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 112216 alk.TXT
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 11/22/2016 1315	Units: mg/L	Final Weight/Volume:
Prep Date: N/A		
Leach Date: N/A		

Analyte	Result	Qual	RL	RL
Alkalinity, Total (As CaCO3)	ND		5.0	5.0
Alkalinity, Bicarbonate (As CaCO3)	ND		5.0	5.0

Lab Control Sample - Batch: 280-352831

Method: SM 2320B
Preparation: N/A

Lab Sample ID: LCS 280-352831/4	Analysis Batch: 280-352831	Instrument ID: WC-AT3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 112216 alk.TXT
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 11/22/2016 1311	Units: mg/L	Final Weight/Volume:
Prep Date: N/A		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Alkalinity, Total (As CaCO3)	200	200	100	90 - 110	

Duplicate - Batch: 280-352831

Method: SM 2320B
Preparation: N/A

Lab Sample ID: 280-91078-A-2 DU	Analysis Batch: 280-352831	Instrument ID: WC-AT3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 112216 alk.TXT
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 11/22/2016 1324	Units: mg/L	Final Weight/Volume:
Prep Date: N/A		
Leach Date: N/A		

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Alkalinity, Total (As CaCO3)	260	262	0.5	10	

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

Method Blank - Batch: 280-353180

Method: SM 2320B

Preparation: N/A

Lab Sample ID: MB 280-353180/5	Analysis Batch: 280-353180	Instrument ID: WC-AT3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 112316 alk.TXT
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 11/23/2016 1224	Units: mg/L	Final Weight/Volume:
Prep Date: N/A		
Leach Date: N/A		

Analyte	Result	Qual	RL	RL
Alkalinity, Total (As CaCO3)	ND		5.0	5.0
Alkalinity, Bicarbonate (As CaCO3)	ND		5.0	5.0

Lab Control Sample - Batch: 280-353180

Method: SM 2320B

Preparation: N/A

Lab Sample ID: LCS 280-353180/4	Analysis Batch: 280-353180	Instrument ID: WC-AT3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 112316 alk.TXT
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 11/23/2016 1220	Units: mg/L	Final Weight/Volume:
Prep Date: N/A		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Alkalinity, Total (As CaCO3)	200	202	101	90 - 110	

Duplicate - Batch: 280-353180

Method: SM 2320B

Preparation: N/A

Lab Sample ID: 280-91292-A-3 DU	Analysis Batch: 280-353180	Instrument ID: WC-AT3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 112316 alk.TXT
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 11/23/2016 1234	Units: mg/L	Final Weight/Volume:
Prep Date: N/A		
Leach Date: N/A		

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Alkalinity, Total (As CaCO3)	180	194	6	10	

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

Method Blank - Batch: 280-352631

Method: SM 2540C

Preparation: N/A

Lab Sample ID: MB 280-352631/1	Analysis Batch: 280-352631	Instrument ID: No Equipment Assigned
Client Matrix: Water	Prep Batch: N/A	Lab File ID: N/A
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 100 mL
Analysis Date: 11/22/2016 1053	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	Result	Qual	RL	RL
Total Dissolved Solids (TDS)	ND		5.0	5.0

Lab Control Sample - Batch: 280-352631

Method: SM 2540C

Preparation: N/A

Lab Sample ID: LCS 280-352631/2	Analysis Batch: 280-352631	Instrument ID: No Equipment Assigned
Client Matrix: Water	Prep Batch: N/A	Lab File ID: N/A
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 100 mL
Analysis Date: 11/22/2016 1053	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Total Dissolved Solids (TDS)	500	494	99	86 - 110	

Duplicate - Batch: 280-352631

Method: SM 2540C

Preparation: N/A

Lab Sample ID: 280-91170-R-2 DU	Analysis Batch: 280-352631	Instrument ID: No Equipment Assigned
Client Matrix: Water	Prep Batch: N/A	Lab File ID: N/A
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 25 mL
Analysis Date: 11/22/2016 1053	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Total Dissolved Solids (TDS)	12000	11900	2	10	E

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

Method Blank - Batch: 280-352743

Method: SM 2540D
Preparation: N/A

Lab Sample ID: MB 280-352743/2	Analysis Batch: 280-352743	Instrument ID: No Equipment Assigned
Client Matrix: Water	Prep Batch: N/A	Lab File ID: N/A
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 250 mL
Analysis Date: 11/22/2016 1849	Units: mg/L	Final Weight/Volume: 250 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	Result	Qual	RL	RL
Total Suspended Solids	ND		4.0	4.0

Lab Control Sample - Batch: 280-352743

Method: SM 2540D
Preparation: N/A

Lab Sample ID: LCS 280-352743/1	Analysis Batch: 280-352743	Instrument ID: No Equipment Assigned
Client Matrix: Water	Prep Batch: N/A	Lab File ID: N/A
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 250 mL
Analysis Date: 11/22/2016 1849	Units: mg/L	Final Weight/Volume: 250 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Total Suspended Solids	100	92.8	93	86 - 114	

Duplicate - Batch: 280-352743

Method: SM 2540D
Preparation: N/A

Lab Sample ID: 280-91129-3	Analysis Batch: 280-352743	Instrument ID: No Equipment Assigned
Client Matrix: Water	Prep Batch: N/A	Lab File ID: N/A
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 250 mL
Analysis Date: 11/22/2016 1849	Units: mg/L	Final Weight/Volume: 250 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Total Suspended Solids	31	31.2	1	10	

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

Method Blank - Batch: 280-354209

Method: SM 5310B

Preparation: N/A

Lab Sample ID: MB 280-354209/4	Analysis Batch: 280-354209	Instrument ID: WC_SHI3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 120216.txt
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 12/02/2016 1512	Units: mg/L	Final Weight/Volume:
Prep Date: N/A		
Leach Date: N/A		

Analyte	Result	Qual	RL	RL
Total Organic Carbon - Average	ND		1.0	1.0

Lab Control Sample - Batch: 280-354209

Method: SM 5310B

Preparation: N/A

Lab Sample ID: LCS 280-354209/3	Analysis Batch: 280-354209	Instrument ID: WC_SHI3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 120216.txt
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 12/02/2016 1458	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	24.4	98	88 - 112	

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-354209**

Method: SM 5310B

Preparation: N/A

MS Lab Sample ID: 280-91049-C-3 MS	Analysis Batch: 280-354209	Instrument ID: WC_SHI3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 120216.txt
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 12/02/2016 1558		Final Weight/Volume: 50 mL
Prep Date: N/A		
Leach Date: N/A		

MSD Lab Sample ID: 280-91049-C-3 MSD	Analysis Batch: 280-354209	Instrument ID: WC_SHI3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 120216.txt
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 12/02/2016 1613		Final Weight/Volume: 50 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Total Organic Carbon - Average	102	102	88 - 112	0	15		

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-354209**

**Method: SM 5310B
Preparation: N/A**

MS Lab Sample ID: 280-91049-C-3 MS Units: mg/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/02/2016 1558
Prep Date: N/A
Leach Date: N/A

MSD Lab Sample ID: 280-91049-C-3 MSD
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/02/2016 1613
Prep 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	ND	25.0	25.0	25.5	25.5

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

Laboratory Chronicle

Lab ID: 280-91129-1

Client ID: MW-23A

Sample Date/Time: 11/16/2016 13:05 Received Date/Time: 11/17/2016 17:05

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	280-91129-F-1		480-333598		11/27/2016 16:23	1	TAL BUF	NEA
A:8260C	280-91129-F-1		480-333598		11/27/2016 16:23	1	TAL BUF	NEA
P:5030C	280-91129-K-1		480-332686		11/20/2016 01:13	1	TAL BUF	NEA
A:8260C SIM	280-91129-K-1		480-332686		11/20/2016 01:13	1	TAL BUF	NEA
P:3005A	280-91129-E-1-B		280-354579	280-352793	11/30/2016 07:35	1	TAL DEN	TEB
A:6010B	280-91129-E-1-B		280-354579	280-352793	12/06/2016 20:17	1	TAL DEN	CML
P:3005A	280-91129-E-1-B		280-354656	280-352793	11/30/2016 07:35	1	TAL DEN	TEB
A:6010B	280-91129-E-1-B		280-354656	280-352793	12/07/2016 11:17	1	TAL DEN	SJS
P:3005A	280-91129-D-1-A		280-354736	280-352797	11/29/2016 14:35	1	TAL DEN	SEJ
A:6010B	280-91129-D-1-A		280-354736	280-352797	12/07/2016 21:21	1	TAL DEN	SJS
P:3005A	280-91129-D-1-B		280-353847	280-352798	11/30/2016 07:35	1	TAL DEN	SUR
A:6020	280-91129-D-1-B		280-353847	280-352798	11/30/2016 22:12	1	TAL DEN	LMT
P:3005A	280-91129-E-1-A		280-353847	280-352792	11/29/2016 14:35	1	TAL DEN	SEJ
A:6020	280-91129-E-1-A		280-353847	280-352792	12/01/2016 02:25	1	TAL DEN	LMT
A:300.0	280-91129-A-1		280-354600		12/08/2016 08:58	1	TAL DEN	AFB
A:350.1	280-91129-C-1		280-353099		11/25/2016 12:31	1	TAL DEN	MAS
A:353.2	280-91129-A-1		280-354812		12/08/2016 10:39	1	TAL DEN	AJA
A:SM 2320B	280-91129-B-1		280-352831		11/22/2016 13:49	1	TAL DEN	MMC
A:SM 2540C	280-91129-A-1		280-352631		11/22/2016 10:53	1	TAL DEN	JAP
A:SM 2540D	280-91129-B-1		280-352743		11/22/2016 18:49	1	TAL DEN	SVC
A:SM 5310B	280-91129-C-1		280-354209		12/02/2016 18:25	1	TAL DEN	CCJ
A:Field Sampling	280-91129-A-1		280-352756		11/16/2016 14:05	1	TAL DEN	C1K

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

Laboratory Chronicle

Lab ID: 280-91129-2

Client ID: MW-32

Sample Date/Time: 11/16/2016 14:05 Received Date/Time: 11/17/2016 17:05

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	280-91129-F-2		480-333598		11/27/2016 16:46	1	TAL BUF	NEA
A:8260C	280-91129-F-2		480-333598		11/27/2016 16:46	1	TAL BUF	NEA
P:5030C	280-91129-J-2		480-332790		11/21/2016 15:27	1	TAL BUF	CDC
A:8260C SIM	280-91129-J-2		480-332790		11/21/2016 15:27	1	TAL BUF	CDC
P:3005A	280-91129-E-2-B		280-354579	280-352793	11/30/2016 07:35	1	TAL DEN	TEB
A:6010B	280-91129-E-2-B		280-354579	280-352793	12/06/2016 20:19	1	TAL DEN	CML
P:3005A	280-91129-E-2-B		280-354656	280-352793	11/30/2016 07:35	1	TAL DEN	TEB
A:6010B	280-91129-E-2-B		280-354656	280-352793	12/07/2016 11:19	1	TAL DEN	SJS
P:3005A	280-91129-D-2-A		280-354736	280-352797	11/29/2016 14:35	1	TAL DEN	SEJ
A:6010B	280-91129-D-2-A		280-354736	280-352797	12/07/2016 21:23	1	TAL DEN	SJS
P:3005A	280-91129-D-2-B		280-353847	280-352798	11/30/2016 07:35	1	TAL DEN	SUR
A:6020	280-91129-D-2-B		280-353847	280-352798	11/30/2016 22:16	1	TAL DEN	LMT
P:3005A	280-91129-E-2-A		280-353847	280-352792	11/29/2016 14:35	1	TAL DEN	SEJ
A:6020	280-91129-E-2-A		280-353847	280-352792	12/01/2016 02:29	1	TAL DEN	LMT
A:300.0	280-91129-A-2		280-354600		12/08/2016 09:16	1	TAL DEN	AFB
A:300.0	280-91129-A-2		280-355349		12/13/2016 12:29	1	TAL DEN	AFB
A:350.1	280-91129-C-2		280-353099		11/25/2016 12:33	1	TAL DEN	MAS
A:353.2	280-91129-A-2		280-354812		12/08/2016 10:39	1	TAL DEN	AJA
A:SM 2320B	280-91129-B-2		280-352831		11/22/2016 13:53	1	TAL DEN	MMC
A:SM 2540C	280-91129-A-2		280-352631		11/22/2016 10:53	1	TAL DEN	JAP
A:SM 2540D	280-91129-B-2		280-352743		11/22/2016 18:49	1	TAL DEN	SVC
A:SM 5310B	280-91129-C-2		280-354209		12/02/2016 18:40	1	TAL DEN	CCJ
A:Field Sampling	280-91129-A-2		280-352756		11/16/2016 15:05	1	TAL DEN	C1K

Lab ID: 280-91129-2 MS

Client ID: MW-32

Sample Date/Time: 11/16/2016 14:05 Received Date/Time: 11/17/2016 17:05

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:300.0	280-91129-A-2 MS		280-354600		12/08/2016 09:51	1	TAL DEN	AFB
A:350.1	280-91129-C-2 MS		280-353099		11/25/2016 12:49	1	TAL DEN	MAS

Lab ID: 280-91129-2 MSD

Client ID: MW-32

Sample Date/Time: 11/16/2016 14:05 Received Date/Time: 11/17/2016 17:05

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:300.0	280-91129-A-2 MSD		280-354600		12/08/2016 10:09	1	TAL DEN	AFB
A:350.1	280-91129-C-2 MSD		280-353099		11/25/2016 12:51	1	TAL DEN	MAS

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

Laboratory Chronicle

Lab ID: 280-91129-2 DU

Client ID: MW-32

Sample Date/Time: 11/16/2016 14:05 Received Date/Time: 11/17/2016 17:05

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:300.0	280-91129-A-2 DU		280-354600		12/08/2016 09:33	1	TAL DEN	AFB

Lab ID: 280-91129-3

Client ID: MW-42

Sample Date/Time: 11/16/2016 15:00 Received Date/Time: 11/17/2016 17:05

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	280-91129-I-3		480-333730		11/28/2016 23:53	1	TAL BUF	NEA
A:8260C	280-91129-I-3		480-333730		11/28/2016 23:53	1	TAL BUF	NEA
P:5030C	280-91129-J-3		480-332790		11/21/2016 15:52	1	TAL BUF	CDC
A:8260C SIM	280-91129-J-3		480-332790		11/21/2016 15:52	1	TAL BUF	CDC
P:3005A	280-91129-E-3-B		280-354579	280-352793	11/30/2016 07:35	1	TAL DEN	TEB
A:6010B	280-91129-E-3-B		280-354579	280-352793	12/06/2016 20:22	1	TAL DEN	CML
P:3005A	280-91129-E-3-B		280-354656	280-352793	11/30/2016 07:35	1	TAL DEN	TEB
A:6010B	280-91129-E-3-B		280-354656	280-352793	12/07/2016 11:22	1	TAL DEN	SJS
P:3005A	280-91129-D-3-A		280-354736	280-352797	11/29/2016 14:35	1	TAL DEN	SEJ
A:6010B	280-91129-D-3-A		280-354736	280-352797	12/07/2016 21:26	1	TAL DEN	SJS
P:3005A	280-91129-D-3-B		280-353847	280-352798	11/30/2016 07:35	1	TAL DEN	SUR
A:6020	280-91129-D-3-B		280-353847	280-352798	11/30/2016 22:20	1	TAL DEN	LMT
P:3005A	280-91129-E-3-A		280-353847	280-352792	11/29/2016 14:35	1	TAL DEN	SEJ
A:6020	280-91129-E-3-A		280-353847	280-352792	12/01/2016 02:33	1	TAL DEN	LMT
A:300.0	280-91129-B-3		280-354600		12/08/2016 10:27	1	TAL DEN	AFB
A:300.0	280-91129-B-3		280-355349		12/13/2016 13:30	1	TAL DEN	AFB
A:350.1	280-91129-C-3		280-353099		11/25/2016 12:53	2	TAL DEN	MAS
A:353.2	280-91129-A-3		280-354812		12/08/2016 10:39	1	TAL DEN	AJA
A:SM 2320B	280-91129-A-3		280-352831		11/22/2016 13:58	1	TAL DEN	MMC
A:SM 2540C	280-91129-B-3		280-352631		11/22/2016 10:53	1	TAL DEN	JAP
A:SM 2540D	280-91129-A-3		280-352743		11/22/2016 18:49	1	TAL DEN	SVC
A:SM 5310B	280-91129-C-3		280-354209		12/02/2016 18:54	1	TAL DEN	CCJ
A:Field Sampling	280-91129-A-3		280-352756		11/16/2016 16:00	1	TAL DEN	C1K

Lab ID: 280-91129-3 MS

Client ID: MW-42

Sample Date/Time: 11/16/2016 15:00 Received Date/Time: 11/17/2016 17:05

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3005A	280-91129-D-3-C MS		280-353847	280-352798	11/30/2016 07:35	1	TAL DEN	SUR
A:6020	280-91129-D-3-C MS		280-353847	280-352798	11/30/2016 22:27	1	TAL DEN	LMT

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

Laboratory Chronicle

Lab ID: 280-91129-3 MSD

Client ID: MW-42

Sample Date/Time: 11/16/2016 15:00 Received Date/Time: 11/17/2016 17:05

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3005A	280-91129-D-3-D MSD		280-353847	280-352798	11/30/2016 07:35	1	TAL DEN	SUR
A:6020	280-91129-D-3-D MSD		280-353847	280-352798	11/30/2016 22:31	1	TAL DEN	LMT

Lab ID: 280-91129-3 DU

Client ID: MW-42

Sample Date/Time: 11/16/2016 15:00 Received Date/Time: 11/17/2016 17:05

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:SM 2540D	280-91129-A-3 DU		280-352743		11/22/2016 18:49	1	TAL DEN	SVC

Lab ID: 280-91129-4

Client ID: TRIP BLANK

Sample Date/Time: 11/16/2016 00:00 Received Date/Time: 11/17/2016 17:05

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	280-91129-A-4		480-333598		11/27/2016 17:32	1	TAL BUF	NEA
A:8260C	280-91129-A-4		480-333598		11/27/2016 17:32	1	TAL BUF	NEA
P:5030C	280-91129-B-4		480-332686		11/20/2016 02:27	1	TAL BUF	NEA
A:8260C SIM	280-91129-B-4		480-332686		11/20/2016 02:27	1	TAL BUF	NEA

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

Laboratory Chronicle

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 480-333598/7		480-333598		11/27/2016 14:16	1	TAL BUF	NEA
A:8260C	MB 480-333598/7		480-333598		11/27/2016 14:16	1	TAL BUF	NEA
P:5030C	MB 480-333730/6		480-333730		11/28/2016 21:14	1	TAL BUF	NEA
A:8260C	MB 480-333730/6		480-333730		11/28/2016 21:14	1	TAL BUF	NEA
P:5030C	MB 480-332686/7		480-332686		11/20/2016 00:06	1	TAL BUF	NEA
A:8260C SIM	MB 480-332686/7		480-332686		11/20/2016 00:06	1	TAL BUF	NEA
P:5030C	MB 480-332790/7		480-332790		11/21/2016 13:05	1	TAL BUF	CDC
A:8260C SIM	MB 480-332790/7		480-332790		11/21/2016 13:05	1	TAL BUF	CDC
P:3005A	MB 280-352793/1-A		280-354579	280-352793	11/30/2016 07:35	1	TAL DEN	TEB
A:6010B	MB 280-352793/1-A		280-354579	280-352793	12/06/2016 19:05	1	TAL DEN	CML
P:3005A	MB 280-352793/1-A		280-354656	280-352793	11/30/2016 07:35	1	TAL DEN	TEB
A:6010B	MB 280-352793/1-A		280-354656	280-352793	12/07/2016 10:52	1	TAL DEN	SJS
P:3005A	MB 280-352797/1-A		280-354736	280-352797	11/29/2016 14:35	1	TAL DEN	SEJ
A:6010B	MB 280-352797/1-A		280-354736	280-352797	12/07/2016 21:16	1	TAL DEN	SJS
P:3005A	MB 280-352798/1-A		280-353847	280-352798	11/30/2016 07:35	1	TAL DEN	SUR
A:6020	MB 280-352798/1-A		280-353847	280-352798	11/30/2016 22:05	1	TAL DEN	LMT
P:3005A	MB 280-352792/1-A		280-353847	280-352792	11/29/2016 14:35	1	TAL DEN	SEJ
A:6020	MB 280-352792/1-A		280-353847	280-352792	12/01/2016 00:49	1	TAL DEN	LMT
A:300.0	MB 280-354600/57		280-354600		12/08/2016 08:40	1	TAL DEN	AFB
A:300.0	MB 280-355349/6		280-355349		12/13/2016 10:46	1	TAL DEN	AFB
A:350.1	MB 280-353099/64		280-353099		11/25/2016 11:53	1	TAL DEN	MAS
A:353.2	MB 280-354812/1		280-354812		12/08/2016 10:39	1	TAL DEN	AJA
A:SM 2320B	MB 280-352831/5		280-352831		11/22/2016 13:15	1	TAL DEN	MMC
A:SM 2320B	MB 280-353180/5		280-353180		11/23/2016 12:24	1	TAL DEN	MMC
A:SM 2540C	MB 280-352631/1		280-352631		11/22/2016 10:53	1	TAL DEN	JAP
A:SM 2540D	MB 280-352743/2		280-352743		11/22/2016 18:49	1	TAL DEN	SVC
A:SM 5310B	MB 280-354209/4		280-354209		12/02/2016 15:12	1	TAL DEN	CCJ

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

Laboratory Chronicle

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 480-333598/5		480-333598		11/27/2016 13:30	1	TAL BUF	NEA
A:8260C	LCS 480-333598/5		480-333598		11/27/2016 13:30	1	TAL BUF	NEA
P:5030C	LCS 480-333730/4		480-333730		11/28/2016 20:28	1	TAL BUF	NEA
A:8260C	LCS 480-333730/4		480-333730		11/28/2016 20:28	1	TAL BUF	NEA
P:5030C	LCS 480-332686/4		480-332686		11/19/2016 22:52	1	TAL BUF	NEA
A:8260C SIM	LCS 480-332686/4		480-332686		11/19/2016 22:52	1	TAL BUF	NEA
P:5030C	LCS 480-332790/4		480-332790		11/21/2016 11:52	1	TAL BUF	CDC
A:8260C SIM	LCS 480-332790/4		480-332790		11/21/2016 11:52	1	TAL BUF	CDC
P:3005A	LCS 280-352793/2-A		280-354579	280-352793	11/30/2016 07:35	1	TAL DEN	TEB
A:6010B	LCS 280-352793/2-A		280-354579	280-352793	12/06/2016 19:08	1	TAL DEN	CML
P:3005A	LCS 280-352793/2-A		280-354656	280-352793	11/30/2016 07:35	1	TAL DEN	TEB
A:6010B	LCS 280-352793/2-A		280-354656	280-352793	12/07/2016 10:54	1	TAL DEN	SJS
P:3005A	LCS 280-352797/2-A		280-354736	280-352797	11/29/2016 14:35	1	TAL DEN	SEJ
A:6010B	LCS 280-352797/2-A		280-354736	280-352797	12/07/2016 21:19	1	TAL DEN	SJS
P:3005A	LCS 280-352798/2-A		280-353847	280-352798	11/30/2016 07:35	1	TAL DEN	SUR
A:6020	LCS 280-352798/2-A		280-353847	280-352798	11/30/2016 22:08	1	TAL DEN	LMT
P:3005A	LCS 280-352792/2-A		280-353847	280-352792	11/29/2016 14:35	1	TAL DEN	SEJ
A:6020	LCS 280-352792/2-A		280-353847	280-352792	12/01/2016 00:53	1	TAL DEN	LMT
A:300.0	LCS 280-354600/55		280-354600		12/08/2016 08:05	1	TAL DEN	AFB
A:300.0	LCS 280-355349/4		280-355349		12/13/2016 10:15	1	TAL DEN	AFB
A:350.1	LCS 280-353099/62		280-353099		11/25/2016 11:49	1	TAL DEN	MAS
A:SM 2320B	LCS 280-352831/4		280-352831		11/22/2016 13:11	1	TAL DEN	MMC
A:SM 2320B	LCS 280-353180/4		280-353180		11/23/2016 12:20	1	TAL DEN	MMC
A:SM 2540C	LCS 280-352631/2		280-352631		11/22/2016 10:53	1	TAL DEN	JAP
A:SM 2540D	LCS 280-352743/1		280-352743		11/22/2016 18:49	1	TAL DEN	SVC
A:SM 5310B	LCS 280-354209/3		280-354209		12/02/2016 14:58	1	TAL DEN	CCJ

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 480-332686/5		480-332686		11/19/2016 23:16	1	TAL BUF	NEA
A:8260C SIM	LCSD 480-332686/5		480-332686		11/19/2016 23:16	1	TAL BUF	NEA
P:5030C	LCSD 480-332790/5		480-332790		11/21/2016 12:17	1	TAL BUF	CDC
A:8260C SIM	LCSD 480-332790/5		480-332790		11/21/2016 12:17	1	TAL BUF	CDC
A:300.0	LCSD 280-354600/56		280-354600		12/08/2016 08:23	1	TAL DEN	AFB
A:300.0	LCSD 280-355349/5		280-355349		12/13/2016 10:30	1	TAL DEN	AFB
A:350.1	LCSD 280-353099/63		280-353099		11/25/2016 11:51	1	TAL DEN	MAS

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

Laboratory Chronicle

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 280-354600/3		280-354600		12/07/2016 09:58	1	TAL DEN	AFB
A:300.0	MRL 280-355349/3		280-355349		12/13/2016 10:00	1	TAL DEN	AFB

Lab ID: MS

Client ID: N/A

Sample Date/Time: 11/16/2016 12:30

Received Date/Time: 11/17/2016 09:45

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	480-109772-D-4 MS		480-333598		11/27/2016 21:51	10	TAL BUF	NEA
A:8260C	480-109772-D-4 MS		480-333598		11/27/2016 21:51	10	TAL BUF	NEA
P:5030C	480-109807-G-6 MS		480-333730		11/29/2016 04:53	1	TAL BUF	NEA
A:8260C	480-109807-G-6 MS		480-333730		11/29/2016 04:53	1	TAL BUF	NEA
P:3005A	280-91117-E-2-C MS		280-354579	280-352793	11/30/2016 07:35	1	TAL DEN	TEB
A:6010B	280-91117-E-2-C MS		280-354579	280-352793	12/06/2016 19:18	1	TAL DEN	CML
P:3005A	280-91117-E-2-C MS		280-354656	280-352793	11/30/2016 07:35	1	TAL DEN	TEB
A:6010B	280-91117-E-2-C MS		280-354656	280-352793	12/07/2016 11:02	1	TAL DEN	SJS
P:3005A	280-91130-C-1-B MS		280-354736	280-352797	11/29/2016 14:35	1	TAL DEN	SEJ
A:6010B	280-91130-C-1-B MS		280-354736	280-352797	12/07/2016 21:34	1	TAL DEN	SJS
P:3005A	280-91117-E-1-B MS		280-353847	280-352792	11/29/2016 14:35	1	TAL DEN	SEJ
A:6020	280-91117-E-1-B MS		280-353847	280-352792	12/01/2016 01:05	1	TAL DEN	LMT
A:SM 5310B	280-91049-C-3 MS		280-354209		12/02/2016 15:58	1	TAL DEN	CCJ

Quality Control Results

Client: Waste Management

Job Number: 280-91129-1

Laboratory Chronicle

Lab ID: MSD

Client ID: N/A

Sample Date/Time: 11/16/2016 12:30 Received Date/Time: 11/17/2016 09:45

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	480-109772-D-4 MSD		480-333598		11/27/2016 22:14	10	TAL BUF	NEA
A:8260C	480-109772-D-4 MSD		480-333598		11/27/2016 22:14	10	TAL BUF	NEA
P:5030C	480-109807-H-6 MSD		480-333730		11/29/2016 05:16	1	TAL BUF	NEA
A:8260C	480-109807-H-6 MSD		480-333730		11/29/2016 05:16	1	TAL BUF	NEA
P:3005A	280-91117-E-2-D MSD		280-354579	280-352793	11/30/2016 07:35	1	TAL DEN	TEB
A:6010B	280-91117-E-2-D MSD		280-354579	280-352793	12/06/2016 19:20	1	TAL DEN	CML
P:3005A	280-91117-E-2-D MSD		280-354656	280-352793	11/30/2016 07:35	1	TAL DEN	TEB
A:6010B	280-91117-E-2-D MSD		280-354656	280-352793	12/07/2016 11:04	1	TAL DEN	SJS
P:3005A	280-91130-C-1-C MSD		280-354736	280-352797	11/29/2016 14:35	1	TAL DEN	SEJ
A:6010B	280-91130-C-1-C MSD		280-354736	280-352797	12/07/2016 21:36	1	TAL DEN	SJS
P:3005A	280-91117-E-1-C MSD		280-353847	280-352792	11/29/2016 14:35	1	TAL DEN	SEJ
A:6020	280-91117-E-1-C MSD		280-353847	280-352792	12/01/2016 01:09	1	TAL DEN	LMT
A:SM 5310B	280-91049-C-3 MSD		280-354209		12/02/2016 16:13	1	TAL DEN	CCJ

Lab ID: DU

Client ID: N/A

Sample Date/Time: 11/15/2016 08:15 Received Date/Time: 11/16/2016 10:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:SM 2320B	280-91078-A-2 DU		280-352831		11/22/2016 13:24	1	TAL DEN	MMC
A:SM 2320B	280-91292-A-3 DU		280-353180		11/23/2016 12:34	1	TAL DEN	MMC
A:SM 2540C	280-91170-R-2 DU		280-352631		11/22/2016 10:53	1	TAL DEN	JAP

Lab References:

TAL BUF = TestAmerica Buffalo

TAL DEN = TestAmerica Denver

Chain of Custody Record

Client Information Client Contact: Mr. Patrick Madej Company: Waste Management Address: 2615 Davis Street City: San Leandro State, Zip: CA, 94577 Phone: 612-940-2480 Email: smadej@waste.com		Lab PM: Sara, Betsy A E-Mail: betsy.sara@testamericainc.com		Carrier Tracking No(s): 8104 0151 6950 Page: 1 of 1 Job #: 04204027.14	
Project Name: WA02 Olympic View Sanitary LF Event Desc: Quarterly GW Appl/II - Mar Jun Sep Dec Site: Washington		Due Date Requested: TAT Requested (days): Standard 14 PO #: 612-940-2480 WO #: SG 2615 Davis Street Project #: 28002692 SSOW#:		Analysis Requested Dissolved Metals Ammonia/TOC 8260B - long list (TA Buffalo) 8260B SIM (TA Buffalo) Total Metals TSS Total Arsenic (direct sub to ARI)	
Sample Identification MW-23A MW-32 MW-42 Trip blank		Sample Date 11/16/16 ↓ ↓		Sample Time 1305 1405 1500 -	
Sample Type (C=Comp, G=grab) Preservation Code: W ↓ ↓		Field Filtered Sample (Yes or No) Yes ↓ ↓		Perform MS/MSD (Yes or No) Yes ↓ ↓	
TDS/AIks/Cl/SO4/NO3(cad) N X X X		Disolved Metals D X X X		TSS D X X X	
Total Arsenic (direct sub to ARI) D X X X		Total Number of containers D 11 11 11 2		Special Instructions/Note: Short Hld: NO3(cad) Arsenic - Direct sub to ARI	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)					
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months					
Special Instructions/QC Requirements: 280-91129 Chain of Custody					
Empty Kit Relinquished by: Sam MA Relinquished by: Sam MA Relinquished by:		Date: 11/16/16 1600 Date Time:		Method of Shipment: Date Time: 11/17/16 1000 Company: JAS Company	
Custody Seal No.: 876312 Δ Yes Δ No		Cooler Temperature(s) °C and Other Remarks: 0.6 to 0.0 IES transferred h. 75 11/17/16			



FIELD INFORMATION FORM



Site Name: USC
 Site No.: 111616
 Sample Point: MW-23A
 Sample ID

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO
 PURGE DATE: 11/16/16 PURGE TIME: 12:42 ELAPSED HRS: 23
 (MM DD YY) (2400 Hr Clock) (hrs:min)
 WATER VOL IN CASING: _____ ACTUAL VOL PURGED: _____ WELL VOLs PURGED: _____
 (Gallons) (Gallons)
 Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: or N
 Filter Device: or N 0.45 µ or _____ µ (circle or fill in)
 Purging Device: C A-Submersible Pump D-Bailer
 B-Peristaltic Pump E-Piston Pump
 Sampling Device: C C-QED Bladder Pump F-Dipper/Bottle
 Filter Type: 4 A-In-line Disposable C-Vacuum
 B-Pressure X-Other _____
 X-Other: _____ Sample Tube Type: D A-Teflon C-PVC X-Other: _____
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC): _____ (ft/msl) Depth to Water (DTW) (from TOC): 1206 (ft) Groundwater Elevation (site datum, from TOC): _____ (ft/msl)
 Total Well Depth (from TOC): _____ (ft) Stick Up (from ground elevation): _____ (ft) Casing ID: _____ (in) Casing Material: _____
 Note: Total Well Depth, Stick Up, Casing Id. etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (µmhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
12:45	350	5.36	90	12.36		4.52	117.71	
12:50		5.67	87	12.40		4.28	116.63	
12:53		5.90	87	12.44		4.12	115.62	
12:56		5.97	87	12.46		4.12	115.18	
12:59		6.04	88	12.47		4.09	114.83	
13:02		6.08	88	12.49		4.05	114.63	
13:05		6.11	88	12.49	1.64	4.02	114.50	1206

Suggested range for 3 consec. readings or note Permit/State requirements:
 pH: +/- 0.2 Conductance: +/- 3% D.O.: +/- 10% eH/ORP: +/- 25 mV DTW: Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA
 SAMPLE DATE (MM DD YY): 11/16/16 pH (std): 6.11 CONDUCTANCE (µmhos/cm @ 25°C): 88 TEMP. (°C): 12.49 TURBIDITY (ntu): 1.64 DO (mg/L-ppm): 4.02 eH/ORP (mV): 114.50 Other: Time
 Units: _____
 Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: clear Odor: - Color: - Other: -
 Weather Conditions (required daily, or as conditions change): _____ Direction/Speed: - Outlook: - Precipitation: Y or N

FIELD COMMENTS
 Specific Comments (including purge/well volume calculations if required): _____

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
11/16/16 Sam Gruber [Signature] SCS

 Date Name Signature Company

FIELD INFORMATION FORM



Site Name: DUSL
 Site No.:
 Sample Point: MW-32
 Sample ID:

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO

111616	13147	118			
PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs:min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)	WELL VOLS PURGED

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment... Dedicated: or N

Filter Device: or N 0.45 μ or μ (circle or fill in)

Purging Device: C A-Submersible Pump D-Bailer
 B-Peristaltic Pump E-Piston Pump

Sampling Device: C C-QED Bladder Pump F-Dipper/Bottle

Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other

X-Other: Sample Tube Type: D A-Teflon C-PVC X-Other:
 B-Stainless Steel D-Polypropylene

WELL DATA

Well Elevation (at TOC) (ft/msl) Depth to Water (DTW) (from TOC) 108 (ft) Groundwater Elevation (site datum, from TOC) (ft/msl)

Total Well Depth (from TOC) (ft) Stick Up (from ground elevation) (ft) Casing ID (in) Casing Material

Note: Total Well Depth, Stick Up, Casing Id. etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit (ml/min)	pH (std)	Conductance (SC/EC) (μmhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
13:50	350	6.94	249	12.03		13.77	73.6	
13:53		7.13	249	12.07		2.04	42.7	
13:56		7.43	249	12.09		1.34	13.9	
13:59		7.55	250	12.11		1.14	3.2	
14:02		7.57	249	12.12		1.06	-0.3	
14:05	✓	7.60	251	12.13	1.50	1.18	-2.3	1.12

Suggested range for 3 consec. readings or note Permit/State requirements:
 pH: +/- 0.2 Conductance: +/- 3% Temp: - Turbidity: - D.O.: +/- 10% eH/ORP: +/- 25 mV DTW: Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (umhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: <u>Time</u> Units
111616	7.60	251	12.13	1.50	1.18	-2.3	1405

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: clear Odor: No Color: No Other: -

Weather Conditions (required daily, or as conditions change): Direction/Speed: - Outlook: overcast Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required):

FIELD COMMENTS

pic getting into sample tubing

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

11/16/16 Sam Gruber [Signature] SCS

Date Name Signature Company

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM



Site Name: OSL
 Site No.:
 Sample Point: M642
 Sample ID:

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO

<u>111616</u>	<u>1442</u>	<u>18</u>	<u> </u>	<u> </u>
PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs:min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)
<i>Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.</i>				

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment... Dedicated: Y or N

Purging Device: C A-Submersible Pump D-Bailer
 B-Peristaltic Pump E-Piston Pump
 Sampling Device: C C-QED Bladder Pump F-Dipper/Bottle
 X-Other:

Filter Device: Y or N 0.45 μ or μ (circle or fill in)
 Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other
 Sample Tube Type: D A-Teflon C-PVC X-Other:
 B-Stainless Steel D-Polypropylene

WELL DATA

Well Elevation (at TOC): (ft/msl) Depth to Water (DTW) (from TOC): 2641 (ft) Groundwater Elevation (site datum, from TOC): (ft/msl)

Total Well Depth (from TOC): (ft) Stick Up (from ground elevation): (ft) Casing ID: (in) Casing Material:

Note: Total Well Depth, Stick Up, Casing Id. etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit (ml/min)	pH (std)	Conductance (SC/EC) (μ mhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
<u>14:45</u>	<u>390</u>	<u>7.48</u>	<u>540</u>	<u>12.60</u>	<u> </u>	<u>1.09</u>	<u>-466</u>	<u> </u>
<u>14:48</u>	<u> </u>	<u>7.54</u>	<u>547</u>	<u>12.60</u>	<u> </u>	<u>1.52</u>	<u>-489</u>	<u> </u>
<u>14:51</u>	<u> </u>	<u>7.54</u>	<u>549</u>	<u>12.60</u>	<u> </u>	<u>1.42</u>	<u>-506</u>	<u> </u>
<u>14:54</u>	<u> </u>	<u>7.52</u>	<u>549</u>	<u>12.58</u>	<u> </u>	<u>1.36</u>	<u>-519</u>	<u> </u>
<u>14:57</u>	<u> </u>	<u>7.50</u>	<u>551</u>	<u>12.59</u>	<u> </u>	<u>1.33</u>	<u>-527</u>	<u> </u>
<u>15:00</u>	<u> </u>	<u>7.49</u>	<u>550</u>	<u>12.57</u>	<u>3.75</u>	<u>1.30</u>	<u>-535</u>	<u>2644</u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>

Suggested range for 3 consec. readings or note Permit/State requirements: +/- 0.2 +/- 3% - - +/- 10% +/- 25 mV Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. **If more fields above are needed, use separate sheet or form.**

FIELD DATA

<u>111616</u>	<u>7.49</u>	<u>550</u>	<u>12.57</u>	<u>3.75</u>	<u>0.30</u>	<u>-535</u>	<u>1500</u>
SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (μ mhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: <u>fine</u> Units

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: clear Odor: no Color: no Other:

Weather Conditions (required daily, or as conditions change): Direction/Speed: Outlook: Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required):

FIELD COMMENTS

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

11/16/16 Sam Gruber SCS

Date Name Signature Company

Chain of Custody Record



Client Information (Sub Contract Lab)		Sampler: Sara, Betsy A		Carrier Tracking No(s): 280-378315.1	
Client Contact: 10 Hazelwood Drive, Amherst NY, 14228-2298		Phone: 716-691-2600 (Tel) 716-691-7991 (Fax)		Page: 1 of 1	
Shipping/Receiving		E-Mail: betsy.sara@testamericainc.com		Job #: 280-91129-1	
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Oregon		Preservation Codes: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 X - EDTA Y - EDA Z - other (specify) Other:	
Address: 10 Hazelwood Drive, Amherst NY, 14228-2298		Due Date Requested: 12/6/2016		Analysis Requested	
City: Amherst		TAT Requested (days):		Total Number of Containers	
State, Zip: NY, 14228-2298		PO #:		6	
Phone: 716-691-2600 (Tel) 716-691-7991 (Fax)		WO #:		6	
Email:		Project #: 28002692		6	
Project Name: WAO2 Olympic View Sanitary LF		SSOW#:		2	
Site: WAO2 Olympic View Sanitary LF		Sample Date		Special Instructions/Note:	
Sample Identification - Client ID (Lab ID)		Sample Time		Field Filtered Sample (Yes or No)	
MW-23A (280-91129-1)		13:05 Pacific		X	
MW-32 (280-91129-2)		14:05 Pacific		X	
MW-42 (280-91129-3)		15:00 Pacific		X	
TRIP BLANK (280-91129-4)		Pacific		X	
Matrix (Water, Solid, On-waste/oil, Effluent, Aqueous)		Sample Type (C=Comp, G=grab)		Perform MS/MSD (Yes or No)	
Water		Water		X	
Water		Water		X	
Water		Water		X	
Water		Water		X	
Preservation Code:		12860/5030C (MOD) Appendix II Volatiles		12860C SIM/5030C (MOD) Local Method	
MW-23A (280-91129-1)		Water		X	
MW-32 (280-91129-2)		Water		X	
MW-42 (280-91129-3)		Water		X	
TRIP BLANK (280-91129-4)		Water		X	

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/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 compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification
 Unconfirmed Return To Client Disposal By Lab Archive For _____ Months
 Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2
 Empty Kit Relinquished by: _____ Date: _____ Method of Shipment: _____

Relinquished by: *Se* Date: 11-18-16 16:30 Company: TAD
 Relinquished by: _____ Date/Time: _____ Received by: *NR-MS* Date/Time: 11/16/16 09:00 Company: TAD
 Relinquished by: _____ Date/Time: _____ Received by: _____ Date/Time: _____ Company: _____
 Custody Seals Intact: _____ Custody Seal No.: _____ Cooler Temperature(s) °C and Other Remarks: #1 2.7°C

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-91129-1

Login Number: 91129
List Number: 1
Creator: True, Joshua A

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.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-91129-1

Login Number: 91129
List Number: 2
Creator: Hulbert, Michael J

List Source: TestAmerica Buffalo
List Creation: 11/19/16 11:48 AM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.7 #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	

ANALYTICAL REPORT

Job Number: 280-91758-1

Job Description: WA02|Olympic View Sanitary LF

For:

Waste Management
Sun Valley Hauling
9081 Tujunga Avenue
Sun Valley, CA 91352

Attention: Mr. Phil Perley



Approved for release.
Betsy A Sara
Project Manager II
12/5/2016 10:04 AM

Betsy A Sara, Project Manager II
4955 Yarrow Street, Arvada, CO, 80002
(303)736-0189
betsy.sara@testamericainc.com
12/05/2016

cc: Mr. Dan Venchiarutti

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.

TestAmerica Laboratories, Inc.

TestAmerica Denver 4955 Yarrow Street, Arvada, CO 80002
Tel (303) 736-0100 Fax (303) 431-7171 www.testamericainc.com



Table of Contents

Cover Title Page	1
Subcontracted Data	3



02 December 2016

Sample Receiving
Test America - Denver
4955 Yarrow Street
Arvada, CO 80002

RE: OVSL

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)
16K0286

Associated SDG ID(s)
N/A

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

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

Analytical Resources, Inc.

Mark Harris, Project Manager

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 its entirety.



Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: 16K02086
 Turn-around Requested: Standard
 Phone: 425-746-4600
 ARI Client Company: SCS Engineers
 Client Contact: Dan Venchiarutti
 Client Project Name: OVSL
 Client Project #: 04204027.19
 Samplers: Sam Graber

Date: 11/18/16
 Page: 1 of 3
 No. of Coolers: 1
 Cooler Temps: 3

Analysis Requested

Sample ID	Date	Time	Matrix	No. Containers	Analysis Requested		Notes/Comments
					low level	Total Arsenic	
MW-13A	11/14/16	1043	Ground water	1	X		
MW-13B		1135					
MW-16		1248					
MW-39		1354					
MW-4		1500					
MW-43		1158					
MW-29A		1244					
MW-20		1329					
Dup-2		1339					
MW-19C		1428					

Relinquished by: (Signature) Sam Graber Received by: (Signature) [Signature]
 Printed Name: Sam Graber Printed Name: Brian Warren
 Company: SCS Company: ARI
 Date & Time: 11/18/16 1135 Date & Time: 11/18/16 1135

Limits of Liability: ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.

Sample Retention Policy: Unless specified by workorder or contract, all water/soil samples submitted to ARI will be discarded or returned, no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer. Sediment samples submitted under PSDDA/PSEP/SMS protocol will be stored frozen for up to one year and then discarded.

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: 16K0289	Turn-around Requested: Standard	Date: 11/18/16
ARI Client Company: SCS Engineers	Phone: 425-746-4600	Page: 2 of 3
Client Contact: Dan Venchiarutti		No. of Coolers: 3
Client Project Name: OVSL		Cooler Temps:



Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

Sample ID	Date	Time	Matrix	No. Containers	Analysis Requested			Notes/Comments
MW-35	11/15/16	950	Ground Water	1				low level total Arsenic
MW-34C		1115						
MW-34A		1200						
MW-36A		1251						
MW-15R		1350						
MW-2B1		1453						
MW-23A	11/16/16	1305						
MW-32		1405						
MW-42		1500						
MW-33A	11/17/16	950						

Relinquished by: (Signature) <i>Sam Graber</i>	Received by: (Signature) <i>[Signature]</i>
Printed Name: Sam Graber	Printed Name: Brian Warr
Company: SCS	Company: ARI
Date & Time: 11/18/16 135	Date & Time: 11/18/16 1135

Limits of Liability: ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.

Sample Retention Policy: Unless specified by workorder or contract, all water/soil samples submitted to ARI will be discarded or returned, no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer. Sediment samples submitted under PSDDA/PSEP/SMS protocol will be stored frozen for up to one year and then discarded.



WORK ORDER

16K0286

Client: Test America - Denver

Project Manager: Mark Harris

Project: OVSL

Project Number: 04204027.19

Preservation Confirmation

Container ID	Container Type	pH	
16K0286-01 A	Miscellaneous Container	< 2	pass
16K0286-02 A	Miscellaneous Container		
16K0286-03 A	Miscellaneous Container		
16K0286-04 A	Miscellaneous Container		
16K0286-05 A	Miscellaneous Container		
16K0286-06 A	Miscellaneous Container		
16K0286-07 A	Miscellaneous Container		
16K0286-08 A	Miscellaneous Container		
16K0286-09 A	Miscellaneous Container		
16K0286-10 A	Miscellaneous Container		
16K0286-11 A	Miscellaneous Container		
16K0286-12 A	Miscellaneous Container		
16K0286-13 A	Miscellaneous Container		
16K0286-14 A	Miscellaneous Container		
16K0286-15 A	Miscellaneous Container		
16K0286-16 A	Miscellaneous Container		
16K0286-17 A	Miscellaneous Container		
16K0286-18 A	Miscellaneous Container		
16K0286-19 A	Miscellaneous Container		
16K0286-20 A	Miscellaneous Container		
16K0286-21 A	Miscellaneous Container		
16K0286-22 A	Miscellaneous Container		
16K0286-23 A	Miscellaneous Container		

TR

Preservation Confirmed By

11-18-16

Date



Cooler Receipt Form

ARI Client: SCS

Project Name: OVSL

COC No(s): _____ NA

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

Assigned ARI Job No: 16K0206

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)

Time: 12:40 2:3

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

Temp Gun ID#: 0005279

Cooler Accepted by: [Signature] Date: 11/18/16 Time: 1:35

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: TJ Date: 11-18-16 Time: 1650

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

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

Additional Notes, Discrepancies, & Resolutions:

By: _____ Date: _____

			Small → "sm" (< 2 mm)
			Peabubbles → "pb" (2 to < 4 mm)
			Large → "lg" (4 to < 6 mm)
			Headspace → "hs" (> 6 mm)



Test America - Denver
4955 Yarrow Street
Arvada, CO 80002

Project: OVSL
Project Number: 04204027.19
Project Manager: Sample Receiving

Reported:
02-Dec-2016 06:32

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-13A	16K0286-01	Water	14-Nov-2016 10:43	18-Nov-2016 11:35
MW-13B	16K0286-02	Water	14-Nov-2016 11:35	18-Nov-2016 11:35
MW-16	16K0286-03	Water	14-Nov-2016 12:48	18-Nov-2016 11:35
MW-39	16K0286-04	Water	14-Nov-2016 13:54	18-Nov-2016 11:35
MW-4	16K0286-05	Water	14-Nov-2016 15:00	18-Nov-2016 11:35
MW-43	16K0286-06	Water	14-Nov-2016 11:58	18-Nov-2016 11:35
MW-29A	16K0286-07	Water	14-Nov-2016 12:44	18-Nov-2016 11:35
MW-20	16K0286-08	Water	14-Nov-2016 13:29	18-Nov-2016 11:35
Dup-2	16K0286-09	Water	14-Nov-2016 13:39	18-Nov-2016 11:35
MW-19C	16K0286-10	Water	14-Nov-2016 14:28	18-Nov-2016 11:35
MW-35	16K0286-11	Water	15-Nov-2016 09:50	18-Nov-2016 11:35
MW-34C	16K0286-12	Water	15-Nov-2016 11:15	18-Nov-2016 11:35
MW-34A	16K0286-13	Water	15-Nov-2016 12:00	18-Nov-2016 11:35
MW-36A	16K0286-14	Water	15-Nov-2016 12:51	18-Nov-2016 11:35
MW-15R	16K0286-15	Water	15-Nov-2016 13:50	18-Nov-2016 11:35
MW-2B1	16K0286-16	Water	15-Nov-2016 14:53	18-Nov-2016 11:35
MW-23A	16K0286-17	Water	16-Nov-2016 13:05	18-Nov-2016 11:35
MW-32	16K0286-18	Water	16-Nov-2016 14:05	18-Nov-2016 11:35
MW-42	16K0286-19	Water	16-Nov-2016 15:00	18-Nov-2016 11:35
MW-33A	16K0286-20	Water	17-Nov-2016 09:50	18-Nov-2016 11:35
MW-33C	16K0286-21	Water	17-Nov-2016 10:50	18-Nov-2016 11:35
Dup-1	16K0286-22	Water	17-Nov-2016 11:00	18-Nov-2016 11:35
MW-24	16K0286-23	Water	17-Nov-2016 13:20	18-Nov-2016 11:35



Test America - Denver
4955 Yarrow Street
Arvada, CO 80002

Project: OVSL
Project Number: 04204027.19
Project Manager: Sample Receiving

Reported:
02-Dec-2016 06:32

Case Narrative

CASE NARRATIVE

Client: Test America - Denver
Project: OVSL
Workorder: 16K0286

Sample receipt

23 samples were received 18-Nov-2016 11:35 under ARI workorder 16K0286. For details regarding sample receipt, please refer to the Cooler Receipt Form.

Total Metals - EPA Method 200.8

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

All initial and continuing calibrations were within method requirements.

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

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-13 A and MW-34A. 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-13 A and MW-34A. The RPDs for arsenic were within acceptable QC limits for the MDs.



Test America - Denver 4955 Yarrow Street Arvada, CO 80002	Project: OVSL Project Number: 04204027.19 Project Manager: Sample Receiving	Reported: 02-Dec-2016 06:32
---	---	--------------------------------

MW-13A
16K0286-01 (Water)

Metals and Metallic Compounds

Method: EPA 200.8 Sampled: 11/14/2016 10:43
Instrument: ICPMS2 Analyzed: 11/23/2016 18:38

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x
Preparation Batch: BEK0607 Sample Size: 100 mL
Prepared: 11/23/2016 07:45 Final Volume: 20 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.0000400	0.000170	mg/L	



Test America - Denver 4955 Yarrow Street Arvada, CO 80002	Project: OVSL Project Number: 04204027.19 Project Manager: Sample Receiving	Reported: 02-Dec-2016 06:32
---	---	--------------------------------

MW-13B
16K0286-02 (Water)

Metals and Metallic Compounds

Method: EPA 200.8 Sampled: 11/14/2016 11:35
Instrument: ICPMS2 Analyzed: 11/23/2016 18:08

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x
Preparation Batch: BEK0607 Sample Size: 100 mL
Prepared: 11/23/2016 07:45 Final Volume: 20 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.0000400	0.000314	mg/L	



Test America - Denver 4955 Yarrow Street Arvada, CO 80002	Project: OVSL Project Number: 04204027.19 Project Manager: Sample Receiving	Reported: 02-Dec-2016 06:32
---	---	--------------------------------

MW-16
16K0286-03 (Water)

Metals and Metallic Compounds

Method: EPA 200.8 Sampled: 11/14/2016 12:48
Instrument: ICPMS2 Analyzed: 11/23/2016 18:13

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x
Preparation Batch: BEK0607 Sample Size: 100 mL
Prepared: 11/23/2016 07:45 Final Volume: 20 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.0000400	0.000381	mg/L	



Test America - Denver
4955 Yarrow Street
Arvada, CO 80002

Project: OVSL
Project Number: 04204027.19
Project Manager: Sample Receiving

Reported:
02-Dec-2016 06:32

MW-39
16K0286-04 (Water)

Metals and Metallic Compounds

Method: EPA 200.8
Instrument: ICPMS2

Sampled: 11/14/2016 13:54
Analyzed: 11/23/2016 18:18

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x
Preparation Batch: BEK0607 Sample Size: 100 mL
Prepared: 11/23/2016 07:45 Final Volume: 20 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.0000400	0.000181	mg/L	



Test America - Denver 4955 Yarrow Street Arvada, CO 80002	Project: OVSL Project Number: 04204027.19 Project Manager: Sample Receiving	Reported: 02-Dec-2016 06:32
---	---	--------------------------------

MW-4
16K0286-05 (Water)

Metals and Metallic Compounds

Method: EPA 200.8 Sampled: 11/14/2016 15:00
Instrument: ICPMS2 Analyzed: 11/23/2016 18:23

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x
Preparation Batch: BEK0607 Sample Size: 100 mL
Prepared: 11/23/2016 07:45 Final Volume: 20 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.0000400	0.000292	mg/L	



Test America - Denver
4955 Yarrow Street
Arvada, CO 80002

Project: OVSL
Project Number: 04204027.19
Project Manager: Sample Receiving

Reported:
02-Dec-2016 06:32

MW-43
16K0286-06 (Water)

Metals and Metallic Compounds

Method: EPA 200.8
Instrument: ICPMS2

Sampled: 11/14/2016 11:58
Analyzed: 11/23/2016 18:28

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x
Preparation Batch: BEK0607 Sample Size: 100 mL
Prepared: 11/23/2016 07:45 Final Volume: 20 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.0000400	ND	mg/L	U



Test America - Denver
4955 Yarrow Street
Arvada, CO 80002

Project: OVSL
Project Number: 04204027.19
Project Manager: Sample Receiving

Reported:
02-Dec-2016 06:32

MW-29A
16K0286-07 (Water)

Metals and Metallic Compounds

Method: EPA 200.8
Instrument: ICPMS2

Sampled: 11/14/2016 12:44
Analyzed: 11/23/2016 19:07

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x
Preparation Batch: BEK0607 Sample Size: 100 mL
Prepared: 11/23/2016 07:45 Final Volume: 20 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.0000400	0.00199	mg/L	



Test America - Denver 4955 Yarrow Street Arvada, CO 80002	Project: OVSL Project Number: 04204027.19 Project Manager: Sample Receiving	Reported: 02-Dec-2016 06:32
---	---	--------------------------------

MW-20
16K0286-08 (Water)

Metals and Metallic Compounds

Method: EPA 200.8 Sampled: 11/14/2016 13:29
Instrument: ICPMS2 Analyzed: 11/23/2016 19:12

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x
Preparation Batch: BEK0607 Sample Size: 100 mL
Prepared: 11/23/2016 07:45 Final Volume: 20 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.0000400	0.000182	mg/L	



Test America - Denver
4955 Yarrow Street
Arvada, CO 80002

Project: OVSL
Project Number: 04204027.19
Project Manager: Sample Receiving

Reported:
02-Dec-2016 06:32

Dup-2
16K0286-09 (Water)

Metals and Metallic Compounds

Method: EPA 200.8
Instrument: ICPMS2

Sampled: 11/14/2016 13:39
Analyzed: 11/23/2016 19:16

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x
Preparation Batch: BEK0607 Sample Size: 100 mL
Prepared: 11/23/2016 07:45 Final Volume: 20 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.0000400	0.000164	mg/L	



Test America - Denver
4955 Yarrow Street
Arvada, CO 80002

Project: OVSL
Project Number: 04204027.19
Project Manager: Sample Receiving

Reported:
02-Dec-2016 06:32

MW-19C
16K0286-10 (Water)

Metals and Metallic Compounds

Method: EPA 200.8
Instrument: ICPMS2

Sampled: 11/14/2016 14:28
Analyzed: 11/23/2016 19:21

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x
Preparation Batch: BEK0607 Sample Size: 100 mL
Prepared: 11/23/2016 07:45 Final Volume: 20 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.0000400	0.00288	mg/L	



Test America - Denver
4955 Yarrow Street
Arvada, CO 80002

Project: OVSL
Project Number: 04204027.19
Project Manager: Sample Receiving

Reported:
02-Dec-2016 06:32

MW-35
16K0286-11 (Water)

Metals and Metallic Compounds

Method: EPA 200.8
Instrument: ICPMS2

Sampled: 11/15/2016 09:50
Analyzed: 11/23/2016 19:26

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x
Preparation Batch: BEK0607 Sample Size: 100 mL
Prepared: 11/23/2016 07:45 Final Volume: 20 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.0000400	0.000114	mg/L	



Test America - Denver 4955 Yarrow Street Arvada, CO 80002	Project: OVSL Project Number: 04204027.19 Project Manager: Sample Receiving	Reported: 02-Dec-2016 06:32
---	---	---------------------------------------

MW-34C
16K0286-12 (Water)

Metals and Metallic Compounds

Method: EPA 200.8 Sampled: 11/15/2016 11:15
Instrument: ICPMS2 Analyzed: 11/23/2016 19:31

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x
Preparation Batch: BEK0607 Sample Size: 100 mL
Prepared: 11/23/2016 07:45 Final Volume: 20 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.0000400	0.00542	mg/L	



Test America - Denver
4955 Yarrow Street
Arvada, CO 80002

Project: OVSL
Project Number: 04204027.19
Project Manager: Sample Receiving

Reported:
02-Dec-2016 06:32

MW-34A
16K0286-13 (Water)

Metals and Metallic Compounds

Method: EPA 200.8
Instrument: ICPMS2

Sampled: 11/15/2016 12:00
Analyzed: 11/30/2016 21:02

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x
Preparation Batch: BEK0716 Sample Size: 100 mL
Prepared: 11/29/2016 07:30 Final Volume: 20 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.0000400	0.000453	mg/L	



Test America - Denver 4955 Yarrow Street Arvada, CO 80002	Project: OVSL Project Number: 04204027.19 Project Manager: Sample Receiving	Reported: 02-Dec-2016 06:32
---	---	--------------------------------

MW-36A
16K0286-14 (Water)

Metals and Metallic Compounds

Method: EPA 200.8 Sampled: 11/15/2016 12:51
Instrument: ICPMS2 Analyzed: 11/30/2016 20:33

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x
Preparation Batch: BEK0716 Sample Size: 100 mL
Prepared: 11/29/2016 07:30 Final Volume: 20 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.0000400	0.000566	mg/L	



Test America - Denver 4955 Yarrow Street Arvada, CO 80002	Project: OVSL Project Number: 04204027.19 Project Manager: Sample Receiving	Reported: 02-Dec-2016 06:32
---	---	--------------------------------

MW-15R
16K0286-15 (Water)

Metals and Metallic Compounds

Method: EPA 200.8 Sampled: 11/15/2016 13:50
Instrument: ICPMS2 Analyzed: 11/30/2016 20:38

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x
Preparation Batch: BEK0716 Sample Size: 100 mL
Prepared: 11/29/2016 07:30 Final Volume: 20 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.0000400	0.000238	mg/L	



Test America - Denver
4955 Yarrow Street
Arvada, CO 80002

Project: OVSL
Project Number: 04204027.19
Project Manager: Sample Receiving

Reported:
02-Dec-2016 06:32

MW-2B1
16K0286-16 (Water)

Metals and Metallic Compounds

Method: EPA 200.8
Instrument: ICPMS2

Sampled: 11/15/2016 14:53
Analyzed: 11/30/2016 20:43

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x
Preparation Batch: BEK0716 Sample Size: 100 mL
Prepared: 11/29/2016 07:30 Final Volume: 20 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.0000400	0.00133	mg/L	



Test America - Denver
4955 Yarrow Street
Arvada, CO 80002

Project: OVSL
Project Number: 04204027.19
Project Manager: Sample Receiving

Reported:
02-Dec-2016 06:32

MW-23A
16K0286-17 (Water)

Metals and Metallic Compounds

Method: EPA 200.8
Instrument: ICPMS2

Sampled: 11/16/2016 13:05
Analyzed: 11/30/2016 20:48

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x
Preparation Batch: BEK0716 Sample Size: 100 mL
Prepared: 11/29/2016 07:30 Final Volume: 20 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.0000400	0.0000810	mg/L	



Test America - Denver
4955 Yarrow Street
Arvada, CO 80002

Project: OVSL
Project Number: 04204027.19
Project Manager: Sample Receiving

Reported:
02-Dec-2016 06:32

MW-32
16K0286-18 (Water)

Metals and Metallic Compounds

Method: EPA 200.8
Instrument: ICPMS2

Sampled: 11/16/2016 14:05
Analyzed: 11/30/2016 20:52

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x
Preparation Batch: BEK0716 Sample Size: 100 mL
Prepared: 11/29/2016 07:30 Final Volume: 20 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.0000400	0.00995	mg/L	



Test America - Denver
4955 Yarrow Street
Arvada, CO 80002

Project: OVSL
Project Number: 04204027.19
Project Manager: Sample Receiving

Reported:
02-Dec-2016 06:32

MW-42
16K0286-19 (Water)

Metals and Metallic Compounds

Method: EPA 200.8
Instrument: ICPMS2

Sampled: 11/16/2016 15:00
Analyzed: 11/30/2016 21:31

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x
Preparation Batch: BEK0716 Sample Size: 100 mL
Prepared: 11/29/2016 07:30 Final Volume: 20 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.0000400	0.00186	mg/L	



Test America - Denver 4955 Yarrow Street Arvada, CO 80002	Project: OVSL Project Number: 04204027.19 Project Manager: Sample Receiving	Reported: 02-Dec-2016 06:32
---	---	--------------------------------

MW-33A
16K0286-20 (Water)

Metals and Metallic Compounds

Method: EPA 200.8 Sampled: 11/17/2016 09:50
Instrument: ICPMS2 Analyzed: 11/30/2016 21:36

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x
Preparation Batch: BEK0716 Sample Size: 100 mL
Prepared: 11/29/2016 07:30 Final Volume: 20 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.0000400	0.000509	mg/L	



Test America - Denver 4955 Yarrow Street Arvada, CO 80002	Project: OVSL Project Number: 04204027.19 Project Manager: Sample Receiving	Reported: 02-Dec-2016 06:32
---	---	--------------------------------

MW-33C
16K0286-21 (Water)

Metals and Metallic Compounds

Method: EPA 200.8 Sampled: 11/17/2016 10:50
Instrument: ICPMS2 Analyzed: 11/30/2016 21:41

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x
Preparation Batch: BEK0716 Sample Size: 100 mL
Prepared: 11/29/2016 07:30 Final Volume: 20 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.0000400	0.00253	mg/L	



Test America - Denver 4955 Yarrow Street Arvada, CO 80002	Project: OVSL Project Number: 04204027.19 Project Manager: Sample Receiving	Reported: 02-Dec-2016 06:32
---	---	--------------------------------

Dup-1
16K0286-22 (Water)

Metals and Metallic Compounds

Method: EPA 200.8 Sampled: 11/17/2016 11:00
Instrument: ICPMS2 Analyzed: 11/30/2016 21:46

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x
Preparation Batch: BEK0716 Sample Size: 100 mL
Prepared: 11/29/2016 07:30 Final Volume: 20 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.0000400	0.00250	mg/L	



Test America - Denver 4955 Yarrow Street Arvada, CO 80002	Project: OVSL Project Number: 04204027.19 Project Manager: Sample Receiving	Reported: 02-Dec-2016 06:32
---	---	--------------------------------

MW-24
16K0286-23 (Water)

Metals and Metallic Compounds

Method: EPA 200.8 Sampled: 11/17/2016 13:20
Instrument: ICPMS2 Analyzed: 11/30/2016 21:51

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x
Preparation Batch: BEK0716 Sample Size: 100 mL
Prepared: 11/29/2016 07:30 Final Volume: 20 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.0000400	0.000271	mg/L	



Test America - Denver
4955 Yarrow Street
Arvada, CO 80002

Project: OVSL
Project Number: 04204027.19
Project Manager: Sample Receiving

Reported:
02-Dec-2016 06:32

Metals and Metallic Compounds - Quality Control

Batch BEK0607 - 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 (BEK0607-BLK1)						Prepared: 23-Nov-2016 Analyzed: 23-Nov-2016 18:03					
Arsenic		ND	0.0000400	mg/L							U
LCS (BEK0607-BS1)						Prepared: 23-Nov-2016 Analyzed: 23-Nov-2016 18:48					
Arsenic	75a	0.00468	0.0000400	mg/L	0.00500		93.5	80-120			
Duplicate (BEK0607-DUP1)						Source: 16K0286-01 Prepared: 23-Nov-2016 Analyzed: 23-Nov-2016 18:33					
Arsenic	75a	0.000169	0.0000400	mg/L		0.000170			0.83	20	
Matrix Spike (BEK0607-MS1)						Source: 16K0286-01 Prepared: 23-Nov-2016 Analyzed: 23-Nov-2016 18:43					
Arsenic	75a	0.00456	0.0000400	mg/L	0.00500	0.000170	87.8	75-125			

Recovery limits for target analytes in MS/MSD QC samples are advisory only.



Test America - Denver
4955 Yarrow Street
Arvada, CO 80002

Project: OVSL
Project Number: 04204027.19
Project Manager: Sample Receiving

Reported:
02-Dec-2016 06:32

Metals and Metallic Compounds - Quality Control

Batch BEK0716 - 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 (BEK0716-BLK1)					Prepared: 29-Nov-2016 Analyzed: 30-Nov-2016 20:28						
Arsenic	75a	ND	0.0000400	mg/L							U
LCS (BEK0716-BS1)					Prepared: 29-Nov-2016 Analyzed: 30-Nov-2016 21:12						
Arsenic	75a	0.00446	0.0000400	mg/L	0.00500		89.3	80-120			
Duplicate (BEK0716-DUPI)					Source: 16K0286-13 Prepared: 29-Nov-2016 Analyzed: 30-Nov-2016 20:57						
Arsenic	75a	0.000446	0.0000400	mg/L		0.000453			1.56	20	
Matrix Spike (BEK0716-MS1)					Source: 16K0286-13 Prepared: 29-Nov-2016 Analyzed: 30-Nov-2016 21:07						
Arsenic	75a	0.00471	0.0000400	mg/L	0.00500	0.000453	85.2	75-125			

Recovery limits for target analytes in MS/MSD QC samples are advisory only.



Test America - Denver
4955 Yarrow Street
Arvada, CO 80002

Project: OVSL
Project Number: 04204027.19
Project Manager: Sample Receiving

Reported:
02-Dec-2016 06:32

Certified Analyses included in this Report

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

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
4955 Yarrow Street
Arvada, CO 80002

Project: OVSL
Project Number: 04204027.19
Project Manager: Sample Receiving

Reported:
02-Dec-2016 06:32

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.

ANALYTICAL REPORT

Job Number: 280-91425-1

Job Description: WA02|Olympic View Sanitary LF

For:

Waste Management
Sun Valley Hauling
9081 Tujunga Avenue
Sun Valley, CA 91352

Attention: Mr. Phil Perley



Approved for release.
Betsy A Sara
Project Manager II
12/15/2016 5:42 PM

Betsy A Sara, Project Manager II
4955 Yarrow Street, Arvada, CO, 80002
(303)736-0189
betsy.sara@testamericainc.com
12/15/2016

cc: Mr. Dan Venchiarutti

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.

TestAmerica Laboratories, Inc.

TestAmerica Denver 4955 Yarrow Street, Arvada, CO 80002
Tel (303) 736-0100 Fax (303) 431-7171 www.testamericainc.com



Table of Contents

Cover Title Page	1
Report Narrative	3
Executive Summary	4
Method Summary	5
Method / Analyst Summary	6
Sample Summary	7
Sample Results	8
Sample Datasheets	9
Data Qualifiers	11
QC Results	12
Qc Association Summary	13
Qc Reports	16
Laboratory Chronicle	34
Client Chain of Custody	37
Sample Receipt Checklist	38

CASE NARRATIVE

Client: Waste Management

Project: WA02|Olympic View Sanitary LF

Report Number: 280-91425-1

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

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

Sample Receiving

The sample was received on 11/25/2016; the sample arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 4.9 C.

Holding Times

The 48-hour holding time for Biochemical Oxygen Demand (BOD) Method 5210B expired prior to sample receipt. The client was notified.

The Total Dissolved Solids (TDS) Method 2540C was analyzed 1 day past the 7-day holding time. Total Dissolved Solids analysis was requested with a few hours remaining in the holding time. The client was notified.

All other holding times were within established control limits.

Method Blanks

All Method Blank recoveries were within established control limits.

Laboratory Control Samples (LCS)

The Method 350.1 LCS/LCSD exhibited RPD data outside the QC control limits for Ammonia. Both the LCS and LCSD were recovered within QC control limits, demonstrating that the laboratory performed the method within acceptable guidelines; therefore, corrective action is deemed unnecessary.

All other Laboratory Control Samples were within established control limits.

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

The Matrix Spike and Matrix Spike Duplicate performed on a sample from another client exhibited recoveries outside control limits for Total Organic Carbon (TOC) Method 5310B. 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.

EXECUTIVE SUMMARY - Detections

Client: Waste Management

Job Number: 280-91425-1

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-91425-1	LP-LCD					
Chloride		630		10	mg/L	300.0
Sulfate		260		10	mg/L	300.0
Ammonia (as N)		4.7		0.15	mg/L	350.1
Chemical Oxygen Demand (COD)		190		20	mg/L	410.4
Alkalinity, Total (As CaCO3)		790		5.0	mg/L	SM 2320B
Alkalinity, Bicarbonate (As CaCO3)		790		5.0	mg/L	SM 2320B
Total Dissolved Solids (TDS)		2400	H	10	mg/L	SM 2540C
Total Organic Carbon - Average		54		2.0	mg/L	SM 5310B
Biochemical Oxygen Demand		14	H	13	mg/L	SM5210B
<i>Total Recoverable</i>						
Calcium, Total		58		0.040	mg/L	6010B
Iron, Total		0.54		0.060	mg/L	6010B
Magnesium, Total		34		0.050	mg/L	6010B
Manganese, Total		0.73		0.050	mg/L	6010B
Potassium, Total		76		1.0	mg/L	6010B
Sodium, Total		740		1.0	mg/L	6010B

METHOD SUMMARY

Client: Waste Management

Job Number: 280-91425-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Metals (ICP)	TAL DEN	SW846 6010B	
Preparation, Total Recoverable or Dissolved Metals	TAL DEN		SW846 3005A
Anions, Ion Chromatography	TAL DEN	MCAWW 300.0	
Nitrogen, Ammonia	TAL DEN	MCAWW 350.1	
COD	TAL DEN	MCAWW 410.4	
Alkalinity	TAL DEN	SM SM 2320B	
Solids, Total Dissolved (TDS)	TAL DEN	SM SM 2540C	
Organic Carbon, Total (TOC)	TAL DEN	SM SM 5310B	
BOD, 5 Day	TAL DEN	SM SM5210B	

Lab References:

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: Waste Management

Job Number: 280-91425-1

Method	Analyst	Analyst ID
SW846 6010B	Lackey, Cara M	CML
MCAWW 300.0	Benson, Alex F	AFB
MCAWW 350.1	Spedale, Morgan A	MAS
MCAWW 410.4	Jewell, Connie C	CCJ
SM SM 2320B	Carter, Melynda M	MMC
SM SM 2540C	Pedrick, Joshua A	JAP
SM SM 5310B	Jewell, Connie C	CCJ
SM SM5210B	Martinez, Rut S	RSM

SAMPLE SUMMARY

Client: Waste Management

Job Number: 280-91425-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-91425-1	LP-LCD	Water	11/22/2016 1110	11/25/2016 0835

SAMPLE RESULTS

Analytical Data

Client: Waste Management

Job Number: 280-91425-1

Client Sample ID: LP-LCD

Lab Sample ID: 280-91425-1

Date Sampled: 11/22/2016 1110

Client Matrix: Water

Date Received: 11/25/2016 0835

6010B Metals (ICP)-Total Recoverable

Analysis Method: 6010B	Analysis Batch: 280-353968	Instrument ID: MT_025
Prep Method: 3005A	Prep Batch: 280-353411	Lab File ID: 25B120116.asc
Dilution: 1.0		Initial Weight/Volume: 50 mL
Analysis Date: 12/01/2016 1816		Final Weight/Volume: 50 mL
Prep Date: 11/29/2016 1435		

Analyte	Result (mg/L)	Qualifier	RL	RL
Calcium, Total	58		0.040	0.040
Iron, Total	0.54		0.060	0.060
Magnesium, Total	34		0.050	0.050
Manganese, Total	0.73		0.050	0.050
Potassium, Total	76		1.0	1.0
Sodium, Total	740		1.0	1.0

Client: Waste Management

Job Number: 280-91425-1

General Chemistry

Client Sample ID: LP-LCD

Lab Sample ID: 280-91425-1
 Client Matrix: Water

Date Sampled: 11/22/2016 1110
 Date Received: 11/25/2016 0835

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Chloride	630		mg/L	10	10	10	300.0
	Analysis Batch: 280-355362		Analysis Date: 12/14/2016 0143				
Sulfate	260		mg/L	10	10	10	300.0
	Analysis Batch: 280-355362		Analysis Date: 12/14/2016 0143				
Ammonia (as N)	4.7		mg/L	0.15	0.15	5.0	350.1
	Analysis Batch: 280-353756		Analysis Date: 11/30/2016 1300				
Chemical Oxygen Demand (COD)	190		mg/L	20	20	2.0	410.4
	Analysis Batch: 280-354396		Analysis Date: 12/06/2016 0921				
Alkalinity, Total (As CaCO3)	790		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-353708		Analysis Date: 11/29/2016 1345				
Alkalinity, Bicarbonate (As CaCO3)	790		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-353708		Analysis Date: 11/29/2016 1345				
Total Dissolved Solids (TDS)	2400	H	mg/L	10	10	1.0	SM 2540C
	Analysis Batch: 280-353679		Analysis Date: 11/30/2016 0904				
Total Organic Carbon - Average	54		mg/L	2.0	2.0	2.0	SM 5310B
	Analysis Batch: 280-355417		Analysis Date: 12/12/2016 1939				
Biochemical Oxygen Demand	14	H	mg/L	13	13	5.0	SM5210B
	Analysis Batch: 280-353110		Analysis Date: 11/25/2016 1722				

DATA REPORTING QUALIFIERS

Client: Waste Management

Job Number: 280-91425-1

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

QUALITY CONTROL RESULTS

Quality Control Results

Client: Waste Management

Job Number: 280-91425-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 280-353411					
LCS 280-353411/2-A	Lab Control Sample	R	Water	3005A	
MB 280-353411/1-A	Method Blank	R	Water	3005A	
280-91415-D-1-B MS	Matrix Spike	R	Water	3005A	
280-91415-D-1-C MSD	Matrix Spike Duplicate	R	Water	3005A	
280-91425-1	LP-LCD	R	Water	3005A	
Analysis Batch:280-353968					
LCS 280-353411/2-A	Lab Control Sample	R	Water	6010B	280-353411
MB 280-353411/1-A	Method Blank	R	Water	6010B	280-353411
280-91415-D-1-B MS	Matrix Spike	R	Water	6010B	280-353411
280-91415-D-1-C MSD	Matrix Spike Duplicate	R	Water	6010B	280-353411
280-91425-1	LP-LCD	R	Water	6010B	280-353411

Report Basis

R = Total Recoverable

Quality Control Results

Client: Waste Management

Job Number: 280-91425-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:280-353110					
LCS 280-353110/3	Lab Control Sample	T	Water	SM5210B	
MB 280-353110/4	Method Blank	T	Water	SM5210B	
280-91425-1	LP-LCD	T	Water	SM5210B	
280-91425-1DU	Duplicate	T	Water	SM5210B	
Analysis Batch:280-353679					
LCS 280-353679/2	Lab Control Sample	T	Water	SM 2540C	
LCSD 280-353679/3	Lab Control Sample Duplicate	T	Water	SM 2540C	
MB 280-353679/1	Method Blank	T	Water	SM 2540C	
280-91425-1	LP-LCD	T	Water	SM 2540C	
280-91498-B-2 DU	Duplicate	T	Water	SM 2540C	
Analysis Batch:280-353708					
LCS 280-353708/4	Lab Control Sample	T	Water	SM 2320B	
MB 280-353708/5	Method Blank	T	Water	SM 2320B	
280-91425-1	LP-LCD	T	Water	SM 2320B	
280-91425-1DU	Duplicate	T	Water	SM 2320B	
Analysis Batch:280-353756					
LCS 280-353696/1-A	Lab Control Sample	T	Water	350.1	
LCS 280-353756/59	Lab Control Sample	T	Water	350.1	
LCSD 280-353696/2-A	Lab Control Sample Duplicate	T	Water	350.1	
LCSD 280-353756/60	Lab Control Sample Duplicate	T	Water	350.1	
MB 280-353756/61	Method Blank	T	Water	350.1	
280-91179-C-1 MS	Matrix Spike	T	Water	350.1	
280-91179-C-1 MSD	Matrix Spike Duplicate	T	Water	350.1	
280-91425-1	LP-LCD	T	Water	350.1	
280-91497-J-3 MS	Matrix Spike	T	Water	350.1	
280-91497-J-3 MSD	Matrix Spike Duplicate	T	Water	350.1	
Analysis Batch:280-354396					
LCS 280-354396/3	Lab Control Sample	T	Water	410.4	
LCSD 280-354396/4	Lab Control Sample Duplicate	T	Water	410.4	
MB 280-354396/5	Method Blank	T	Water	410.4	
280-91373-C-1 MS	Matrix Spike	T	Water	410.4	
280-91373-C-1 MSD	Matrix Spike Duplicate	T	Water	410.4	
280-91425-1	LP-LCD	T	Water	410.4	

Quality Control Results

Client: Waste Management

Job Number: 280-91425-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:280-355362					
LCS 280-355362/4	Lab Control Sample	T	Water	300.0	
LCSD 280-355362/5	Lab Control Sample Duplicate	T	Water	300.0	
MB 280-355362/6	Method Blank	T	Water	300.0	
280-91415-A-1 DU	Duplicate	T	Water	300.0	
280-91415-A-1 MS	Matrix Spike	T	Water	300.0	
280-91415-A-1 MSD	Matrix Spike Duplicate	T	Water	300.0	
280-91425-1	LP-LCD	T	Water	300.0	
Analysis Batch:280-355417					
LCS 280-355417/12	Lab Control Sample	T	Water	SM 5310B	
MB 280-355417/13	Method Blank	T	Water	SM 5310B	
280-91425-1	LP-LCD	T	Water	SM 5310B	
280-91615-C-3 MS	Matrix Spike	T	Water	SM 5310B	
280-91615-C-3 MSD	Matrix Spike Duplicate	T	Water	SM 5310B	
Analysis Batch:280-355418					
LCS 280-355418/12	Lab Control Sample	T	Water	SM 5310B	
MB 280-355418/13	Method Blank	T	Water	SM 5310B	
280-91425-1	LP-LCD	T	Water	SM 5310B	
280-91615-C-3 MS	Matrix Spike	T	Water	SM 5310B	
280-91615-C-3 MSD	Matrix Spike Duplicate	T	Water	SM 5310B	

Report Basis

T = Total

Quality Control Results

Client: Waste Management

Job Number: 280-91425-1

Method Blank - Batch: 280-353411

Lab Sample ID: MB 280-353411/1-A
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/01/2016 1658
 Prep Date: 11/29/2016 1435
 Leach Date: N/A

Analysis Batch: 280-353968
 Prep Batch: 280-353411
 Leach Batch: N/A
 Units: mg/L

Method: 6010B
Preparation: 3005A
Total Recoverable
 Instrument ID: MT_025
 Lab File ID: 25B120116.asc
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL	RL
Calcium, Total	ND		0.040	0.040
Iron, Total	ND		0.060	0.060
Magnesium, Total	ND		0.050	0.050
Manganese, Total	ND		0.050	0.050
Potassium, Total	ND		1.0	1.0
Sodium, Total	ND		1.0	1.0

Lab Control Sample - Batch: 280-353411

Lab Sample ID: LCS 280-353411/2-A
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/01/2016 1701
 Prep Date: 11/29/2016 1435
 Leach Date: N/A

Analysis Batch: 280-353968
 Prep Batch: 280-353411
 Leach Batch: N/A
 Units: mg/L

Method: 6010B
Preparation: 3005A
Total Recoverable
 Instrument ID: MT_025
 Lab File ID: 25B120116.asc
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Calcium, Total	50.0	51.5	103	90 - 111	
Iron, Total	1.00	1.02	102	89 - 115	
Magnesium, Total	50.0	51.7	103	90 - 113	
Manganese, Total	0.500	0.505	101	90 - 110	
Potassium, Total	50.0	51.7	103	89 - 114	
Sodium, Total	50.0	51.3	103	90 - 115	

Quality Control Results

Client: Waste Management

Job Number: 280-91425-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-353411**

**Method: 6010B
Preparation: 3005A
Total Recoverable**

MS Lab Sample ID: 280-91415-D-1-B MS	Analysis Batch: 280-353968	Instrument ID: MT_025
Client Matrix: Water	Prep Batch: 280-353411	Lab File ID: 25B120116.asc
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 50 mL
Analysis Date: 12/01/2016 1708		Final Weight/Volume: 50 mL
Prep Date: 11/29/2016 1435		
Leach Date: N/A		

MSD Lab Sample ID: 280-91415-D-1-C MSD	Analysis Batch: 280-353968	Instrument ID: MT_025
Client Matrix: Water	Prep Batch: 280-353411	Lab File ID: 25B120116.asc
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 50 mL
Analysis Date: 12/01/2016 1710		Final Weight/Volume: 50 mL
Prep Date: 11/29/2016 1435		
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Calcium, Total	95	101	48 - 153	3	20		
Iron, Total	104	105	52 - 155	2	20		
Magnesium, Total	100	102	62 - 146	2	20		
Manganese, Total	99	101	79 - 121	2	20		
Potassium, Total	101	105	76 - 132	4	20		
Sodium, Total	98	102	70 - 203	4	20		

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-353411**

**Method: 6010B
Preparation: 3005A
Total Recoverable**

MS Lab Sample ID: 280-91415-D-1-B MS	Units: mg/L
Client Matrix: Water	
Dilution: 1.0	
Analysis Date: 12/01/2016 1708	
Prep Date: 11/29/2016 1435	
Leach Date: N/A	

MSD Lab Sample ID: 280-91415-D-1-C MSD	Units: mg/L
Client Matrix: Water	
Dilution: 1.0	
Analysis Date: 12/01/2016 1710	
Prep Date: 11/29/2016 1435	
Leach Date: N/A	

Analyte	Sample	MS Spike	MSD Spike	MS	MSD
	Result/Qual	Amount	Amount	Result/Qual	Result/Qual
Calcium, Total	74	50.0	50.0	122	125
Iron, Total	ND	1.00	1.00	1.04	1.05
Magnesium, Total	17	50.0	50.0	67.2	68.4
Manganese, Total	ND	0.500	0.500	0.497	0.506
Potassium, Total	3.5	50.0	50.0	54.0	56.1
Sodium, Total	13	50.0	50.0	61.6	64.0

Quality Control Results

Client: Waste Management

Job Number: 280-91425-1

Method Blank - Batch: 280-355362

Method: 300.0
Preparation: N/A

Lab Sample ID: MB 280-355362/6	Analysis Batch: 280-355362	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: 12/13/2016 1050	Units: mg/L	Final Weight/Volume: 5 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	Result	Qual	RL	RL
Chloride	ND		1.0	1.0
Sulfate	ND		1.0	1.0

Method Reporting Limit Check - Batch: 280-355362

Method: 300.0
Preparation: N/A

Lab Sample ID: MRL 280-355362/3	Analysis Batch: 280-355362	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: 12/13/2016 1000	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	103	50 - 150	
Sulfate	2.50	ND	101	50 - 150	

Lab Control Sample/

Method: 300.0
Preparation: N/A

Lab Control Sample Duplicate Recovery Report - Batch: 280-355362

LCS Lab Sample ID: LCS 280-355362/4	Analysis Batch: 280-355362	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: 12/13/2016 1016	Units: mg/L	Final Weight/Volume: 5 mL
Prep Date: N/A		25 uL
Leach Date: N/A		

LCSD Lab Sample ID: LCSD 280-355362/5	Analysis Batch: 280-355362	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: 12/13/2016 1033	Units: mg/L	Final Weight/Volume: 5 mL
Prep Date: N/A		25 uL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Chloride	101	101	90 - 110	0	10		
Sulfate	101	101	90 - 110	0	10		

Quality Control Results

Client: Waste Management

Job Number: 280-91425-1

**Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-355362**

**Method: 300.0
Preparation: N/A**

LCS Lab Sample ID: LCS 280-355362/4 Units: mg/L
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/13/2016 1016
 Prep Date: N/A
 Leach Date: N/A

LCSD Lab Sample ID: LCSD 280-355362/5
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/13/2016 1033
 Prep Date: N/A
 Leach Date: N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Chloride	100	100	101	101
Sulfate	100	100	101	101

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-355362**

**Method: 300.0
Preparation: N/A**

MS Lab Sample ID: 280-91415-A-1 MS
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/13/2016 2312
 Prep Date: N/A
 Leach Date: N/A

Analysis Batch: 280-355362
 Prep Batch: N/A
 Leach Batch: N/A

Instrument ID: WC_IonChrom8
 Lab File ID: 27.0000.d
 Initial Weight/Volume: 5 mL
 Final Weight/Volume: 5 mL
 25 uL

MSD Lab Sample ID: 280-91415-A-1 MSD
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/13/2016 2329
 Prep Date: N/A
 Leach Date: N/A

Analysis Batch: 280-355362
 Prep Batch: N/A
 Leach Batch: N/A

Instrument ID: WC_IonChrom8
 Lab File ID: 28.0000.d
 Initial Weight/Volume: 5 mL
 Final Weight/Volume: 5 mL
 25 uL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Chloride	101	103	80 - 120	2	20		
Sulfate	101	104	80 - 120	1	20		

Quality Control Results

Client: Waste Management

Job Number: 280-91425-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-355362**

**Method: 300.0
Preparation: N/A**

MS Lab Sample ID: 280-91415-A-1 MS Units: mg/L
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/13/2016 2312
 Prep Date: N/A
 Leach Date: N/A

MSD Lab Sample ID: 280-91415-A-1 MSD
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/13/2016 2329
 Prep Date: N/A
 Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Chloride	9.0	25.0	25.0	34.2	34.9
Sulfate	28	25.0	25.0	53.8	54.5

Duplicate - Batch: 280-355362

**Method: 300.0
Preparation: N/A**

Lab Sample ID: 280-91415-A-1 DU
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/13/2016 2255
 Prep Date: N/A
 Leach Date: N/A

Analysis Batch: 280-355362
 Prep Batch: N/A
 Leach Batch: N/A
 Units: mg/L

Instrument ID: WC_IonChrom8
 Lab File ID: 26.0000.d
 Initial Weight/Volume: 5 mL
 Final Weight/Volume: 5 mL
 25 uL

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Chloride	9.0	9.25	3	15	
Sulfate	28	28.5	0.2	15	

Quality Control Results

Client: Waste Management

Job Number: 280-91425-1

Method Blank - Batch: 280-353756

Method: 350.1
Preparation: N/A

Lab Sample ID: MB 280-353756/61
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/30/2016 1310
Prep Date: N/A
Leach Date: N/A

Analysis Batch: 280-353756
Prep Batch: N/A
Leach Batch: N/A
Units: mg/L

Instrument ID: WC_Alp 3
Lab File ID: C:\FLOW_4\113016.RS
Initial Weight/Volume:
Final Weight/Volume:

Analyte	Result	Qual	RL	RL
Ammonia (as N)	ND		0.030	0.030

Quality Control Results

Client: Waste Management

Job Number: 280-91425-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-353756 **Method: 350.1**
Preparation: N/A

LCS Lab Sample ID: LCS 280-353696/1-A	Analysis Batch: 280-353756	Instrument ID: WC_Alp 3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: C:\FLOW_4\113016.RS
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 100 mL
Analysis Date: 11/30/2016 1144	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

LCSD Lab Sample ID: LCSD 280-353696/2-A	Analysis Batch: 280-353756	Instrument ID: WC_Alp 3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: C:\FLOW_4\113016.RS
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 100 mL
Analysis Date: 11/30/2016 1146	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Ammonia (as N)	100	101	90 - 110	1	10		

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-353756 **Method: 350.1**
Preparation: N/A

LCS Lab Sample ID: LCS 280-353756/59	Analysis Batch: 280-353756	Instrument ID: WC_Alp 3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: C:\FLOW_4\113016.RS
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 100 mL
Analysis Date: 11/30/2016 1306	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

LCSD Lab Sample ID: LCSD 280-353756/60	Analysis Batch: 280-353756	Instrument ID: WC_Alp 3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: C:\FLOW_4\113016.RS
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 100 mL
Analysis Date: 11/30/2016 1308	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Ammonia (as N)	90	100	90 - 110	11	10		*

Quality Control Results

Client: Waste Management

Job Number: 280-91425-1

**Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-353756**

**Method: 350.1
Preparation: N/A**

LCS Lab Sample ID: LCS 280-353696/1-A Units: mg/L
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/30/2016 1144
 Prep Date: N/A
 Leach Date: N/A

LCSD Lab Sample ID: LCSD 280-353696/2-A
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/30/2016 1146
 Prep 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	2.50	2.52

**Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-353756**

**Method: 350.1
Preparation: N/A**

LCS Lab Sample ID: LCS 280-353756/59 Units: mg/L
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/30/2016 1306
 Prep Date: N/A
 Leach Date: N/A

LCSD Lab Sample ID: LCSD 280-353756/60
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/30/2016 1308
 Prep 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	2.25	2.51 *

Quality Control Results

Client: Waste Management

Job Number: 280-91425-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-353756**

**Method: 350.1
Preparation: N/A**

MS Lab Sample ID: 280-91497-J-3 MS	Analysis Batch: 280-353756	Instrument ID: WC_Alp 3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: C:\FLOW_4\113016.RS
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 10 mL
Analysis Date: 11/30/2016 1314		Final Weight/Volume: 10 mL
Prep Date: N/A		
Leach Date: N/A		

MSD Lab Sample ID: 280-91497-J-3 MSD	Analysis Batch: 280-353756	Instrument ID: WC_Alp 3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: C:\FLOW_4\113016.RS
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 10 mL
Analysis Date: 11/30/2016 1316		Final Weight/Volume: 10 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Ammonia (as N)	108	108	90 - 110	0	10		

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-353756**

**Method: 350.1
Preparation: N/A**

MS Lab Sample ID: 280-91179-C-1 MS	Analysis Batch: 280-353756	Instrument ID: WC_Alp 3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: C:\FLOW_4\113016.RS
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 10 mL
Analysis Date: 11/30/2016 1358		Final Weight/Volume: 10 mL
Prep Date: N/A		
Leach Date: N/A		

MSD Lab Sample ID: 280-91179-C-1 MSD	Analysis Batch: 280-353756	Instrument ID: WC_Alp 3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: C:\FLOW_4\113016.RS
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 10 mL
Analysis Date: 11/30/2016 1400		Final Weight/Volume: 10 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Ammonia (as N)	107	105	90 - 110	2	10		

Quality Control Results

Client: Waste Management

Job Number: 280-91425-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-353756**

**Method: 350.1
Preparation: N/A**

MS Lab Sample ID: 280-91497-J-3 MS Units: mg/L
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/30/2016 1314
 Prep Date: N/A
 Leach Date: N/A

MSD Lab Sample ID: 280-91497-J-3 MSD
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/30/2016 1316
 Prep 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)	0.079	1.00	1.00	1.16	1.16

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-353756**

**Method: 350.1
Preparation: N/A**

MS Lab Sample ID: 280-91179-C-1 MS Units: mg/L
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/30/2016 1358
 Prep Date: N/A
 Leach Date: N/A

MSD Lab Sample ID: 280-91179-C-1 MSD
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/30/2016 1400
 Prep 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	1.07	1.05

Quality Control Results

Client: Waste Management

Job Number: 280-91425-1

Method Blank - Batch: 280-354396

Method: 410.4
Preparation: N/A

Lab Sample ID: MB 280-354396/5	Analysis Batch: 280-354396	Instrument ID: WC_Genesys20
Client Matrix: Water	Prep Batch: N/A	Lab File ID: N/A
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 2 mL
Analysis Date: 12/06/2016 0921	Units: mg/L	Final Weight/Volume: 2 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	Result	Qual	RL	RL
Chemical Oxygen Demand (COD)	ND		10	10

Lab Control Sample/ Lab Control Sample Duplicate Recovery Report - Batch: 280-354396

Method: 410.4
Preparation: N/A

LCS Lab Sample ID: LCS 280-354396/3	Analysis Batch: 280-354396	Instrument ID: WC_Genesys20
Client Matrix: Water	Prep Batch: N/A	Lab File ID: N/A
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 100 mL
Analysis Date: 12/06/2016 0921	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

LCSD Lab Sample ID: LCSD 280-354396/4	Analysis Batch: 280-354396	Instrument ID: WC_Genesys20
Client Matrix: Water	Prep Batch: N/A	Lab File ID: N/A
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 100 mL
Analysis Date: 12/06/2016 0921	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	<u>% Rec.</u>		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Chemical Oxygen Demand (COD)	95	97	90 - 110	2	11		

Laboratory Control/ Laboratory Duplicate Data Report - Batch: 280-354396

Method: 410.4
Preparation: N/A

LCS Lab Sample ID: LCS 280-354396/3	Units: mg/L	LCSD Lab Sample ID: LCSD 280-354396/4
Client Matrix: Water		Client Matrix: Water
Dilution: 1.0		Dilution: 1.0
Analysis Date: 12/06/2016 0921		Analysis Date: 12/06/2016 0921
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
Chemical Oxygen Demand (COD)	100	100	95.5	97.1

Quality Control Results

Client: Waste Management

Job Number: 280-91425-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-354396**

**Method: 410.4
Preparation: N/A**

MS Lab Sample ID: 280-91373-C-1 MS
Client Matrix: Water
Dilution: 5.0
Analysis Date: 12/06/2016 0921
Prep Date: N/A
Leach Date: N/A

Analysis Batch: 280-354396
Prep Batch: N/A
Leach Batch: N/A

Instrument ID: WC_Genesys20
Lab File ID: N/A
Initial Weight/Volume: 100 mL
Final Weight/Volume: 100 mL

MSD Lab Sample ID: 280-91373-C-1 MSD
Client Matrix: Water
Dilution: 5.0
Analysis Date: 12/06/2016 0921
Prep Date: N/A
Leach Date: N/A

Analysis Batch: 280-354396
Prep Batch: N/A
Leach Batch: N/A

Instrument ID: WC_Genesys20
Lab File ID: N/A
Initial Weight/Volume: 100 mL
Final Weight/Volume: 100 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Chemical Oxygen Demand (COD)	101	99	90 - 110	1	11		

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-354396**

**Method: 410.4
Preparation: N/A**

MS Lab Sample ID: 280-91373-C-1 MS
Client Matrix: Water
Dilution: 5.0
Analysis Date: 12/06/2016 0921
Prep Date: N/A
Leach Date: N/A

Units: mg/L

MSD Lab Sample ID: 280-91373-C-1 MSD
Client Matrix: Water
Dilution: 5.0
Analysis Date: 12/06/2016 0921
Prep Date: N/A
Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Chemical Oxygen Demand (COD)	270	250	250	519	514

Quality Control Results

Client: Waste Management

Job Number: 280-91425-1

Method Blank - Batch: 280-353708

Method: SM 2320B

Preparation: N/A

Lab Sample ID: MB 280-353708/5	Analysis Batch: 280-353708	Instrument ID: WC_AT2
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 113016 alk.TXT
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 11/29/2016 1336	Units: mg/L	Final Weight/Volume:
Prep Date: N/A		
Leach Date: N/A		

Analyte	Result	Qual	RL	RL
Alkalinity, Total (As CaCO3)	ND		5.0	5.0
Alkalinity, Bicarbonate (As CaCO3)	ND		5.0	5.0

Lab Control Sample - Batch: 280-353708

Method: SM 2320B

Preparation: N/A

Lab Sample ID: LCS 280-353708/4	Analysis Batch: 280-353708	Instrument ID: WC_AT2
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 113016 alk.TXT
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 11/29/2016 1332	Units: mg/L	Final Weight/Volume:
Prep Date: N/A		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Alkalinity, Total (As CaCO3)	200	201	100	90 - 110	

Duplicate - Batch: 280-353708

Method: SM 2320B

Preparation: N/A

Lab Sample ID: 280-91425-1	Analysis Batch: 280-353708	Instrument ID: WC_AT2
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 113016 alk.TXT
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 11/29/2016 1352	Units: mg/L	Final Weight/Volume:
Prep Date: N/A		
Leach Date: N/A		

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Alkalinity, Total (As CaCO3)	790	772	2	10	

Quality Control Results

Client: Waste Management

Job Number: 280-91425-1

Method Blank - Batch: 280-353679

Method: SM 2540C
Preparation: N/A

Lab Sample ID: MB 280-353679/1	Analysis Batch: 280-353679	Instrument ID: No Equipment Assigned
Client Matrix: Water	Prep Batch: N/A	Lab File ID: N/A
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 100 mL
Analysis Date: 11/30/2016 0904	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	Result	Qual	RL	RL
Total Dissolved Solids (TDS)	ND		5.0	5.0

Lab Control Sample/

Method: SM 2540C
Preparation: N/A

Lab Control Sample Duplicate Recovery Report - Batch: 280-353679

LCS Lab Sample ID: LCS 280-353679/2	Analysis Batch: 280-353679	Instrument ID: No Equipment Assigned
Client Matrix: Water	Prep Batch: N/A	Lab File ID: N/A
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 100 mL
Analysis Date: 11/30/2016 0904	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

LCSD Lab Sample ID: LCSD 280-353679/3	Analysis Batch: 280-353679	Instrument ID: No Equipment Assigned
Client Matrix: Water	Prep Batch: N/A	Lab File ID: N/A
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 100 mL
Analysis Date: 11/30/2016 0904	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	<u>% Rec.</u>		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Total Dissolved Solids (TDS)	97	99	86 - 110	1	20		

Laboratory Control/

Method: SM 2540C
Preparation: N/A

Laboratory Duplicate Data Report - Batch: 280-353679

LCS Lab Sample ID: LCS 280-353679/2	Units: mg/L	LCSD Lab Sample ID: LCSD 280-353679/3
Client Matrix: Water		Client Matrix: Water
Dilution: 1.0		Dilution: 1.0
Analysis Date: 11/30/2016 0904		Analysis Date: 11/30/2016 0904
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
Total Dissolved Solids (TDS)	501	501	488	494

Quality Control Results

Client: Waste Management

Job Number: 280-91425-1

Duplicate - Batch: 280-353679

Method: SM 2540C

Preparation: N/A

Lab Sample ID:	280-91498-B-2 DU	Analysis Batch:	280-353679	Instrument ID:	No Equipment Assigned
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	11/30/2016 0904	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Total Dissolved Solids (TDS)	280	284	2	10	

Quality Control Results

Client: Waste Management

Job Number: 280-91425-1

Method Blank - Batch: 280-355417

Method: SM 5310B

Preparation: N/A

Lab Sample ID: MB 280-355417/13	Analysis Batch: 280-355417	Instrument ID: WC_SHI2
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 121216.txt
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 12/12/2016 1909	Units: mg/L	Final Weight/Volume:
Prep Date: N/A		
Leach Date: N/A		

Analyte	Result	Qual	RL	RL
Total Organic Carbon - Average	ND		1.0	1.0

Lab Control Sample - Batch: 280-355417

Method: SM 5310B

Preparation: N/A

Lab Sample ID: LCS 280-355417/12	Analysis Batch: 280-355417	Instrument ID: WC_SHI2
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 121216.txt
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 12/12/2016 1854	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	24.0	96	88 - 112	

Matrix Spike/

Method: SM 5310B

Matrix Spike Duplicate Recovery Report - Batch: 280-355417

Preparation: N/A

MS Lab Sample ID: 280-91615-C-3 MS	Analysis Batch: 280-355417	Instrument ID: WC_SHI2
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 121216.txt
Dilution: 83.33	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 12/12/2016 2011		Final Weight/Volume: 50 mL
Prep Date: N/A		
Leach Date: N/A		

MSD Lab Sample ID: 280-91615-C-3 MSD	Analysis Batch: 280-355417	Instrument ID: WC_SHI2
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 121216.txt
Dilution: 50	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 12/12/2016 2041		Final Weight/Volume: 50 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	<u>% Rec.</u>		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Total Organic Carbon - Average	56	0	88 - 112	NC	15	F1	F1

Quality Control Results

Client: Waste Management

Job Number: 280-91425-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-355417**

**Method: SM 5310B
Preparation: N/A**

MS Lab Sample ID: 280-91615-C-3 MS Units: mg/L
 Client Matrix: Water
 Dilution: 83.33
 Analysis Date: 12/12/2016 2011
 Prep Date: N/A
 Leach Date: N/A

MSD Lab Sample ID: 280-91615-C-3 MSD
 Client Matrix: Water
 Dilution: 50
 Analysis Date: 12/12/2016 2041
 Prep 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	2000	2080	1250	3170 F1	ND F1

Quality Control Results

Client: Waste Management

Job Number: 280-91425-1

Method Blank - Batch: 280-353110

Method: SM5210B
Preparation: N/A

Lab Sample ID: MB 280-353110/4	Analysis Batch: 280-353110	Instrument ID: No Equipment Assigned
Client Matrix: Water	Prep Batch: N/A	Lab File ID: N/A
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 11/25/2016 1722	Units: mg/L	Final Weight/Volume: 300 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	Result	Qual	RL	RL
Biochemical Oxygen Demand	ND		2.0	2.0

Lab Control Sample - Batch: 280-353110

Method: SM5210B
Preparation: N/A

Lab Sample ID: LCS 280-353110/3	Analysis Batch: 280-353110	Instrument ID: No Equipment Assigned
Client Matrix: Water	Prep Batch: N/A	Lab File ID: N/A
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 11/25/2016 1722	Units: mg/L	Final Weight/Volume: 300 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Biochemical Oxygen Demand	198	196	99	85 - 115	

Duplicate - Batch: 280-353110

Method: SM5210B
Preparation: N/A

Lab Sample ID: 280-91425-1	Analysis Batch: 280-353110	Instrument ID: No Equipment Assigned
Client Matrix: Water	Prep Batch: N/A	Lab File ID: N/A
Dilution: 5.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 11/25/2016 1722	Units: mg/L	Final Weight/Volume: 300 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Biochemical Oxygen Demand	14	13.4	8	20	

Quality Control Results

Client: Waste Management

Job Number: 280-91425-1

Laboratory Chronicle

Lab ID: 280-91425-1

Client ID: LP-LCD

Sample Date/Time: 11/22/2016 11:10 Received Date/Time: 11/25/2016 08:35

Method	Bottle ID	Run	Analysis		Date Prepared /		Dil	Lab	Analyst
			Batch	Prep Batch	Analyzed				
P:3005A	280-91425-E-1-A		280-353968	280-353411	11/29/2016	14:35	1	TAL DEN	SEJ
A:6010B	280-91425-E-1-A		280-353968	280-353411	12/01/2016	18:16	1	TAL DEN	CML
A:300.0	280-91425-B-1		280-355362		12/14/2016	01:43	10	TAL DEN	AFB
A:350.1	280-91425-D-1		280-353756		11/30/2016	13:00	5	TAL DEN	MAS
A:410.4	280-91425-D-1		280-354396		12/06/2016	09:21	2	TAL DEN	CCJ
A:SM 2320B	280-91425-A-1		280-353708		11/29/2016	13:45	1	TAL DEN	MMC
A:SM 2540C	280-91425-B-1		280-353679		11/30/2016	09:04	1	TAL DEN	JAP
A:SM 5310B	280-91425-D-1		280-355417		12/12/2016	19:39	2	TAL DEN	CCJ
A:SM5210B	280-91425-A-1		280-353110		11/25/2016	17:22	5	TAL DEN	RSM

Lab ID: 280-91425-1 DU

Client ID: LP-LCD

Sample Date/Time: 11/22/2016 11:10 Received Date/Time: 11/25/2016 08:35

Method	Bottle ID	Run	Analysis		Date Prepared /		Dil	Lab	Analyst
			Batch	Prep Batch	Analyzed				
A:SM 2320B	280-91425-A-1 DU		280-353708		11/29/2016	13:52	1	TAL DEN	MMC
A:SM5210B	280-91425-A-1 DU		280-353110		11/25/2016	17:22	5	TAL DEN	RSM

Lab ID: MB

Client ID: N/A

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

Method	Bottle ID	Run	Analysis		Date Prepared /		Dil	Lab	Analyst
			Batch	Prep Batch	Analyzed				
P:3005A	MB 280-353411/1-A		280-353968	280-353411	11/29/2016	14:35	1	TAL DEN	SEJ
A:6010B	MB 280-353411/1-A		280-353968	280-353411	12/01/2016	16:58	1	TAL DEN	CML
A:300.0	MB 280-355362/6		280-355362		12/13/2016	10:50	1	TAL DEN	AFB
A:350.1	MB 280-353756/61		280-353756		11/30/2016	13:10	1	TAL DEN	MAS
A:410.4	MB 280-354396/5		280-354396		12/06/2016	09:21	1	TAL DEN	CCJ
A:SM 2320B	MB 280-353708/5		280-353708		11/29/2016	13:36	1	TAL DEN	MMC
A:SM 2540C	MB 280-353679/1		280-353679		11/30/2016	09:04	1	TAL DEN	JAP
A:SM 5310B	MB 280-355417/13		280-355417		12/12/2016	19:09	1	TAL DEN	CCJ
A:SM5210B	MB 280-353110/4		280-353110		11/25/2016	17:22	1	TAL DEN	RSM

Quality Control Results

Client: Waste Management

Job Number: 280-91425-1

Laboratory Chronicle

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:3005A	LCS 280-353411/2-A		280-353968	280-353411	11/29/2016 14:35	1	TAL DEN	SEJ
A:6010B	LCS 280-353411/2-A		280-353968	280-353411	12/01/2016 17:01	1	TAL DEN	CML
A:300.0	LCS 280-355362/4		280-355362		12/13/2016 10:16	1	TAL DEN	AFB
A:350.1	LCS 280-353696/1-A		280-353756		11/30/2016 11:44	1	TAL DEN	MAS
A:350.1	LCS 280-353756/59		280-353756		11/30/2016 13:06	1	TAL DEN	MAS
A:410.4	LCS 280-354396/3		280-354396		12/06/2016 09:21	1	TAL DEN	CCJ
A:SM 2320B	LCS 280-353708/4		280-353708		11/29/2016 13:32	1	TAL DEN	MMC
A:SM 2540C	LCS 280-353679/2		280-353679		11/30/2016 09:04	1	TAL DEN	JAP
A:SM 5310B	LCS 280-355417/12		280-355417		12/12/2016 18:54	1	TAL DEN	CCJ
A:SM5210B	LCS 280-353110/3		280-353110		11/25/2016 17:22	1	TAL DEN	RSM

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
A:300.0	LCSD 280-355362/5		280-355362		12/13/2016 10:33	1	TAL DEN	AFB
A:350.1	LCSD 280-353696/2-A		280-353756		11/30/2016 11:46	1	TAL DEN	MAS
A:350.1	LCSD 280-353756/60		280-353756		11/30/2016 13:08	1	TAL DEN	MAS
A:410.4	LCSD 280-354396/4		280-354396		12/06/2016 09:21	1	TAL DEN	CCJ
A:SM 2540C	LCSD 280-353679/3		280-353679		11/30/2016 09:04	1	TAL DEN	JAP

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 280-355362/3		280-355362		12/13/2016 10:00	1	TAL DEN	AFB

Lab ID: MS

Client ID: N/A

Sample Date/Time: 11/21/2016 11:01

Received Date/Time: 11/22/2016 09:10

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3005A	280-91415-D-1-B MS		280-353968	280-353411	11/29/2016 14:35	1	TAL DEN	SEJ
A:6010B	280-91415-D-1-B MS		280-353968	280-353411	12/01/2016 17:08	1	TAL DEN	CML
A:300.0	280-91415-A-1 MS		280-355362		12/13/2016 23:12	1	TAL DEN	AFB
A:350.1	280-91497-J-3 MS		280-353756		11/30/2016 13:14	1	TAL DEN	MAS
A:350.1	280-91179-C-1 MS		280-353756		11/30/2016 13:58	1	TAL DEN	MAS
A:410.4	280-91373-C-1 MS		280-354396		12/06/2016 09:21	5	TAL DEN	CCJ
A:SM 5310B	280-91615-C-3 MS		280-355417		12/12/2016 20:11	83.33	TAL DEN	CCJ

Quality Control Results

Client: Waste Management

Job Number: 280-91425-1

Laboratory Chronicle

Lab ID: MSD

Client ID: N/A

Sample Date/Time: 11/21/2016 11:01 Received Date/Time: 11/22/2016 09:10

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3005A	280-91415-D-1-C MSD		280-353968	280-353411	11/29/2016 14:35	1	TAL DEN	SEJ
A:6010B	280-91415-D-1-C MSD		280-353968	280-353411	12/01/2016 17:10	1	TAL DEN	CML
A:300.0	280-91415-A-1 MSD		280-355362		12/13/2016 23:29	1	TAL DEN	AFB
A:350.1	280-91497-J-3 MSD		280-353756		11/30/2016 13:16	1	TAL DEN	MAS
A:350.1	280-91179-C-1 MSD		280-353756		11/30/2016 14:00	1	TAL DEN	MAS
A:410.4	280-91373-C-1 MSD		280-354396		12/06/2016 09:21	5	TAL DEN	CCJ
A:SM 5310B	280-91615-C-3 MSD		280-355417		12/12/2016 20:41	50	TAL DEN	CCJ

Lab ID: DU

Client ID: N/A


Sample Date/Time: 11/21/2016 11:01 Received Date/Time: 11/22/2016 09:10

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:300.0	280-91415-A-1 DU		280-355362		12/13/2016 22:55	1	TAL DEN	AFB
A:SM 2540C	280-91498-B-2 DU		280-353679		11/30/2016 09:04	1	TAL DEN	JAP

Lab References:

TAL DEN = TestAmerica Denver

Chain of Custody Record

Client Information Client: Matt Frank Company: Waste Management Address: Olympic View Transfer Station 9300 Southwest Barney White Rd City: Bremerton State, Zip: WA, 98312 Phone: 818-974-1334 Email: mfrank@wm.com		Lab PM: Sara, Betsy A E-Mail: betsy.sara@testamerica.com		Carrier Tracking No(s): COC No: 280-27355-11726.1 Page: Page 1 of 1 Job #:	
Due Date Requested: TAT Requested (days): PO #: 818-974-1334 Purchase Order not required WO #: mfrank@wm.com Project #: 28002692 - Orly Leachate Risers-Mar Jun Sep Dec SSOW#:		Analysis Requested Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Perform MS/MSD (Yes or No) <input type="checkbox"/> Yes <input type="checkbox"/> No 410.4-COD <input type="checkbox"/> S <input type="checkbox"/> N BOD <input type="checkbox"/> X <input type="checkbox"/> Y Metals <input type="checkbox"/> X <input type="checkbox"/> Y TOC, Ammonia <input type="checkbox"/> X <input type="checkbox"/> Y CL, SO ₄ , Alk <input type="checkbox"/> X <input type="checkbox"/> Y			
Sample Identification OUSE-161122-LP-LD Sample Date: 11/22/16 Sample Time: 1110 Sample Type (C=Comp, G=grab): Grab Matrix (W=water, S=solid, O=wastewater, DT=tissue, A=air): W		Total Number of containers: _____ Special Instructions/Note: <div style="text-align: center;">  280-91425 Chain of Custody </div>			
Possible Hazard Identification <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months			
Deliverable Requested: I, II, III, IV, Other (specify) _____		Special Instructions/QC Requirements:			
Empty Kit Relinquished by: Relinquished by: <i>[Signature]</i> Relinquished by: _____ Relinquished by: _____		Method of Shipment: Fed-Ex Received by: SK Date/Time: 11/22/16 11:50 Company: SLS-FS			
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Cooler Temperature(s) °C and Other Remarks: S.1 TRS (T-OZ) transferred SPS 11-25-16			

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-91425-1

Login Number: 91425
List Number: 1
Creator: White, Denise E

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.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	False	OUT OF HT, SAMPLED 11/22 RECEIVED 11/25
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.	N/A	
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	

ANALYTICAL REPORT

Job Number: 280-91197-1

Job Description: WA02|Olympic View Sanitary LF

For:

Waste Management
Sun Valley Hauling
9081 Tujunga Avenue
Sun Valley, CA 91352

Attention: Mr. Phil Perley



Approved for release.
Betsy A Sara
Project Manager II
12/16/2016 10:06 AM

Betsy A Sara, Project Manager II
4955 Yarrow Street, Arvada, CO, 80002
(303)736-0189
betsy.sara@testamericainc.com
12/16/2016

cc: Mr. Dan Venchiarutti

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.

TestAmerica Laboratories, Inc.

TestAmerica Denver 4955 Yarrow Street, Arvada, CO 80002
Tel (303) 736-0100 Fax (303) 431-7171 www.testamericainc.com



Table of Contents

Cover Title Page	1
Report Narrative	3
Executive Summary	5
Method Summary	8
Method / Analyst Summary	9
Sample Summary	10
Sample Results	11
Sample Datasheets	12
Data Qualifiers	52
QC Results	53
Qc Association Summary	54
Surrogate Recovery Report	60
Qc Reports	62
Laboratory Chronicle	99
Client Chain of Custody	107
Sample Receipt Checklist	113

CASE NARRATIVE

Client: Waste Management

Project: WA02|Olympic View Sanitary LF

Report Number: 280-91197-1

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

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

Sample Receiving

The samples were received on 11/18/2016 and 11/21/2016; the samples arrived in good condition, properly preserved and on ice. The temperatures of the coolers at receipt were 0.2° C and 2.9° C.

One of two coolers arrived on 11/18/2016 at a temperature of 0.4 C. The other cooler arrived on 11/21/2016 at a temperature of 3.1 C. The delayed cooler contained all sample volume for samples DUP1 and MW-24.

Holding Times

The Nitrate result was derived from a calculation and the analysis date/time reflects when the calculation was performed. Nitrate+Nitrite and Nitrite results were required for the calculation. Nitrate+Nitrite analysis has a 28-day holding time. Nitrite analysis has a 48-hour holding time, and due to a FedEx delay, the associated Nitrite analysis was performed outside of the 48-hour holding time for the samples DUP1 and MW-24. The Nitrite analysis was performed within the holding time for the samples MW-33C and MW-33A.

The original Total Dissolved Solids (TDS) result for the sample MW-24 was over the calibration range, therefore the sample was reanalyzed eight days outside of the 7-day holding time. Only the reanalysis result is reported in this submission.

All other holding times were within established control limits.

Method Blanks

Vinyl chloride Method 8260C SIM was detected in the Method Blanks below the project established reporting limits. No corrective action is taken for any values in Method Blanks that are below the requested reporting limits.

All other Method Blank recoveries 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)

The Matrix Spikes and Matrix Spike Duplicates performed on samples from other clients exhibited recoveries outside control limits for multiple 8260C compounds. Because the corresponding Laboratory Control Samples and the Method Blank samples were within control limits, these anomalies may be due to matrix interference and no corrective action was taken.

The percent recoveries and/or relative percent difference of the MS/MSD performed on a sample from another client were outside control limits for Dissolved Manganese Method 6020 because the sample concentration was greater than four times the spike amount. Because the corresponding Laboratory Control Sample and the Method Blank sample were within control limits, no corrective action was taken.

Sample MW-33A was selected to fulfill the laboratory batch quality control requirements for Method 6020. Analysis of the laboratory generated MS/MSD for this sample exhibited recoveries of Total Manganese below the lower control limit. 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 Method 8260B surrogate recoveries of 1,2-Dichloroethane-d4, 4-Bromofluorobenzene and Toluene-d8 were above the upper control limits for sample DUP1. Because the data are considered to be biased high and all target analytes in the sample were non-detect above the reporting limits, corrective action was deemed unnecessary.

The analytes Acrolein, Acrylonitrile and 2-chloroethyl vinyl ether cannot be reliably quantitated in acid preserved samples, therefore, the reporting limits for the analytes Acrolein, Acrylonitrile and 2-chloroethyl vinyl ether is not reliable or defensible.

General Comments

The analyses for Volatile Organics by Method 8260C and Volatile Organics by Method 8260C SIM were performed by TestAmerica Buffalo. Their address and phone number are:

TestAmerica Buffalo
10 Hazelwood Drive, Suite 106
Amherst, NY 14228
716-691-2600

EXECUTIVE SUMMARY - Detections

Client: Waste Management

Job Number: 280-91197-1

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-91197-1	MW-33C					
Depth to water		1.63			ft	Field Sampling
Specific Conductivity		159			umhos/cm	Field Sampling
Dissolved Oxygen		0.26			mg/L	Field Sampling
eH		-61.14			millivolts	Field Sampling
Turbidity		1.12			NTU	Field Sampling
Temperature		9.24			Degrees C	Field Sampling
pH		8.31			SU	Field Sampling
Chloride		2.8		1.0	mg/L	300.0
Sulfate		7.4		1.0	mg/L	300.0
Alkalinity, Total (As CaCO3)		68		5.0	mg/L	SM 2320B
Alkalinity, Bicarbonate (As CaCO3)		68		5.0	mg/L	SM 2320B
Total Dissolved Solids (TDS)		95		5.0	mg/L	SM 2540C
Total Suspended Solids		4.0		4.0	mg/L	SM 2540D
<i>Dissolved</i>						
Calcium, Dissolved		17		0.040	mg/L	6010B
Iron, Dissolved		0.081		0.060	mg/L	6010B
Magnesium, Dissolved		7.4		0.050	mg/L	6010B
Potassium, Dissolved		1.3		1.0	mg/L	6010B
Sodium, Dissolved		4.2		1.0	mg/L	6010B
Manganese, Dissolved		0.15		0.0010	mg/L	6020
<i>Total Recoverable</i>						
Barium, Total		0.0048		0.0010	mg/L	6020
Manganese, Total		0.15		0.0010	mg/L	6020

EXECUTIVE SUMMARY - Detections

Client: Waste Management

Job Number: 280-91197-1

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-91197-3	MW-33A					
Depth to water		4.41			ft	Field Sampling
Specific Conductivity		8.4			umhos/cm	Field Sampling
Dissolved Oxygen		0.43			mg/L	Field Sampling
eH		39.2			millivolts	Field Sampling
Turbidity		8.61			NTU	Field Sampling
Temperature		9.99			Degrees C	Field Sampling
pH		6.67			SU	Field Sampling
Chloride		2.2		1.0	mg/L	300.0
Sulfate		1.8		1.0	mg/L	300.0
Ammonia (as N)		0.30		0.030	mg/L	350.1
Alkalinity, Total (As CaCO3)		39		5.0	mg/L	SM 2320B
Alkalinity, Bicarbonate (As CaCO3)		39		5.0	mg/L	SM 2320B
Total Dissolved Solids (TDS)		62		5.0	mg/L	SM 2540C
Total Suspended Solids		8.4		4.0	mg/L	SM 2540D
Total Organic Carbon - Average		2.5		1.0	mg/L	SM 5310B
<i>Dissolved</i>						
Calcium, Dissolved		8.6		0.040	mg/L	6010B
Iron, Dissolved		2.5		0.060	mg/L	6010B
Magnesium, Dissolved		4.1		0.050	mg/L	6010B
Sodium, Dissolved		3.0		1.0	mg/L	6010B
Manganese, Dissolved		0.089		0.0010	mg/L	6020
<i>Total Recoverable</i>						
Iron, Total		2.5		0.060	mg/L	6010B
Barium, Total		0.0024		0.0010	mg/L	6020
Manganese, Total		0.083	F1	0.0010	mg/L	6020
Vanadium, Total		0.0032		0.0020	mg/L	6020

EXECUTIVE SUMMARY - Detections

Client: Waste Management

Job Number: 280-91197-1

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-91197-4	DUP1					
Chloride		2.8		1.0	mg/L	300.0
Sulfate		7.4		1.0	mg/L	300.0
Ammonia (as N)		0.047		0.030	mg/L	350.1
Alkalinity, Total (As CaCO3)		69		5.0	mg/L	SM 2320B
Alkalinity, Bicarbonate (As CaCO3)		69		5.0	mg/L	SM 2320B
Total Dissolved Solids (TDS)		97		5.0	mg/L	SM 2540C
<i>Dissolved</i>						
Calcium, Dissolved		17		0.040	mg/L	6010B
Magnesium, Dissolved		7.4		0.050	mg/L	6010B
Potassium, Dissolved		1.3		1.0	mg/L	6010B
Sodium, Dissolved		4.2		1.0	mg/L	6010B
Manganese, Dissolved		0.14		0.0010	mg/L	6020
<i>Total Recoverable</i>						
Iron, Total		0.060		0.060	mg/L	6010B
Barium, Total		0.0034		0.0010	mg/L	6020
Manganese, Total		0.14		0.0010	mg/L	6020
280-91197-5	MW-24					
Depth to water		32.20			ft	Field Sampling
Specific Conductivity		127			umhos/cm	Field Sampling
Dissolved Oxygen		0.24			mg/L	Field Sampling
eH		107.9			millivolts	Field Sampling
Turbidity		2.12			NTU	Field Sampling
Temperature		11.66			Degrees C	Field Sampling
pH		6.63			SU	Field Sampling
Chloride		2.5		1.0	mg/L	300.0
Sulfate		3.5		1.0	mg/L	300.0
Nitrate as N		0.16		0.050	mg/L	353.2
Alkalinity, Total (As CaCO3)		57		5.0	mg/L	SM 2320B
Alkalinity, Bicarbonate (As CaCO3)		57		5.0	mg/L	SM 2320B
Total Dissolved Solids (TDS)		86	H	5.0	mg/L	SM 2540C
<i>Dissolved</i>						
Calcium, Dissolved		11		0.040	mg/L	6010B
Magnesium, Dissolved		6.5		0.050	mg/L	6010B
Sodium, Dissolved		5.0		1.0	mg/L	6010B
Manganese, Dissolved		0.70		0.0010	mg/L	6020
<i>Total Recoverable</i>						
Barium, Total		0.0057		0.0010	mg/L	6020
Manganese, Total		1.7		0.0010	mg/L	6020
Vanadium, Total		0.0022		0.0020	mg/L	6020

METHOD SUMMARY

Client: Waste Management

Job Number: 280-91197-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Metals (ICP)	TAL DEN	SW846 6010B	
Preparation, Total Recoverable or Dissolved Metals	TAL DEN		SW846 3005A
Metals (ICP)	TAL DEN	SW846 6010B	
Preparation, Total Recoverable or Dissolved Metals	TAL DEN		SW846 3005A
Sample Filtration, Field			FIELD_FLTRD
Metals (ICP/MS)	TAL DEN	SW846 6020	
Preparation, Total Recoverable or Dissolved Metals	TAL DEN		SW846 3005A
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	
Nitrogen, Ammonia	TAL DEN	MCAWW 350.1	
Nitrate	TAL DEN	EPA 353.2	
Alkalinity	TAL DEN	SM SM 2320B	
Solids, Total Dissolved (TDS)	TAL DEN	SM SM 2540C	
Solids, Total Suspended (TSS)	TAL DEN	SM SM 2540D	
Organic Carbon, Total (TOC)	TAL DEN	SM SM 5310B	
Field Sampling	TAL DEN	EPA Field Sampling	
Volatile Organic Compounds by GC/MS	TAL BUF	SW846 8260C	
Purge and Trap	TAL BUF		SW846 5030C
Volatile Organic Compounds (GC/MS)	TAL BUF	SW846 8260C SIM	
Purge and Trap	TAL BUF		SW846 5030C

Lab References:

TAL BUF = TestAmerica Buffalo

TAL DEN = TestAmerica Denver

Method References:

EPA = US Environmental Protection Agency

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: Waste Management

Job Number: 280-91197-1

Method	Analyst	Analyst ID
SW846 8260C	O'Brien, Shaun W	SWO
SW846 8260C SIM	Gentile, Joseph W	JWG
SW846 6010B	Diaz, Luis R	LRD
SW846 6010B	Rhoades, Chris R	CRR
SW846 6020	Trudell, Lynn-Anne M	LMT
EPA Field Sampling	Krisorn, Chamaiporn 1	C1K
MCAWW 300.0	Benson, Alex F	AFB
MCAWW 350.1	Spedale, Morgan A	MAS
EPA 353.2	Allen, Andrew J	AJA
SM SM 2320B	Carter, Melynda M	MMC
SM SM 2540C	Pedrick, Joshua A	JAP
SM SM 2540D	Cherry, Scott V	SVC
SM SM 5310B	Jewell, Connie C	CCJ

SAMPLE SUMMARY

Client: Waste Management

Job Number: 280-91197-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-91197-1	MW-33C	Water	11/17/2016 1050	11/18/2016 1000
280-91197-2TB	TRIP BLANK	Water	11/17/2016 0000	11/18/2016 1000
280-91197-3	MW-33A	Water	11/17/2016 0950	11/18/2016 1000
280-91197-4	DUP1	Water	11/17/2016 1100	11/18/2016 1000
280-91197-5	MW-24	Water	11/17/2016 1320	11/18/2016 1000

SAMPLE RESULTS

Analytical Data

Client: Waste Management

Job Number: 280-91197-1

Client Sample ID: MW-33C

Lab Sample ID: 280-91197-1

Date Sampled: 11/17/2016 1050

Client Matrix: Water

Date Received: 11/18/2016 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333995	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S0146.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/30/2016 1144		Final Weight/Volume: 5 mL
Prep Date: 11/30/2016 1144		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	ND		0.35	1.0
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,1-Dichloropropene	ND		0.72	1.0
1,2,3-Trichlorobenzene	ND		0.41	1.0
1,2,3-Trichloropropane	ND		0.89	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2,4-Trimethylbenzene	ND		0.75	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane (EDB)	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloroethene, Total	ND		0.81	2.0
1,2-Dichloropropane	ND		0.72	1.0
1,3,5-Trichlorobenzene	ND		0.23	1.0
1,3,5-Trimethylbenzene	ND		0.77	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,3-Dichloropropane	ND		0.75	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
1,4-Dioxane	ND		9.3	40
2,2-Dichloropropane	ND		0.40	1.0
2-Butanone (MEK)	ND		1.3	10
2-Chloroethyl vinyl ether	ND		0.96	5.0
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Acetonitrile	ND		4.9	15
Acrolein	ND		0.91	20
Acrylonitrile	ND		0.83	5.0
Benzene	ND		0.41	1.0
Bromobenzene	ND		0.80	1.0
Bromochloromethane	ND		0.87	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Butyl alcohol, n-	ND		8.9	40
Butyl alcohol, tert-	ND		3.3	10
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Chlorodifluoromethane	ND		0.26	1.0
Chloroethane	ND		0.32	1.0

Analytical Data

Client: Waste Management

Job Number: 280-91197-1

Client Sample ID: MW-33C

Lab Sample ID: 280-91197-1

Date Sampled: 11/17/2016 1050

Client Matrix: Water

Date Received: 11/18/2016 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333995	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S0146.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/30/2016 1144		Final Weight/Volume: 5 mL
Prep Date: 11/30/2016 1144		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dibromochloromethane	ND		0.32	1.0
Dibromomethane	ND		0.41	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Dichlorofluoromethane	ND		0.34	1.0
Ethyl acetate	ND		0.66	1.0
Ethyl ether	ND		0.72	1.0
Ethyl tert-butyl ether	ND		0.29	1.0
Ethylbenzene	ND		0.74	1.0
Hexachlorobutadiene	ND		0.28	1.0
Hexane	ND		0.40	10
Iodomethane	ND		0.30	1.0
Isobutanol	ND		4.8	25
Isopropyl ether	ND		0.59	1.0
Isopropylbenzene	ND		0.79	1.0
Methacrylonitrile	ND		0.69	5.0
Methyl acetate	ND		1.3	2.5
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
Naphthalene	ND		0.43	1.0
n-Butylbenzene	ND		0.64	1.0
N-Propylbenzene	ND		0.69	1.0
o-Chlorotoluene	ND		0.86	1.0
o-Xylene	ND		0.76	1.0
p-Chlorotoluene	ND		0.84	1.0
p-Cymene	ND		0.31	1.0
sec-Butylbenzene	ND		0.75	1.0
Styrene	ND		0.73	1.0
Tert-amyl methyl ether	ND		0.27	1.0
tert-Butylbenzene	ND		0.81	1.0
Tetrachloroethene	ND		0.36	1.0
Tetrahydrofuran	ND		1.3	5.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
trans-1,4-Dichloro-2-butene	ND		0.22	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0
Vinyl acetate	ND		0.85	5.0
Vinyl chloride	ND		0.90	1.0

Analytical Data

Client: Waste Management

Job Number: 280-91197-1

Client Sample ID: MW-33C

Lab Sample ID: 280-91197-1

Date Sampled: 11/17/2016 1050

Client Matrix: Water

Date Received: 11/18/2016 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333995	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S0146.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/30/2016 1144		Final Weight/Volume: 5 mL
Prep Date: 11/30/2016 1144		

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	102		77 - 120
4-Bromofluorobenzene (Surr)	97		73 - 120
Toluene-d8 (Surr)	102		80 - 120

Analytical Data

Client: Waste Management

Job Number: 280-91197-1

Client Sample ID: MW-33C

Lab Sample ID: 280-91197-1

Date Sampled: 11/17/2016 1050

Client Matrix: Water

Date Received: 11/18/2016 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analysis Batch: 480-333995

Instrument ID: HP5973S

Prep Method: 5030C

Prep Batch: N/A

Lab File ID: S0146.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Analysis Date: 11/30/2016 1144

Final Weight/Volume: 5 mL

Prep Date: 11/30/2016 1144

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
67-72-1	Hexachloroethane TIC	ND	

Analytical Data

Client: Waste Management

Job Number: 280-91197-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 280-91197-2TB

Date Sampled: 11/17/2016 0000

Client Matrix: Water

Date Received: 11/18/2016 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333995	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S0147.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/30/2016 1207		Final Weight/Volume: 5 mL
Prep Date: 11/30/2016 1207		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	ND		0.35	1.0
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,1-Dichloropropene	ND		0.72	1.0
1,2,3-Trichlorobenzene	ND		0.41	1.0
1,2,3-Trichloropropane	ND		0.89	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2,4-Trimethylbenzene	ND		0.75	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane (EDB)	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloroethene, Total	ND		0.81	2.0
1,2-Dichloropropane	ND		0.72	1.0
1,3,5-Trichlorobenzene	ND		0.23	1.0
1,3,5-Trimethylbenzene	ND		0.77	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,3-Dichloropropane	ND		0.75	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
1,4-Dioxane	ND		9.3	40
2,2-Dichloropropane	ND		0.40	1.0
2-Butanone (MEK)	ND		1.3	10
2-Chloroethyl vinyl ether	ND		0.96	5.0
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Acetonitrile	ND		4.9	15
Acrolein	ND		0.91	20
Acrylonitrile	ND		0.83	5.0
Benzene	ND		0.41	1.0
Bromobenzene	ND		0.80	1.0
Bromochloromethane	ND		0.87	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Butyl alcohol, n-	ND		8.9	40
Butyl alcohol, tert-	ND		3.3	10
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Chlorodifluoromethane	ND		0.26	1.0
Chloroethane	ND		0.32	1.0

Analytical Data

Client: Waste Management

Job Number: 280-91197-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 280-91197-2TB

Client Matrix: Water

Date Sampled: 11/17/2016 0000

Date Received: 11/18/2016 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C Analysis Batch: 480-333995 Instrument ID: HP5973S
Prep Method: 5030C Prep Batch: N/A Lab File ID: S0147.D
Dilution: 1.0 Initial Weight/Volume: 5 mL
Analysis Date: 11/30/2016 1207 Final Weight/Volume: 5 mL
Prep Date: 11/30/2016 1207

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dibromochloromethane	ND		0.32	1.0
Dibromomethane	ND		0.41	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Dichlorofluoromethane	ND		0.34	1.0
Ethyl acetate	ND		0.66	1.0
Ethyl ether	ND		0.72	1.0
Ethyl tert-butyl ether	ND		0.29	1.0
Ethylbenzene	ND		0.74	1.0
Hexachlorobutadiene	ND		0.28	1.0
Hexane	ND		0.40	10
Iodomethane	ND		0.30	1.0
Isobutanol	ND		4.8	25
Isopropyl ether	ND		0.59	1.0
Isopropylbenzene	ND		0.79	1.0
Methacrylonitrile	ND		0.69	5.0
Methyl acetate	ND		1.3	2.5
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
Naphthalene	ND		0.43	1.0
n-Butylbenzene	ND		0.64	1.0
N-Propylbenzene	ND		0.69	1.0
o-Chlorotoluene	ND		0.86	1.0
o-Xylene	ND		0.76	1.0
p-Chlorotoluene	ND		0.84	1.0
p-Cymene	ND		0.31	1.0
sec-Butylbenzene	ND		0.75	1.0
Styrene	ND		0.73	1.0
Tert-amyl methyl ether	ND		0.27	1.0
tert-Butylbenzene	ND		0.81	1.0
Tetrachloroethene	ND		0.36	1.0
Tetrahydrofuran	ND		1.3	5.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
trans-1,4-Dichloro-2-butene	ND		0.22	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0
Vinyl acetate	ND		0.85	5.0
Vinyl chloride	ND		0.90	1.0

Analytical Data

Client: Waste Management

Job Number: 280-91197-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 280-91197-2TB

Date Sampled: 11/17/2016 0000

Client Matrix: Water

Date Received: 11/18/2016 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333995	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S0147.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/30/2016 1207		Final Weight/Volume: 5 mL
Prep Date: 11/30/2016 1207		

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	104		77 - 120
4-Bromofluorobenzene (Surr)	96		73 - 120
Toluene-d8 (Surr)	101		80 - 120

Analytical Data

Client: Waste Management

Job Number: 280-91197-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 280-91197-2TB

Date Sampled: 11/17/2016 0000

Client Matrix: Water

Date Received: 11/18/2016 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analysis Batch: 480-333995

Instrument ID: HP5973S

Prep Method: 5030C

Prep Batch: N/A

Lab File ID: S0147.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Analysis Date: 11/30/2016 1207

Final Weight/Volume: 5 mL

Prep Date: 11/30/2016 1207

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
67-72-1	Hexachloroethane TIC	ND	

Analytical Data

Client: Waste Management

Job Number: 280-91197-1

Client Sample ID: MW-33A

Lab Sample ID: 280-91197-3

Date Sampled: 11/17/2016 0950

Client Matrix: Water

Date Received: 11/18/2016 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333995	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S0148.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/30/2016 1230		Final Weight/Volume: 5 mL
Prep Date: 11/30/2016 1230		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	ND		0.35	1.0
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,1-Dichloropropene	ND		0.72	1.0
1,2,3-Trichlorobenzene	ND		0.41	1.0
1,2,3-Trichloropropane	ND		0.89	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2,4-Trimethylbenzene	ND		0.75	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane (EDB)	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloroethene, Total	ND		0.81	2.0
1,2-Dichloropropane	ND		0.72	1.0
1,3,5-Trichlorobenzene	ND		0.23	1.0
1,3,5-Trimethylbenzene	ND		0.77	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,3-Dichloropropane	ND		0.75	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
1,4-Dioxane	ND		9.3	40
2,2-Dichloropropane	ND		0.40	1.0
2-Butanone (MEK)	ND		1.3	10
2-Chloroethyl vinyl ether	ND		0.96	5.0
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Acetonitrile	ND		4.9	15
Acrolein	ND		0.91	20
Acrylonitrile	ND		0.83	5.0
Benzene	ND		0.41	1.0
Bromobenzene	ND		0.80	1.0
Bromochloromethane	ND		0.87	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Butyl alcohol, n-	ND		8.9	40
Butyl alcohol, tert-	ND		3.3	10
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Chlorodifluoromethane	ND		0.26	1.0
Chloroethane	ND		0.32	1.0

Analytical Data

Client: Waste Management

Job Number: 280-91197-1

Client Sample ID: MW-33A

Lab Sample ID: 280-91197-3

Date Sampled: 11/17/2016 0950

Client Matrix: Water

Date Received: 11/18/2016 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-333995	Instrument ID:	HP5973S
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	S0148.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	11/30/2016 1230			Final Weight/Volume:	5 mL
Prep Date:	11/30/2016 1230				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dibromochloromethane	ND		0.32	1.0
Dibromomethane	ND		0.41	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Dichlorofluoromethane	ND		0.34	1.0
Ethyl acetate	ND		0.66	1.0
Ethyl ether	ND		0.72	1.0
Ethyl tert-butyl ether	ND		0.29	1.0
Ethylbenzene	ND		0.74	1.0
Hexachlorobutadiene	ND		0.28	1.0
Hexane	ND		0.40	10
Iodomethane	ND		0.30	1.0
Isobutanol	ND		4.8	25
Isopropyl ether	ND		0.59	1.0
Isopropylbenzene	ND		0.79	1.0
Methacrylonitrile	ND		0.69	5.0
Methyl acetate	ND		1.3	2.5
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
Naphthalene	ND		0.43	1.0
n-Butylbenzene	ND		0.64	1.0
N-Propylbenzene	ND		0.69	1.0
o-Chlorotoluene	ND		0.86	1.0
o-Xylene	ND		0.76	1.0
p-Chlorotoluene	ND		0.84	1.0
p-Cymene	ND		0.31	1.0
sec-Butylbenzene	ND		0.75	1.0
Styrene	ND		0.73	1.0
Tert-amyl methyl ether	ND		0.27	1.0
tert-Butylbenzene	ND		0.81	1.0
Tetrachloroethene	ND		0.36	1.0
Tetrahydrofuran	ND		1.3	5.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
trans-1,4-Dichloro-2-butene	ND		0.22	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0
Vinyl acetate	ND		0.85	5.0
Vinyl chloride	ND		0.90	1.0

Analytical Data

Client: Waste Management

Job Number: 280-91197-1

Client Sample ID: MW-33A

Lab Sample ID: 280-91197-3

Date Sampled: 11/17/2016 0950

Client Matrix: Water

Date Received: 11/18/2016 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333995	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S0148.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/30/2016 1230		Final Weight/Volume: 5 mL
Prep Date: 11/30/2016 1230		

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	103		77 - 120
4-Bromofluorobenzene (Surr)	95		73 - 120
Toluene-d8 (Surr)	100		80 - 120

Analytical Data

Client: Waste Management

Job Number: 280-91197-1

Client Sample ID: MW-33A

Lab Sample ID: 280-91197-3

Date Sampled: 11/17/2016 0950

Client Matrix: Water

Date Received: 11/18/2016 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333995	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S0148.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/30/2016 1230		Final Weight/Volume: 5 mL
Prep Date: 11/30/2016 1230		

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
67-72-1	Hexachloroethane TIC	ND	

Analytical Data

Client: Waste Management

Job Number: 280-91197-1

Client Sample ID: DUP1

Lab Sample ID: 280-91197-4

Date Sampled: 11/17/2016 1100

Client Matrix: Water

Date Received: 11/18/2016 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333995	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S0149.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/30/2016 1254		Final Weight/Volume: 5 mL
Prep Date: 11/30/2016 1254		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	ND		0.35	1.0
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,1-Dichloropropene	ND		0.72	1.0
1,2,3-Trichlorobenzene	ND		0.41	1.0
1,2,3-Trichloropropane	ND		0.89	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2,4-Trimethylbenzene	ND		0.75	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane (EDB)	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloroethene, Total	ND		0.81	2.0
1,2-Dichloropropane	ND		0.72	1.0
1,3,5-Trichlorobenzene	ND		0.23	1.0
1,3,5-Trimethylbenzene	ND		0.77	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,3-Dichloropropane	ND		0.75	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
1,4-Dioxane	ND		9.3	40
2,2-Dichloropropane	ND		0.40	1.0
2-Butanone (MEK)	ND		1.3	10
2-Chloroethyl vinyl ether	ND		0.96	5.0
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Acetonitrile	ND		4.9	15
Acrolein	ND		0.91	20
Acrylonitrile	ND		0.83	5.0
Benzene	ND		0.41	1.0
Bromobenzene	ND		0.80	1.0
Bromochloromethane	ND		0.87	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Butyl alcohol, n-	ND		8.9	40
Butyl alcohol, tert-	ND		3.3	10
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Chlorodifluoromethane	ND		0.26	1.0
Chloroethane	ND		0.32	1.0

Analytical Data

Client: Waste Management

Job Number: 280-91197-1

Client Sample ID: DUP1

Lab Sample ID: 280-91197-4

Date Sampled: 11/17/2016 1100

Client Matrix: Water

Date Received: 11/18/2016 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-333995	Instrument ID:	HP5973S
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	S0149.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	11/30/2016 1254			Final Weight/Volume:	5 mL
Prep Date:	11/30/2016 1254				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dibromochloromethane	ND		0.32	1.0
Dibromomethane	ND		0.41	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Dichlorofluoromethane	ND		0.34	1.0
Ethyl acetate	ND		0.66	1.0
Ethyl ether	ND		0.72	1.0
Ethyl tert-butyl ether	ND		0.29	1.0
Ethylbenzene	ND		0.74	1.0
Hexachlorobutadiene	ND		0.28	1.0
Hexane	ND		0.40	10
Iodomethane	ND		0.30	1.0
Isobutanol	ND		4.8	25
Isopropyl ether	ND		0.59	1.0
Isopropylbenzene	ND		0.79	1.0
Methacrylonitrile	ND		0.69	5.0
Methyl acetate	ND		1.3	2.5
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
Naphthalene	ND		0.43	1.0
n-Butylbenzene	ND		0.64	1.0
N-Propylbenzene	ND		0.69	1.0
o-Chlorotoluene	ND		0.86	1.0
o-Xylene	ND		0.76	1.0
p-Chlorotoluene	ND		0.84	1.0
p-Cymene	ND		0.31	1.0
sec-Butylbenzene	ND		0.75	1.0
Styrene	ND		0.73	1.0
Tert-amyl methyl ether	ND		0.27	1.0
tert-Butylbenzene	ND		0.81	1.0
Tetrachloroethene	ND		0.36	1.0
Tetrahydrofuran	ND		1.3	5.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
trans-1,4-Dichloro-2-butene	ND		0.22	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0
Vinyl acetate	ND		0.85	5.0
Vinyl chloride	ND		0.90	1.0

Analytical Data

Client: Waste Management

Job Number: 280-91197-1

Client Sample ID: DUP1

Lab Sample ID: 280-91197-4

Date Sampled: 11/17/2016 1100

Client Matrix: Water

Date Received: 11/18/2016 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333995	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S0149.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/30/2016 1254		Final Weight/Volume: 5 mL
Prep Date: 11/30/2016 1254		

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	131	X	77 - 120
4-Bromofluorobenzene (Surr)	126	X	73 - 120
Toluene-d8 (Surr)	133	X	80 - 120

Analytical Data

Client: Waste Management

Job Number: 280-91197-1

Client Sample ID: DUP1

Lab Sample ID: 280-91197-4

Date Sampled: 11/17/2016 1100

Client Matrix: Water

Date Received: 11/18/2016 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-333995	Instrument ID:	HP5973S
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	S0149.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	11/30/2016 1254			Final Weight/Volume:	5 mL
Prep Date:	11/30/2016 1254				

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
67-72-1	Hexachloroethane TIC	ND	

Analytical Data

Client: Waste Management

Job Number: 280-91197-1

Client Sample ID: MW-24

Lab Sample ID: 280-91197-5

Date Sampled: 11/17/2016 1320

Client Matrix: Water

Date Received: 11/18/2016 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333995	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S0150.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/30/2016 1317		Final Weight/Volume: 5 mL
Prep Date: 11/30/2016 1317		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	ND		0.35	1.0
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,1-Dichloropropene	ND		0.72	1.0
1,2,3-Trichlorobenzene	ND		0.41	1.0
1,2,3-Trichloropropane	ND		0.89	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2,4-Trimethylbenzene	ND		0.75	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane (EDB)	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloroethene, Total	ND		0.81	2.0
1,2-Dichloropropane	ND		0.72	1.0
1,3,5-Trichlorobenzene	ND		0.23	1.0
1,3,5-Trimethylbenzene	ND		0.77	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,3-Dichloropropane	ND		0.75	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
1,4-Dioxane	ND		9.3	40
2,2-Dichloropropane	ND		0.40	1.0
2-Butanone (MEK)	ND		1.3	10
2-Chloroethyl vinyl ether	ND		0.96	5.0
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Acetonitrile	ND		4.9	15
Acrolein	ND		0.91	20
Acrylonitrile	ND		0.83	5.0
Benzene	ND		0.41	1.0
Bromobenzene	ND		0.80	1.0
Bromochloromethane	ND		0.87	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Butyl alcohol, n-	ND		8.9	40
Butyl alcohol, tert-	ND		3.3	10
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Chlorodifluoromethane	ND		0.26	1.0
Chloroethane	ND		0.32	1.0

Analytical Data

Client: Waste Management

Job Number: 280-91197-1

Client Sample ID: MW-24

Lab Sample ID: 280-91197-5

Date Sampled: 11/17/2016 1320

Client Matrix: Water

Date Received: 11/18/2016 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C Analysis Batch: 480-333995 Instrument ID: HP5973S
Prep Method: 5030C Prep Batch: N/A Lab File ID: S0150.D
Dilution: 1.0 Initial Weight/Volume: 5 mL
Analysis Date: 11/30/2016 1317 Final Weight/Volume: 5 mL
Prep Date: 11/30/2016 1317

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dibromochloromethane	ND		0.32	1.0
Dibromomethane	ND		0.41	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Dichlorofluoromethane	ND		0.34	1.0
Ethyl acetate	ND		0.66	1.0
Ethyl ether	ND		0.72	1.0
Ethyl tert-butyl ether	ND		0.29	1.0
Ethylbenzene	ND		0.74	1.0
Hexachlorobutadiene	ND		0.28	1.0
Hexane	ND		0.40	10
Iodomethane	ND		0.30	1.0
Isobutanol	ND		4.8	25
Isopropyl ether	ND		0.59	1.0
Isopropylbenzene	ND		0.79	1.0
Methacrylonitrile	ND		0.69	5.0
Methyl acetate	ND		1.3	2.5
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
Naphthalene	ND		0.43	1.0
n-Butylbenzene	ND		0.64	1.0
N-Propylbenzene	ND		0.69	1.0
o-Chlorotoluene	ND		0.86	1.0
o-Xylene	ND		0.76	1.0
p-Chlorotoluene	ND		0.84	1.0
p-Cymene	ND		0.31	1.0
sec-Butylbenzene	ND		0.75	1.0
Styrene	ND		0.73	1.0
Tert-amyl methyl ether	ND		0.27	1.0
tert-Butylbenzene	ND		0.81	1.0
Tetrachloroethene	ND		0.36	1.0
Tetrahydrofuran	ND		1.3	5.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
trans-1,4-Dichloro-2-butene	ND		0.22	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0
Vinyl acetate	ND		0.85	5.0
Vinyl chloride	ND		0.90	1.0

Analytical Data

Client: Waste Management

Job Number: 280-91197-1

Client Sample ID: MW-24

Lab Sample ID: 280-91197-5

Date Sampled: 11/17/2016 1320

Client Matrix: Water

Date Received: 11/18/2016 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333995	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S0150.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/30/2016 1317		Final Weight/Volume: 5 mL
Prep Date: 11/30/2016 1317		

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	106		77 - 120
4-Bromofluorobenzene (Surr)	95		73 - 120
Toluene-d8 (Surr)	101		80 - 120

Analytical Data

Client: Waste Management

Job Number: 280-91197-1

Client Sample ID: MW-24

Lab Sample ID: 280-91197-5

Date Sampled: 11/17/2016 1320

Client Matrix: Water

Date Received: 11/18/2016 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-333995	Instrument ID: HP5973S
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: S0150.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 11/30/2016 1317		Final Weight/Volume: 5 mL
Prep Date: 11/30/2016 1317		

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
67-72-1	Hexachloroethane TIC	ND	

Analytical Data

Client: Waste Management

Job Number: 280-91197-1

Client Sample ID: MW-33C

Lab Sample ID: 280-91197-1

Date Sampled: 11/17/2016 1050

Client Matrix: Water

Date Received: 11/18/2016 1000

8260C SIM Volatile Organic Compounds (GC/MS)

Analysis Method:	8260C SIM	Analysis Batch:	480-333833	Instrument ID:	HP5973J
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	J1545.D
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	11/29/2016 1922			Final Weight/Volume:	25 mL
Prep Date:	11/29/2016 1922				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		0.0040	0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	96		50 - 150
TBA-d9 (Surr)	129		50 - 150

Analytical Data

Client: Waste Management

Job Number: 280-91197-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 280-91197-2TB

Client Matrix: Water

Date Sampled: 11/17/2016 0000

Date Received: 11/18/2016 1000

8260C SIM Volatile Organic Compounds (GC/MS)

Analysis Method:	8260C SIM	Analysis Batch:	480-334146	Instrument ID:	HP5973J
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	J1579.D
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	12/01/2016 0250			Final Weight/Volume:	25 mL
Prep Date:	12/01/2016 0250				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		0.0040	0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	94		50 - 150
TBA-d9 (Surr)	136		50 - 150

Analytical Data

Client: Waste Management

Job Number: 280-91197-1

Client Sample ID: MW-33A

Lab Sample ID: 280-91197-3

Date Sampled: 11/17/2016 0950

Client Matrix: Water

Date Received: 11/18/2016 1000

8260C SIM Volatile Organic Compounds (GC/MS)

Analysis Method: 8260C SIM	Analysis Batch: 480-334146	Instrument ID: HP5973J
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: J1580.D
Dilution: 1.0		Initial Weight/Volume: 25 mL
Analysis Date: 12/01/2016 0315		Final Weight/Volume: 25 mL
Prep Date: 12/01/2016 0315		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		0.0040	0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	93		50 - 150
TBA-d9 (Surr)	138		50 - 150

Analytical Data

Client: Waste Management

Job Number: 280-91197-1

Client Sample ID: DUP1

Lab Sample ID: 280-91197-4

Date Sampled: 11/17/2016 1100

Client Matrix: Water

Date Received: 11/18/2016 1000

8260C SIM Volatile Organic Compounds (GC/MS)

Analysis Method: 8260C SIM	Analysis Batch: 480-333833	Instrument ID: HP5973J
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: J1533.D
Dilution: 1.0		Initial Weight/Volume: 25 mL
Analysis Date: 11/29/2016 1429		Final Weight/Volume: 25 mL
Prep Date: 11/29/2016 1429		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		0.0040	0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	96		50 - 150
TBA-d9 (Surr)	105		50 - 150

Analytical Data

Client: Waste Management

Job Number: 280-91197-1

Client Sample ID: MW-24

Lab Sample ID: 280-91197-5

Date Sampled: 11/17/2016 1320

Client Matrix: Water

Date Received: 11/18/2016 1000

8260C SIM Volatile Organic Compounds (GC/MS)

Analysis Method:	8260C SIM	Analysis Batch:	480-333833	Instrument ID:	HP5973J
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	J1534.D
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	11/29/2016 1454			Final Weight/Volume:	25 mL
Prep Date:	11/29/2016 1454				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		0.0040	0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	94		50 - 150
TBA-d9 (Surr)	104		50 - 150

Analytical Data

Client: Waste Management

Job Number: 280-91197-1

Client Sample ID: MW-33C

Lab Sample ID: 280-91197-1

Date Sampled: 11/17/2016 1050

Client Matrix: Water

Date Received: 11/18/2016 1000

6010B Metals (ICP)-Total Recoverable

Analysis Method: 6010B Analysis Batch: 280-354936 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-353059 Lab File ID: 25D120816.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 12/08/2016 2322 Final Weight/Volume: 50 mL
Prep Date: 11/30/2016 0735

Analyte	Result (mg/L)	Qualifier	RL	RL
Cobalt, Total	ND		0.0030	0.0030
Iron, Total	ND		0.060	0.060

6010B Metals (ICP)-Dissolved

Analysis Method: 6010B Analysis Batch: 280-355067 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-353084 Lab File ID: 25D120916.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 12/10/2016 0017 Final Weight/Volume: 50 mL
Prep Date: 12/01/2016 0731

Analyte	Result (mg/L)	Qualifier	RL	RL
Calcium, Dissolved	17		0.040	0.040
Iron, Dissolved	0.081		0.060	0.060
Magnesium, Dissolved	7.4		0.050	0.050
Potassium, Dissolved	1.3		1.0	1.0
Sodium, Dissolved	4.2		1.0	1.0

6020 Metals (ICP/MS)-Total Recoverable

Analysis Method: 6020 Analysis Batch: 280-354033 Instrument ID: MT_077
Prep Method: 3005A Prep Batch: 280-353082 Lab File ID: 229SMPL.d
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 12/02/2016 0348 Final Weight/Volume: 50 mL
Prep Date: 12/01/2016 1405

Analyte	Result (mg/L)	Qualifier	RL	RL
Barium, Total	0.0048		0.0010	0.0010
Cadmium, Total	ND		0.00020	0.00020
Chromium, Total	ND		0.0030	0.0030
Copper, Total	ND		0.0020	0.0020
Lead, Total	ND		0.0010	0.0010
Nickel, Total	ND		0.0040	0.0040
Selenium, Total	ND		0.0010	0.0010
Silver, Total	ND		0.0020	0.0020
Thallium, Total	ND		0.0010	0.0010
Vanadium, Total	ND		0.0020	0.0020
Zinc, Total	ND		0.0050	0.0050

Analytical Data

Client: Waste Management

Job Number: 280-91197-1

Client Sample ID: MW-33C

Lab Sample ID: 280-91197-1

Date Sampled: 11/17/2016 1050

Client Matrix: Water

Date Received: 11/18/2016 1000

6020 Metals (ICP/MS)-Total Recoverable

Analysis Method: 6020 Analysis Batch: 280-354791 Instrument ID: MT_077
Prep Method: 3005A Prep Batch: 280-353082 Lab File ID: 026SMPL.d
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 12/07/2016 1725 Final Weight/Volume: 50 mL
Prep Date: 12/01/2016 1405

Analyte	Result (mg/L)	Qualifier	RL	RL
Antimony, Total	ND		0.0010	0.0010
Beryllium, Total	ND		0.0010	0.0010
Manganese, Total	0.15		0.0010	0.0010

6020 Metals (ICP/MS)-Dissolved

Analysis Method: 6020 Analysis Batch: 280-353835 Instrument ID: MT_077
Prep Method: 3005A Prep Batch: 280-352794 Lab File ID: 105SMPL.d
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 11/30/2016 1909 Final Weight/Volume: 50 mL
Prep Date: 11/30/2016 0735

Analyte	Result (mg/L)	Qualifier	RL	RL
Manganese, Dissolved	0.15		0.0010	0.0010

Analytical Data

Client: Waste Management

Job Number: 280-91197-1

Client Sample ID: MW-33A

Lab Sample ID: 280-91197-3

Date Sampled: 11/17/2016 0950

Client Matrix: Water

Date Received: 11/18/2016 1000

6010B Metals (ICP)-Total Recoverable

Analysis Method: 6010B Analysis Batch: 280-354936 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-353059 Lab File ID: 25D120816.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 12/08/2016 2324 Final Weight/Volume: 50 mL
Prep Date: 11/30/2016 0735

Analyte	Result (mg/L)	Qualifier	RL	RL
Cobalt, Total	ND		0.0030	0.0030
Iron, Total	2.5		0.060	0.060

6010B Metals (ICP)-Dissolved

Analysis Method: 6010B Analysis Batch: 280-355067 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-353084 Lab File ID: 25D120916.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 12/10/2016 0019 Final Weight/Volume: 50 mL
Prep Date: 12/01/2016 0731

Analyte	Result (mg/L)	Qualifier	RL	RL
Calcium, Dissolved	8.6		0.040	0.040
Iron, Dissolved	2.5		0.060	0.060
Magnesium, Dissolved	4.1		0.050	0.050
Potassium, Dissolved	ND		1.0	1.0
Sodium, Dissolved	3.0		1.0	1.0

6020 Metals (ICP/MS)-Total Recoverable

Analysis Method: 6020 Analysis Batch: 280-354033 Instrument ID: MT_077
Prep Method: 3005A Prep Batch: 280-353082 Lab File ID: 232SMPL.d
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 12/02/2016 0359 Final Weight/Volume: 50 mL
Prep Date: 12/01/2016 1405

Analyte	Result (mg/L)	Qualifier	RL	RL
Barium, Total	0.0024		0.0010	0.0010
Cadmium, Total	ND		0.00020	0.00020
Chromium, Total	ND		0.0030	0.0030
Copper, Total	ND		0.0020	0.0020
Lead, Total	ND		0.0010	0.0010
Nickel, Total	ND		0.0040	0.0040
Selenium, Total	ND		0.0010	0.0010
Silver, Total	ND		0.0020	0.0020
Thallium, Total	ND		0.0010	0.0010
Vanadium, Total	0.0032		0.0020	0.0020
Zinc, Total	ND		0.0050	0.0050

Analytical Data

Client: Waste Management

Job Number: 280-91197-1

Client Sample ID: MW-33A

Lab Sample ID: 280-91197-3

Date Sampled: 11/17/2016 0950

Client Matrix: Water

Date Received: 11/18/2016 1000

6020 Metals (ICP/MS)-Total Recoverable

Analysis Method: 6020 Analysis Batch: 280-354791 Instrument ID: MT_077
Prep Method: 3005A Prep Batch: 280-353082 Lab File ID: 027SMPL.d
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 12/07/2016 1729 Final Weight/Volume: 50 mL
Prep Date: 12/01/2016 1405

Analyte	Result (mg/L)	Qualifier	RL	RL
Antimony, Total	ND		0.0010	0.0010
Beryllium, Total	ND		0.0010	0.0010
Manganese, Total	0.083	F1	0.0010	0.0010

6020 Metals (ICP/MS)-Dissolved

Analysis Method: 6020 Analysis Batch: 280-353835 Instrument ID: MT_077
Prep Method: 3005A Prep Batch: 280-352794 Lab File ID: 106SMPL.d
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 11/30/2016 1913 Final Weight/Volume: 50 mL
Prep Date: 11/30/2016 0735

Analyte	Result (mg/L)	Qualifier	RL	RL
Manganese, Dissolved	0.089		0.0010	0.0010

Analytical Data

Client: Waste Management

Job Number: 280-91197-1

Client Sample ID: DUP1

Lab Sample ID: 280-91197-4
Client Matrix: Water

Date Sampled: 11/17/2016 1100
Date Received: 11/18/2016 1000

6010B Metals (ICP)-Total Recoverable

Analysis Method: 6010B	Analysis Batch: 280-354936	Instrument ID: MT_025
Prep Method: 3005A	Prep Batch: 280-353059	Lab File ID: 25D120816.asc
Dilution: 1.0		Initial Weight/Volume: 50 mL
Analysis Date: 12/08/2016 2327		Final Weight/Volume: 50 mL
Prep Date: 11/30/2016 0735		

Analyte	Result (mg/L)	Qualifier	RL	RL
Cobalt, Total	ND		0.0030	0.0030
Iron, Total	0.060		0.060	0.060

6010B Metals (ICP)-Dissolved

Analysis Method: 6010B	Analysis Batch: 280-355067	Instrument ID: MT_025
Prep Method: 3005A	Prep Batch: 280-353084	Lab File ID: 25D120916.asc
Dilution: 1.0		Initial Weight/Volume: 50 mL
Analysis Date: 12/10/2016 0022		Final Weight/Volume: 50 mL
Prep Date: 12/01/2016 0731		

Analyte	Result (mg/L)	Qualifier	RL	RL
Calcium, Dissolved	17		0.040	0.040
Iron, Dissolved	ND		0.060	0.060
Magnesium, Dissolved	7.4		0.050	0.050
Potassium, Dissolved	1.3		1.0	1.0
Sodium, Dissolved	4.2		1.0	1.0

6020 Metals (ICP/MS)-Total Recoverable

Analysis Method: 6020	Analysis Batch: 280-354033	Instrument ID: MT_077
Prep Method: 3005A	Prep Batch: 280-353082	Lab File ID: 237SMPL.d
Dilution: 1.0		Initial Weight/Volume: 50 mL
Analysis Date: 12/02/2016 0418		Final Weight/Volume: 50 mL
Prep Date: 12/01/2016 1405		

Analyte	Result (mg/L)	Qualifier	RL	RL
Barium, Total	0.0034		0.0010	0.0010
Cadmium, Total	ND		0.00020	0.00020
Chromium, Total	ND		0.0030	0.0030
Copper, Total	ND		0.0020	0.0020
Lead, Total	ND		0.0010	0.0010
Nickel, Total	ND		0.0040	0.0040
Selenium, Total	ND		0.0010	0.0010
Silver, Total	ND		0.0020	0.0020
Thallium, Total	ND		0.0010	0.0010
Vanadium, Total	ND		0.0020	0.0020
Zinc, Total	ND		0.0050	0.0050

Analytical Data

Client: Waste Management

Job Number: 280-91197-1

Client Sample ID: MW-24

Lab Sample ID: 280-91197-5

Date Sampled: 11/17/2016 1320

Client Matrix: Water

Date Received: 11/18/2016 1000

6010B Metals (ICP)-Total Recoverable

Analysis Method: 6010B Analysis Batch: 280-354936 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-353059 Lab File ID: 25D120816.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 12/08/2016 2329 Final Weight/Volume: 50 mL
Prep Date: 11/30/2016 0735

Analyte	Result (mg/L)	Qualifier	RL	RL
Cobalt, Total	ND		0.0030	0.0030
Iron, Total	ND		0.060	0.060

6010B Metals (ICP)-Dissolved

Analysis Method: 6010B Analysis Batch: 280-355067 Instrument ID: MT_025
Prep Method: 3005A Prep Batch: 280-353084 Lab File ID: 25D120916.asc
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 12/10/2016 0024 Final Weight/Volume: 50 mL
Prep Date: 12/01/2016 0731

Analyte	Result (mg/L)	Qualifier	RL	RL
Calcium, Dissolved	11		0.040	0.040
Iron, Dissolved	ND		0.060	0.060
Magnesium, Dissolved	6.5		0.050	0.050
Potassium, Dissolved	ND		1.0	1.0
Sodium, Dissolved	5.0		1.0	1.0

6020 Metals (ICP/MS)-Total Recoverable

Analysis Method: 6020 Analysis Batch: 280-354033 Instrument ID: MT_077
Prep Method: 3005A Prep Batch: 280-353082 Lab File ID: 238SMPL.d
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 12/02/2016 0422 Final Weight/Volume: 50 mL
Prep Date: 12/01/2016 1405

Analyte	Result (mg/L)	Qualifier	RL	RL
Barium, Total	0.0057		0.0010	0.0010
Cadmium, Total	ND		0.00020	0.00020
Chromium, Total	ND		0.0030	0.0030
Copper, Total	ND		0.0020	0.0020
Lead, Total	ND		0.0010	0.0010
Nickel, Total	ND		0.0040	0.0040
Selenium, Total	ND		0.0010	0.0010
Silver, Total	ND		0.0020	0.0020
Thallium, Total	ND		0.0010	0.0010
Vanadium, Total	0.0022		0.0020	0.0020
Zinc, Total	ND		0.0050	0.0050

Analytical Data

Client: Waste Management

Job Number: 280-91197-1

Client Sample ID: MW-24

Lab Sample ID: 280-91197-5

Date Sampled: 11/17/2016 1320

Client Matrix: Water

Date Received: 11/18/2016 1000

6020 Metals (ICP/MS)-Total Recoverable

Analysis Method: 6020 Analysis Batch: 280-354791 Instrument ID: MT_077
Prep Method: 3005A Prep Batch: 280-353082 Lab File ID: 033SMPL.d
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 12/07/2016 1752 Final Weight/Volume: 50 mL
Prep Date: 12/01/2016 1405

Analyte	Result (mg/L)	Qualifier	RL	RL
Antimony, Total	ND		0.0010	0.0010
Beryllium, Total	ND		0.0010	0.0010
Manganese, Total	1.7		0.0010	0.0010

6020 Metals (ICP/MS)-Dissolved

Analysis Method: 6020 Analysis Batch: 280-353835 Instrument ID: MT_077
Prep Method: 3005A Prep Batch: 280-352794 Lab File ID: 108SMPL.d
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 11/30/2016 1921 Final Weight/Volume: 50 mL
Prep Date: 11/30/2016 0735

Analyte	Result (mg/L)	Qualifier	RL	RL
Manganese, Dissolved	0.70		0.0010	0.0010

Client: Waste Management

Job Number: 280-91197-1

General Chemistry

Client Sample ID: MW-33C

Lab Sample ID: 280-91197-1

Date Sampled: 11/17/2016 1050

Client Matrix: Water

Date Received: 11/18/2016 1000

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Chloride	2.8		mg/L	1.0	1.0	1.0	300.0
	Analysis Batch: 280-355156		Analysis Date: 12/13/2016 0310				
Sulfate	7.4		mg/L	1.0	1.0	1.0	300.0
	Analysis Batch: 280-355156		Analysis Date: 12/13/2016 0310				
Ammonia (as N)	ND		mg/L	0.030	0.030	1.0	350.1
	Analysis Batch: 280-353602		Analysis Date: 11/29/2016 1429				
Nitrate as N	ND		mg/L	0.050	0.050	1.0	353.2
	Analysis Batch: 280-355401		Analysis Date: 12/13/2016 1028				
Alkalinity, Total (As CaCO3)	68		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-353180		Analysis Date: 11/23/2016 1257				
Alkalinity, Bicarbonate (As CaCO3)	68		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-353180		Analysis Date: 11/23/2016 1257				
Total Dissolved Solids (TDS)	95		mg/L	5.0	5.0	1.0	SM 2540C
	Analysis Batch: 280-352854		Analysis Date: 11/23/2016 0955				
Total Suspended Solids	4.0		mg/L	4.0	4.0	1.0	SM 2540D
	Analysis Batch: 280-352912		Analysis Date: 11/23/2016 1539				
Total Organic Carbon - Average	ND		mg/L	1.0	1.0	1.0	SM 5310B
	Analysis Batch: 280-354778		Analysis Date: 12/07/2016 1422				

Client: Waste Management

Job Number: 280-91197-1

General Chemistry

Client Sample ID: MW-33A

Lab Sample ID: 280-91197-3

Date Sampled: 11/17/2016 0950

Client Matrix: Water

Date Received: 11/18/2016 1000

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Chloride	2.2		mg/L	1.0	1.0	1.0	300.0
	Analysis Batch: 280-355156		Analysis Date: 12/13/2016 0330				
Sulfate	1.8		mg/L	1.0	1.0	1.0	300.0
	Analysis Batch: 280-355156		Analysis Date: 12/13/2016 0330				
Ammonia (as N)	0.30		mg/L	0.030	0.030	1.0	350.1
	Analysis Batch: 280-353602		Analysis Date: 11/29/2016 1431				
Nitrate as N	ND		mg/L	0.050	0.050	1.0	353.2
	Analysis Batch: 280-355401		Analysis Date: 12/13/2016 1028				
Alkalinity, Total (As CaCO3)	39		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-353180		Analysis Date: 11/23/2016 1302				
Alkalinity, Bicarbonate (As CaCO3)	39		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-353180		Analysis Date: 11/23/2016 1302				
Total Dissolved Solids (TDS)	62		mg/L	5.0	5.0	1.0	SM 2540C
	Analysis Batch: 280-352854		Analysis Date: 11/23/2016 0955				
Total Suspended Solids	8.4		mg/L	4.0	4.0	1.0	SM 2540D
	Analysis Batch: 280-352912		Analysis Date: 11/23/2016 1539				
Total Organic Carbon - Average	2.5		mg/L	1.0	1.0	1.0	SM 5310B
	Analysis Batch: 280-354778		Analysis Date: 12/07/2016 1439				

Client: Waste Management

Job Number: 280-91197-1

General Chemistry

Client Sample ID: DUP1

Lab Sample ID: 280-91197-4

Date Sampled: 11/17/2016 1100

Client Matrix: Water

Date Received: 11/18/2016 1000

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Chloride	2.8		mg/L	1.0	1.0	1.0	300.0
	Analysis Batch: 280-355156		Analysis Date: 12/13/2016 0350				
Sulfate	7.4		mg/L	1.0	1.0	1.0	300.0
	Analysis Batch: 280-355156		Analysis Date: 12/13/2016 0350				
Ammonia (as N)	0.047		mg/L	0.030	0.030	1.0	350.1
	Analysis Batch: 280-353602		Analysis Date: 11/29/2016 1433				
Nitrate as N	ND		mg/L	0.050	0.050	1.0	353.2
	Analysis Batch: 280-355401		Analysis Date: 12/13/2016 1028				
Alkalinity, Total (As CaCO3)	69		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-353180		Analysis Date: 11/23/2016 1307				
Alkalinity, Bicarbonate (As CaCO3)	69		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-353180		Analysis Date: 11/23/2016 1307				
Total Dissolved Solids (TDS)	97		mg/L	5.0	5.0	1.0	SM 2540C
	Analysis Batch: 280-352854		Analysis Date: 11/23/2016 0955				
Total Suspended Solids	ND		mg/L	4.0	4.0	1.0	SM 2540D
	Analysis Batch: 280-352912		Analysis Date: 11/23/2016 1539				
Total Organic Carbon - Average	ND		mg/L	1.0	1.0	1.0	SM 5310B
	Analysis Batch: 280-354778		Analysis Date: 12/07/2016 1454				

Client: Waste Management

Job Number: 280-91197-1

General Chemistry

Client Sample ID: MW-24

Lab Sample ID: 280-91197-5

Date Sampled: 11/17/2016 1320

Client Matrix: Water

Date Received: 11/18/2016 1000

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Chloride	2.5		mg/L	1.0	1.0	1.0	300.0
	Analysis Batch: 280-355156		Analysis Date: 12/13/2016 0410				
Sulfate	3.5		mg/L	1.0	1.0	1.0	300.0
	Analysis Batch: 280-355156		Analysis Date: 12/13/2016 0410				
Ammonia (as N)	ND		mg/L	0.030	0.030	1.0	350.1
	Analysis Batch: 280-353602		Analysis Date: 11/29/2016 1435				
Nitrate as N	0.16		mg/L	0.050	0.050	1.0	353.2
	Analysis Batch: 280-355401		Analysis Date: 12/13/2016 1028				
Alkalinity, Total (As CaCO3)	57		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-353180		Analysis Date: 11/23/2016 1311				
Alkalinity, Bicarbonate (As CaCO3)	57		mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 280-353180		Analysis Date: 11/23/2016 1311				
Total Dissolved Solids (TDS)	86	H	mg/L	5.0	5.0	1.0	SM 2540C
	Analysis Batch: 280-353679		Analysis Date: 11/30/2016 0904				
Total Suspended Solids	ND		mg/L	4.0	4.0	1.0	SM 2540D
	Analysis Batch: 280-352912		Analysis Date: 11/23/2016 1539				
Total Organic Carbon - Average	ND		mg/L	1.0	1.0	1.0	SM 5310B
	Analysis Batch: 280-354778		Analysis Date: 12/07/2016 1508				

Analytical Data

Client: Waste Management

Job Number: 280-91197-1

Field Service / Mobile Lab

Client Sample ID: MW-33C

Lab Sample ID: 280-91197-1

Client Matrix: Water

Date Sampled: 11/17/2016 1050

Date Received: 11/18/2016 1000

Analyte	Result	Qual	Units	Dil	Method	Analysis Batch	Date Analyzed	Date Prepared
Depth to water	1.63		ft	1.0	Field Sampling	280-352756	11/17/2016	1150
Specific Conductivity	159		umhos/cm	1.0	Field Sampling	280-352756	11/17/2016	1150
Dissolved Oxygen	0.26		mg/L	1.0	Field Sampling	280-352756	11/17/2016	1150
eH	-61.14		millivolts	1.0	Field Sampling	280-352756	11/17/2016	1150
Turbidity	1.12		NTU	1.0	Field Sampling	280-352756	11/17/2016	1150
Temperature	9.24		Degrees C	1.0	Field Sampling	280-352756	11/17/2016	1150
pH	8.31		SU	1.0	Field Sampling	280-352756	11/17/2016	1150

Client: Waste Management

Job Number: 280-91197-1

Field Service / Mobile Lab

Client Sample ID: MW-33A

Lab Sample ID: 280-91197-3

Date Sampled: 11/17/2016 0950

Client Matrix: Water

Date Received: 11/18/2016 1000

Analyte	Result	Qual	Units	Dil	Method	Analysis Batch	Date Analyzed	Date Prepared
Depth to water	4.41		ft	1.0	Field Sampling	280-352756	11/17/2016	1050
Specific Conductivity	8.4		umhos/cm	1.0	Field Sampling	280-352756	11/17/2016	1050
Dissolved Oxygen	0.43		mg/L	1.0	Field Sampling	280-352756	11/17/2016	1050
eH	39.2		millivolts	1.0	Field Sampling	280-352756	11/17/2016	1050
Turbidity	8.61		NTU	1.0	Field Sampling	280-352756	11/17/2016	1050
Temperature	9.99		Degrees C	1.0	Field Sampling	280-352756	11/17/2016	1050
pH	6.67		SU	1.0	Field Sampling	280-352756	11/17/2016	1050

Analytical Data

Client: Waste Management

Job Number: 280-91197-1

Field Service / Mobile Lab

Client Sample ID: MW-24

Lab Sample ID: 280-91197-5

Client Matrix: Water

Date Sampled: 11/17/2016 1320

Date Received: 11/18/2016 1000

Analyte	Result	Qual	Units	Dil	Method	Analysis Batch	Date Analyzed	Date Prepared
Depth to water	32.20		ft	1.0	Field Sampling	280-352756	11/17/2016	1420
Specific Conductivity	127		umhos/cm	1.0	Field Sampling	280-352756	11/17/2016	1420
Dissolved Oxygen	0.24		mg/L	1.0	Field Sampling	280-352756	11/17/2016	1420
eH	107.9		millivolts	1.0	Field Sampling	280-352756	11/17/2016	1420
Turbidity	2.12		NTU	1.0	Field Sampling	280-352756	11/17/2016	1420
Temperature	11.66		Degrees C	1.0	Field Sampling	280-352756	11/17/2016	1420
pH	6.63		SU	1.0	Field Sampling	280-352756	11/17/2016	1420

DATA REPORTING QUALIFIERS

Client: Waste Management

Job Number: 280-91197-1

Lab Section	Qualifier	Description
GC/MS VOA	F1	MS and/or MSD Recovery is outside acceptance limits.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	X	Surrogate is outside control limits
Metals	F1	MS and/or MSD Recovery is outside acceptance limits.
	4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
General Chemistry	H	Sample was prepped or analyzed beyond the specified holding time

QUALITY CONTROL RESULTS

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:480-333833					
LCS 480-333833/4	Lab Control Sample	T	Water	8260C SIM	
LCSD 480-333833/5	Lab Control Sample Duplicate	T	Water	8260C SIM	
MB 480-333833/7	Method Blank	T	Water	8260C SIM	
280-91197-1	MW-33C	T	Water	8260C SIM	
280-91197-4	DUP1	T	Water	8260C SIM	
280-91197-5	MW-24	T	Water	8260C SIM	
Analysis Batch:480-333995					
LCS 480-333995/4	Lab Control Sample	T	Water	8260C	
MB 480-333995/6	Method Blank	T	Water	8260C	
280-91197-1	MW-33C	T	Water	8260C	
280-91197-2TB	TRIP BLANK	T	Water	8260C	
280-91197-3	MW-33A	T	Water	8260C	
280-91197-4	DUP1	T	Water	8260C	
280-91197-5	MW-24	T	Water	8260C	
480-109984-E-3 MS	Matrix Spike	T	Water	8260C	
480-109984-E-3 MSD	Matrix Spike Duplicate	T	Water	8260C	
Analysis Batch:480-334146					
LCS 480-334146/5	Lab Control Sample	T	Water	8260C SIM	
LCSD 480-334146/6	Lab Control Sample Duplicate	T	Water	8260C SIM	
MB 480-334146/8	Method Blank	T	Water	8260C SIM	
280-91197-2TB	TRIP BLANK	T	Water	8260C SIM	
280-91197-3	MW-33A	T	Water	8260C SIM	

Report Basis

T = Total

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 280-352794					
LCS 280-352794/2-A	Lab Control Sample	R	Water	3005A	
MB 280-352794/1-A	Method Blank	R	Water	3005A	
280-91068-E-1-C MS	Matrix Spike	D	Water	3005A	
280-91068-E-1-D MSD	Matrix Spike Duplicate	D	Water	3005A	
280-91197-1	MW-33C	D	Water	3005A	
280-91197-3	MW-33A	D	Water	3005A	
280-91197-4	DUP1	D	Water	3005A	
280-91197-5	MW-24	D	Water	3005A	
Prep Batch: 280-353059					
LCS 280-353059/2-A	Lab Control Sample	R	Water	3005A	
MB 280-353059/1-A	Method Blank	R	Water	3005A	
280-91196-C-1-B MS	Matrix Spike	D	Water	3005A	
280-91196-C-1-C MSD	Matrix Spike Duplicate	D	Water	3005A	
280-91197-1	MW-33C	R	Water	3005A	
280-91197-3	MW-33A	R	Water	3005A	
280-91197-4	DUP1	R	Water	3005A	
280-91197-5	MW-24	R	Water	3005A	
Prep Batch: 280-353082					
LCS 280-353082/2-A	Lab Control Sample	R	Water	3005A	
MB 280-353082/1-A	Method Blank	R	Water	3005A	
280-91197-1	MW-33C	R	Water	3005A	
280-91197-3	MW-33A	R	Water	3005A	
280-91197-3MS	Matrix Spike	R	Water	3005A	
280-91197-3MSD	Matrix Spike Duplicate	R	Water	3005A	
280-91197-4	DUP1	R	Water	3005A	
280-91197-5	MW-24	R	Water	3005A	
Prep Batch: 280-353084					
LCS 280-353084/2-A	Lab Control Sample	R	Water	3005A	
MB 280-353084/1-A	Method Blank	R	Water	3005A	
280-91197-1	MW-33C	D	Water	3005A	
280-91197-3	MW-33A	D	Water	3005A	
280-91197-4	DUP1	D	Water	3005A	
280-91197-5	MW-24	D	Water	3005A	
280-91292-C-1-B MS	Matrix Spike	D	Water	3005A	
280-91292-C-1-C MSD	Matrix Spike Duplicate	D	Water	3005A	

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:280-353835					
LCS 280-352794/2-A	Lab Control Sample	R	Water	6020	280-352794
MB 280-352794/1-A	Method Blank	R	Water	6020	280-352794
280-91068-E-1-C MS	Matrix Spike	D	Water	6020	280-352794
280-91068-E-1-D MSD	Matrix Spike Duplicate	D	Water	6020	280-352794
280-91197-1	MW-33C	D	Water	6020	280-352794
280-91197-3	MW-33A	D	Water	6020	280-352794
280-91197-4	DUP1	D	Water	6020	280-352794
280-91197-5	MW-24	D	Water	6020	280-352794
Analysis Batch:280-354033					
LCS 280-353082/2-A	Lab Control Sample	R	Water	6020	280-353082
MB 280-353082/1-A	Method Blank	R	Water	6020	280-353082
280-91197-1	MW-33C	R	Water	6020	280-353082
280-91197-3	MW-33A	R	Water	6020	280-353082
280-91197-3MS	Matrix Spike	R	Water	6020	280-353082
280-91197-3MSD	Matrix Spike Duplicate	R	Water	6020	280-353082
280-91197-4	DUP1	R	Water	6020	280-353082
280-91197-5	MW-24	R	Water	6020	280-353082
Analysis Batch:280-354791					
LCS 280-353082/2-A	Lab Control Sample	R	Water	6020	280-353082
MB 280-353082/1-A	Method Blank	R	Water	6020	280-353082
280-91197-1	MW-33C	R	Water	6020	280-353082
280-91197-3	MW-33A	R	Water	6020	280-353082
280-91197-3MS	Matrix Spike	R	Water	6020	280-353082
280-91197-3MSD	Matrix Spike Duplicate	R	Water	6020	280-353082
280-91197-4	DUP1	R	Water	6020	280-353082
280-91197-5	MW-24	R	Water	6020	280-353082
Analysis Batch:280-354936					
LCS 280-353059/2-A	Lab Control Sample	R	Water	6010B	280-353059
MB 280-353059/1-A	Method Blank	R	Water	6010B	280-353059
280-91196-C-1-B MS	Matrix Spike	D	Water	6010B	280-353059
280-91196-C-1-C MSD	Matrix Spike Duplicate	D	Water	6010B	280-353059
280-91197-1	MW-33C	R	Water	6010B	280-353059
280-91197-3	MW-33A	R	Water	6010B	280-353059
280-91197-4	DUP1	R	Water	6010B	280-353059
280-91197-5	MW-24	R	Water	6010B	280-353059

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:280-355067					
LCS 280-353084/2-A	Lab Control Sample	R	Water	6010B	280-353084
MB 280-353084/1-A	Method Blank	R	Water	6010B	280-353084
280-91197-1	MW-33C	D	Water	6010B	280-353084
280-91197-3	MW-33A	D	Water	6010B	280-353084
280-91197-4	DUP1	D	Water	6010B	280-353084
280-91197-5	MW-24	D	Water	6010B	280-353084
280-91292-C-1-B MS	Matrix Spike	D	Water	6010B	280-353084
280-91292-C-1-C MSD	Matrix Spike Duplicate	D	Water	6010B	280-353084

Report Basis

D = Dissolved

R = Total Recoverable

Field Service / Mobile Lab

Analysis Batch:280-352756					
280-91197-1	MW-33C	T	Water	Field Sampling	
280-91197-3	MW-33A	T	Water	Field Sampling	
280-91197-5	MW-24	T	Water	Field Sampling	

Report Basis

T = Total

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:280-352854					
LCS 280-352854/2	Lab Control Sample	T	Water	SM 2540C	
MB 280-352854/1	Method Blank	T	Water	SM 2540C	
280-91197-1	MW-33C	T	Water	SM 2540C	
280-91197-1DU	Duplicate	T	Water	SM 2540C	
280-91197-3	MW-33A	T	Water	SM 2540C	
280-91197-4	DUP1	T	Water	SM 2540C	
Analysis Batch:280-352912					
LCS 280-352912/1	Lab Control Sample	T	Water	SM 2540D	
MB 280-352912/2	Method Blank	T	Water	SM 2540D	
280-91197-1	MW-33C	T	Water	SM 2540D	
280-91197-3	MW-33A	T	Water	SM 2540D	
280-91197-3DU	Duplicate	T	Water	SM 2540D	
280-91197-4	DUP1	T	Water	SM 2540D	
280-91197-5	MW-24	T	Water	SM 2540D	
Analysis Batch:280-353180					
LCS 280-353180/4	Lab Control Sample	T	Water	SM 2320B	
MB 280-353180/5	Method Blank	T	Water	SM 2320B	
280-91197-1	MW-33C	T	Water	SM 2320B	
280-91197-3	MW-33A	T	Water	SM 2320B	
280-91197-4	DUP1	T	Water	SM 2320B	
280-91197-5	MW-24	T	Water	SM 2320B	
280-91292-A-3 DU	Duplicate	T	Water	SM 2320B	
Analysis Batch:280-353602					
LCS 280-353602/18	Lab Control Sample	T	Water	350.1	
LCSD 280-353602/19	Lab Control Sample Duplicate	T	Water	350.1	
MB 280-353602/20	Method Blank	T	Water	350.1	
280-91197-1	MW-33C	T	Water	350.1	
280-91197-3	MW-33A	T	Water	350.1	
280-91197-4	DUP1	T	Water	350.1	
280-91197-5	MW-24	T	Water	350.1	
440-166999-B-1 MS	Matrix Spike	T	Water	350.1	
440-166999-B-1 MSD	Matrix Spike Duplicate	T	Water	350.1	
Analysis Batch:280-353679					
LCS 280-353679/2	Lab Control Sample	T	Water	SM 2540C	
LCSD 280-353679/3	Lab Control Sample Duplicate	T	Water	SM 2540C	
MB 280-353679/1	Method Blank	T	Water	SM 2540C	
280-91197-5	MW-24	T	Water	SM 2540C	
280-91498-B-2 DU	Duplicate	T	Water	SM 2540C	

TestAmerica Denver

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:280-354778					
LCS 280-354778/3	Lab Control Sample	T	Water	SM 5310B	
MB 280-354778/4	Method Blank	T	Water	SM 5310B	
280-91182-G-1 MS	Matrix Spike	T	Water	SM 5310B	
280-91182-G-1 MSD	Matrix Spike Duplicate	T	Water	SM 5310B	
280-91197-1	MW-33C	T	Water	SM 5310B	
280-91197-3	MW-33A	T	Water	SM 5310B	
280-91197-4	DUP1	T	Water	SM 5310B	
280-91197-5	MW-24	T	Water	SM 5310B	
Analysis Batch:280-355156					
LCS 280-355156/4	Lab Control Sample	T	Water	300.0	
LCSD 280-355156/5	Lab Control Sample Duplicate	T	Water	300.0	
MB 280-355156/6	Method Blank	T	Water	300.0	
280-91197-1	MW-33C	T	Water	300.0	
280-91197-3	MW-33A	T	Water	300.0	
280-91197-4	DUP1	T	Water	300.0	
280-91197-5	MW-24	T	Water	300.0	
280-91292-A-11 DU	Duplicate	T	Water	300.0	
280-91292-A-11 MS	Matrix Spike	T	Water	300.0	
280-91292-A-11 MSD	Matrix Spike Duplicate	T	Water	300.0	
Analysis Batch:280-355401					
MB 280-355401/1	Method Blank	T	Water	353.2	
280-91197-1	MW-33C	T	Water	353.2	
280-91197-3	MW-33A	T	Water	353.2	
280-91197-4	DUP1	T	Water	353.2	
280-91197-5	MW-24	T	Water	353.2	

Report Basis

T = Total

Client: Waste Management

Job Number: 280-91197-1

Surrogate Recovery Report

8260C Volatile Organic Compounds by GC/MS

Client Matrix: Water

Lab Sample ID	Client Sample ID	DCA %Rec	BFB %Rec	TOL %Rec
280-91197-1	MW-33C	102	97	102
280-91197-2	TRIP BLANK	104	96	101
280-91197-3	MW-33A	103	95	100
280-91197-4	DUP1	131X	126X	133X
280-91197-5	MW-24	106	95	101
MB 480-333995/6		102	97	103
LCS 480-333995/4		100	99	104
480-109984-E-3 MS		102	97	104
480-109984-E-3 MSD		104	98	106

Surrogate	Acceptance Limits
DCA = 1,2-Dichloroethane-d4 (Surr)	77-120
BFB = 4-Bromofluorobenzene (Surr)	73-120
TOL = Toluene-d8 (Surr)	80-120

Client: Waste Management

Job Number: 280-91197-1

Surrogate Recovery Report

8260C SIM Volatile Organic Compounds (GC/MS)

Client Matrix: Water

Lab Sample ID	Client Sample ID	DBFM %Rec	TBA %Rec
280-91197-1	MW-33C	96	129
280-91197-2	TRIP BLANK	94	136
280-91197-3	MW-33A	93	138
280-91197-4	DUP1	96	105
280-91197-5	MW-24	94	104
MB 480-333833/7		93	132
MB 480-334146/8		95	131
LCS 480-333833/4		98	113
LCS 480-334146/5		95	120
LCSD 480-333833/5		97	121
LCSD 480-334146/6		95	122

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

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

Method Blank - Batch: 480-333995

**Method: 8260C
Preparation: 5030C**

Lab Sample ID: MB 480-333995/6
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/30/2016 1041
Prep Date: 11/30/2016 1041
Leach Date: N/A

Analysis Batch: 480-333995
Prep Batch: N/A
Leach Batch: N/A
Units: ug/L

Instrument ID: HP5973S
Lab File ID: S0144.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
1,1,1,2-Tetrachloroethane	ND		0.35	1.0
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,1-Dichloropropene	ND		0.72	1.0
1,2,3-Trichlorobenzene	ND		0.41	1.0
1,2,3-Trichloropropane	ND		0.89	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2,4-Trimethylbenzene	ND		0.75	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane (EDB)	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloroethene, Total	ND		0.81	2.0
1,2-Dichloropropane	ND		0.72	1.0
1,3,5-Trichlorobenzene	ND		0.23	1.0
1,3,5-Trimethylbenzene	ND		0.77	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,3-Dichloropropane	ND		0.75	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
1,4-Dioxane	ND		9.3	40
2,2-Dichloropropane	ND		0.40	1.0
2-Butanone (MEK)	ND		1.3	10
2-Chloroethyl vinyl ether	ND		0.96	5.0
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Acetonitrile	ND		4.9	15
Acrolein	ND		0.91	20
Acrylonitrile	ND		0.83	5.0
Benzene	ND		0.41	1.0
Bromobenzene	ND		0.80	1.0
Bromochloromethane	ND		0.87	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Butyl alcohol, n-	ND		8.9	40
Butyl alcohol, tert-	ND		3.3	10
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Chlorodifluoromethane	ND		0.26	1.0

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

Method Blank - Batch: 480-333995

**Method: 8260C
Preparation: 5030C**

Lab Sample ID: MB 480-333995/6
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/30/2016 1041
 Prep Date: 11/30/2016 1041
 Leach Date: N/A

Analysis Batch: 480-333995
 Prep Batch: N/A
 Leach Batch: N/A
 Units: ug/L

Instrument ID: HP5973S
 Lab File ID: S0144.D
 Initial Weight/Volume: 5 mL
 Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
Chloroethane	ND		0.32	1.0
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dibromochloromethane	ND		0.32	1.0
Dibromomethane	ND		0.41	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Dichlorofluoromethane	ND		0.34	1.0
Ethyl acetate	ND		0.66	1.0
Ethyl ether	ND		0.72	1.0
Ethyl tert-butyl ether	ND		0.29	1.0
Ethylbenzene	ND		0.74	1.0
Hexachlorobutadiene	ND		0.28	1.0
Hexane	ND		0.40	10
Iodomethane	ND		0.30	1.0
Isobutanol	ND		4.8	25
Isopropyl ether	ND		0.59	1.0
Isopropylbenzene	ND		0.79	1.0
Methacrylonitrile	ND		0.69	5.0
Methyl acetate	ND		1.3	2.5
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
Naphthalene	ND		0.43	1.0
n-Butylbenzene	ND		0.64	1.0
N-Propylbenzene	ND		0.69	1.0
o-Chlorotoluene	ND		0.86	1.0
o-Xylene	ND		0.76	1.0
p-Chlorotoluene	ND		0.84	1.0
p-Cymene	ND		0.31	1.0
sec-Butylbenzene	ND		0.75	1.0
Styrene	ND		0.73	1.0
Tert-amyl methyl ether	ND		0.27	1.0
tert-Butylbenzene	ND		0.81	1.0
Tetrachloroethene	ND		0.36	1.0
Tetrahydrofuran	ND		1.3	5.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
trans-1,4-Dichloro-2-butene	ND		0.22	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

Method Blank - Batch: 480-333995

Method: 8260C
Preparation: 5030C

Lab Sample ID: MB 480-333995/6	Analysis Batch: 480-333995	Instrument ID: HP5973S
Client Matrix: Water	Prep Batch: N/A	Lab File ID: S0144.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/30/2016 1041	Units: ug/L	Final Weight/Volume: 5 mL
Prep Date: 11/30/2016 1041		
Leach Date: N/A		

Analyte	Result	Qual	MDL	RL
Vinyl acetate	ND		0.85	5.0
Vinyl chloride	ND		0.90	1.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	102	77 - 120
4-Bromofluorobenzene (Surr)	97	73 - 120
Toluene-d8 (Surr)	103	80 - 120

Method Blank TICs- Batch: 480-333995

Cas Number	Analyte	RT	Est. Result (ug)	Qual
67-72-1	Hexachloroethane TIC	0.00	ND	

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

Lab Control Sample - Batch: 480-333995

**Method: 8260C
Preparation: 5030C**

Lab Sample ID: LCS 480-333995/4	Analysis Batch: 480-333995	Instrument ID: HP5973S
Client Matrix: Water	Prep Batch: N/A	Lab File ID: S0142.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/30/2016 0954	Units: ug/L	Final Weight/Volume: 5 mL
Prep Date: 11/30/2016 0954		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,1,1,2-Tetrachloroethane	25.0	28.4	114	80 - 120	
1,1,1-Trichloroethane	25.0	27.5	110	73 - 126	
1,1,2,2-Tetrachloroethane	25.0	26.7	107	76 - 120	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	24.0	96	61 - 148	
1,1,2-Trichloroethane	25.0	26.4	106	76 - 122	
1,1-Dichloroethane	25.0	26.6	107	77 - 120	
1,1-Dichloroethene	25.0	26.9	108	66 - 127	
1,1-Dichloropropene	25.0	27.3	109	72 - 122	
1,2,3-Trichlorobenzene	25.0	26.3	105	75 - 123	
1,2,3-Trichloropropane	25.0	25.1	100	68 - 122	
1,2,4-Trichlorobenzene	25.0	26.5	106	79 - 122	
1,2,4-Trimethylbenzene	25.0	26.5	106	76 - 121	
1,2-Dibromo-3-Chloropropane	25.0	27.9	112	56 - 134	
1,2-Dibromoethane (EDB)	25.0	26.7	107	77 - 120	
1,2-Dichlorobenzene	25.0	26.1	104	80 - 124	
1,2-Dichloroethane	25.0	24.5	98	75 - 120	
1,2-Dichloropropane	25.0	25.5	102	76 - 120	
1,3,5-Trimethylbenzene	25.0	26.6	106	77 - 121	
1,3-Dichlorobenzene	25.0	26.5	106	77 - 120	
1,3-Dichloropropane	25.0	26.5	106	75 - 120	
1,4-Dichlorobenzene	25.0	25.8	103	80 - 120	
1,4-Dioxane	500	445	89	50 - 150	
2,2-Dichloropropane	25.0	27.5	110	63 - 136	
2-Butanone (MEK)	125	125	100	57 - 140	
2-Chloroethyl vinyl ether	25.0	26.8	107	70 - 129	
2-Hexanone	125	121	97	65 - 127	
4-Methyl-2-pentanone (MIBK)	125	123	98	71 - 125	
Acetone	125	124	100	56 - 142	
Acrolein	125	130	104	52 - 143	
Acrylonitrile	250	252	101	63 - 125	
Benzene	25.0	26.2	105	71 - 124	
Bromobenzene	25.0	25.7	103	78 - 120	
Bromochloromethane	25.0	26.5	106	72 - 130	
Bromodichloromethane	25.0	26.1	104	80 - 122	
Bromoform	25.0	26.2	105	61 - 132	
Bromomethane	25.0	25.3	101	55 - 144	
Butyl alcohol, tert-	250	248	99	75 - 125	
Carbon disulfide	25.0	25.0	100	59 - 134	
Carbon tetrachloride	25.0	27.9	112	72 - 134	
Chlorobenzene	25.0	26.7	107	80 - 120	
Chloroethane	25.0	27.0	108	69 - 136	
Chloroform	25.0	25.3	101	73 - 127	
Chloromethane	25.0	22.3	89	68 - 124	
cis-1,2-Dichloroethene	25.0	26.8	107	74 - 124	
cis-1,3-Dichloropropene	25.0	26.0	104	74 - 124	
Cyclohexane	25.0	26.9	108	59 - 135	

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

Lab Control Sample - Batch: 480-333995

Method: 8260C
Preparation: 5030C

Lab Sample ID: LCS 480-333995/4	Analysis Batch: 480-333995	Instrument ID: HP5973S
Client Matrix: Water	Prep Batch: N/A	Lab File ID: S0142.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/30/2016 0954	Units: ug/L	Final Weight/Volume: 5 mL
Prep Date: 11/30/2016 0954		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Dibromochloromethane	25.0	27.4	110	75 - 125	
Dibromomethane	25.0	26.0	104	76 - 127	
Dichlorodifluoromethane	25.0	18.6	74	59 - 135	
Dichlorofluoromethane	25.0	25.1	100	76 - 127	
Ethyl ether	25.0	26.6	106	76 - 123	
Ethylbenzene	25.0	25.9	103	77 - 123	
Hexachlorobutadiene	25.0	25.4	102	68 - 131	
Hexane	25.0	26.7	107	54 - 146	
Iodomethane	25.0	25.0	100	78 - 123	
Isobutanol	625	631	101	51 - 150	
Isopropylbenzene	25.0	26.4	106	77 - 122	
Methyl acetate	125	117	94	74 - 133	
Methyl tert-butyl ether	25.0	25.6	102	77 - 120	
Methylcyclohexane	25.0	27.0	108	68 - 134	
Methylene Chloride	25.0	25.2	101	75 - 124	
m-Xylene & p-Xylene	25.0	25.4	102	76 - 122	
Naphthalene	25.0	25.9	104	66 - 125	
n-Butylbenzene	25.0	26.7	107	71 - 128	
N-Propylbenzene	25.0	26.2	105	75 - 127	
o-Chlorotoluene	25.0	25.8	103	76 - 121	
o-Xylene	25.0	25.8	103	76 - 122	
p-Chlorotoluene	25.0	26.3	105	77 - 121	
p-Cymene	25.0	26.3	105	73 - 120	
sec-Butylbenzene	25.0	26.3	105	74 - 127	
Styrene	25.0	25.8	103	80 - 120	
tert-Butylbenzene	25.0	26.1	104	75 - 123	
Tetrachloroethene	25.0	27.0	108	74 - 122	
Tetrahydrofuran	50.0	45.6	91	62 - 132	
Toluene	25.0	26.5	106	80 - 122	
trans-1,2-Dichloroethene	25.0	27.5	110	73 - 127	
trans-1,3-Dichloropropene	25.0	27.2	109	80 - 120	
trans-1,4-Dichloro-2-butene	25.0	20.6	82	41 - 131	
Trichloroethene	25.0	26.4	106	74 - 123	
Trichlorofluoromethane	25.0	24.1	97	62 - 150	
Vinyl acetate	50.0	50.5	101	50 - 144	
Vinyl chloride	25.0	26.0	104	65 - 133	
Surrogate		% Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		100		77 - 120	
4-Bromofluorobenzene (Surr)		99		73 - 120	
Toluene-d8 (Surr)		104		80 - 120	

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 480-333995**

**Method: 8260C
Preparation: 5030C**

MS Lab Sample ID: 480-109984-E-3 MS	Analysis Batch: 480-333995	Instrument ID: HP5973S
Client Matrix: Water	Prep Batch: N/A	Lab File ID: S0163.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/30/2016 1818		Final Weight/Volume: 5 mL
Prep Date: 11/30/2016 1818		5 mL
Leach Date: N/A		

MSD Lab Sample ID: 480-109984-E-3 MSD	Analysis Batch: 480-333995	Instrument ID: HP5973S
Client Matrix: Water	Prep Batch: N/A	Lab File ID: S0164.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/30/2016 1841		Final Weight/Volume: 5 mL
Prep Date: 11/30/2016 1841		5 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
1,1,1-Trichloroethane	130	127	73 - 126	3	15	F1	F1
1,1,2,2-Tetrachloroethane	118	117	76 - 120	1	15		
1,1,2-Trichloro-1,2,2-trifluoroethane	128	123	61 - 148	4	20		
1,1,2-Trichloroethane	118	119	76 - 122	1	15		
1,1-Dichloroethane	125	123	77 - 120	2	20	F1	F1
1,1-Dichloroethene	138	135	66 - 127	2	16	F1	F1
1,2,4-Trichlorobenzene	116	118	79 - 122	2	20		
1,2-Dibromo-3-Chloropropane	111	116	56 - 134	4	15		
1,2-Dibromoethane (EDB)	114	116	77 - 120	1	15		
1,2-Dichlorobenzene	117	117	80 - 124	1	20		
1,2-Dichloroethane	112	111	75 - 120	1	20		
1,2-Dichloropropane	119	119	76 - 120	0	20		
1,3-Dichlorobenzene	119	118	77 - 120	1	20		
1,4-Dichlorobenzene	118	116	78 - 124	2	20		
2-Butanone (MEK)	98	100	57 - 140	1	20		
2-Hexanone	95	96	65 - 127	1	15		
4-Methyl-2-pentanone (MIBK)	101	103	71 - 125	2	35		
Acetone	88	90	56 - 142	1	15		
Benzene	125	122	71 - 124	2	13	F1	
Bromodichloromethane	118	118	80 - 122	1	15		
Bromoform	107	110	61 - 132	2	15		
Bromomethane	111	111	55 - 144	0	15		
Carbon disulfide	116	114	59 - 134	2	15		
Carbon tetrachloride	135	131	72 - 134	2	15	F1	
Chlorobenzene	119	118	80 - 120	0	25		
Chloroethane	129	133	69 - 136	3	15		
Chloroform	120	119	73 - 127	0	20		
Chloromethane	107	111	68 - 124	3	15		
cis-1,2-Dichloroethene	124	123	74 - 124	1	15		
cis-1,3-Dichloropropene	114	112	74 - 124	2	15		
Cyclohexane	132	121	59 - 135	9	20		
Dibromochloromethane	118	117	75 - 125	1	15		
Dichlorodifluoromethane	86	84	59 - 135	2	20		

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 480-333995**

**Method: 8260C
Preparation: 5030C**

MS Lab Sample ID: 480-109984-E-3 MS	Analysis Batch: 480-333995	Instrument ID: HP5973S
Client Matrix: Water	Prep Batch: N/A	Lab File ID: S0163.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/30/2016 1818		Final Weight/Volume: 5 mL
Prep Date: 11/30/2016 1818		5 mL
Leach Date: N/A		

MSD Lab Sample ID: 480-109984-E-3 MSD	Analysis Batch: 480-333995	Instrument ID: HP5973S
Client Matrix: Water	Prep Batch: N/A	Lab File ID: S0164.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 11/30/2016 1841		Final Weight/Volume: 5 mL
Prep Date: 11/30/2016 1841		5 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Ethylbenzene	116	116	77 - 123	0	15		
Isopropylbenzene	121	119	77 - 122	2	20		
Methyl acetate	96	96	74 - 133	1	20		
Methyl tert-butyl ether	113	113	77 - 120	1	37		
Methylcyclohexane	130	125	68 - 134	4	20		
Methylene Chloride	122	125	75 - 124	2	15		F1
m-Xylene & p-Xylene	116	114	76 - 122	2	16		
o-Xylene	113	112	76 - 122	1	16		
Styrene	113	113	80 - 120	0	20		
Tetrachloroethene	125	122	74 - 122	2	20	F1	
Toluene	121	119	80 - 122	1	15		
trans-1,2-Dichloroethene	130	125	73 - 127	4	20	F1	
trans-1,3-Dichloropropene	112	113	80 - 120	1	15		
Trichloroethene	120	121	74 - 123	0	16		
Trichlorofluoromethane	114	113	62 - 150	0	20		
Vinyl chloride	129	127	65 - 133	1	15		
Surrogate		MS % Rec	MSD % Rec			Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		102	104			77 - 120	
4-Bromofluorobenzene (Surr)		97	98			73 - 120	
Toluene-d8 (Surr)		104	106			80 - 120	

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 480-333995**

**Method: 8260C
Preparation: 5030C**

MS Lab Sample ID: 480-109984-E-3 MS Units: ug/L
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/30/2016 1818
 Prep Date: 11/30/2016 1818
 Leach Date: N/A

MSD Lab Sample ID: 480-109984-E-3 MSD
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/30/2016 1841
 Prep Date: 11/30/2016 1841
 Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
1,1,1-Trichloroethane	ND	25.0	25.0	32.6 F1	31.7 F1
1,1,2,2-Tetrachloroethane	ND	25.0	25.0	29.5	29.1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	25.0	25.0	32.0	30.7
1,1,2-Trichloroethane	ND	25.0	25.0	29.6	29.7
1,1-Dichloroethane	ND	25.0	25.0	31.4 F1	30.7 F1
1,1-Dichloroethene	ND	25.0	25.0	34.5 F1	33.8 F1
1,2,4-Trichlorobenzene	ND	25.0	25.0	29.0	29.5
1,2-Dibromo-3-Chloropropane	ND	25.0	25.0	27.8	29.0
1,2-Dibromoethane (EDB)	ND	25.0	25.0	28.6	28.9
1,2-Dichlorobenzene	ND	25.0	25.0	29.4	29.2
1,2-Dichloroethane	ND	25.0	25.0	28.0	27.7
1,2-Dichloropropane	ND	25.0	25.0	29.7	29.8
1,3-Dichlorobenzene	ND	25.0	25.0	29.8	29.5
1,4-Dichlorobenzene	ND	25.0	25.0	29.6	28.9
2-Butanone (MEK)	ND	125	125	123	125
2-Hexanone	ND	125	125	119	120
4-Methyl-2-pentanone (MIBK)	ND	125	125	126	128
Acetone	ND	125	125	110	112
Benzene	ND	25.0	25.0	31.2 F1	30.6
Bromodichloromethane	ND	25.0	25.0	29.6	29.4
Bromoform	ND	25.0	25.0	26.8	27.4
Bromomethane	ND	25.0	25.0	27.8	27.6
Carbon disulfide	ND	25.0	25.0	29.0	28.4
Carbon tetrachloride	ND	25.0	25.0	33.6 F1	32.8
Chlorobenzene	ND	25.0	25.0	29.7	29.5
Chloroethane	ND	25.0	25.0	32.2	33.1
Chloroform	ND	25.0	25.0	29.9	29.9
Chloromethane	ND	25.0	25.0	26.8	27.7
cis-1,2-Dichloroethene	ND	25.0	25.0	30.9	30.7
cis-1,3-Dichloropropene	ND	25.0	25.0	28.6	27.9
Cyclohexane	ND	25.0	25.0	33.0	30.3
Dibromochloromethane	ND	25.0	25.0	29.5	29.3
Dichlorodifluoromethane	ND	25.0	25.0	21.4	21.0
Ethylbenzene	ND	25.0	25.0	29.1	29.0
Isopropylbenzene	ND	25.0	25.0	30.4	29.8
Methyl acetate	ND	125	125	120	121
Methyl tert-butyl ether	0.58 J	25.0	25.0	28.8	28.9
Methylcyclohexane	ND	25.0	25.0	32.6	31.2
Methylene Chloride	ND	25.0	25.0	30.4	31.2 F1
m-Xylene & p-Xylene	ND	25.0	25.0	28.9	28.5
o-Xylene	ND	25.0	25.0	28.4	28.0
Styrene	ND	25.0	25.0	28.2	28.3
Tetrachloroethene	ND	25.0	25.0	31.1 F1	30.6

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 480-333995**

**Method: 8260C
Preparation: 5030C**

MS Lab Sample ID: 480-109984-E-3 MS Units: ug/L
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/30/2016 1818
 Prep Date: 11/30/2016 1818
 Leach Date: N/A

MSD Lab Sample ID: 480-109984-E-3 MSD
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/30/2016 1841
 Prep Date: 11/30/2016 1841
 Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Toluene	ND	25.0	25.0	30.2	29.8
trans-1,2-Dichloroethene	ND	25.0	25.0	32.5 F1	31.2
trans-1,3-Dichloropropene	ND	25.0	25.0	28.0	28.2
Trichloroethene	ND	25.0	25.0	30.1	30.2
Trichlorofluoromethane	ND	25.0	25.0	28.4	28.3
Vinyl chloride	ND	25.0	25.0	32.3	31.8

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

Method Blank - Batch: 480-333833

**Method: 8260C SIM
Preparation: 5030C**

Lab Sample ID: MB 480-333833/7	Analysis Batch: 480-333833	Instrument ID: HP5973J
Client Matrix: Water	Prep Batch: N/A	Lab File ID: J1532.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 25 mL
Analysis Date: 11/29/2016 1326	Units: ug/L	Final Weight/Volume: 25 mL
Prep Date: 11/29/2016 1326		
Leach Date: N/A		

Analyte	Result	Qual	MDL	RL
Vinyl chloride	0.00456	J	0.0040	0.020

Surrogate	% Rec	Acceptance Limits
Dibromofluoromethane (Surr)	93	50 - 150
TBA-d9 (Surr)	132	50 - 150

Lab Control Sample/

**Method: 8260C SIM
Preparation: 5030C**

Lab Control Sample Duplicate Recovery Report - Batch: 480-333833

LCS Lab Sample ID: LCS 480-333833/4	Analysis Batch: 480-333833	Instrument ID: HP5973J
Client Matrix: Water	Prep Batch: N/A	Lab File ID: J1529.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 25 mL
Analysis Date: 11/29/2016 1213	Units: ug/L	Final Weight/Volume: 25 mL
Prep Date: 11/29/2016 1213		25 mL
Leach Date: N/A		

LCSD Lab Sample ID: LCSD 480-333833/5	Analysis Batch: 480-333833	Instrument ID: HP5973J
Client Matrix: Water	Prep Batch: N/A	Lab File ID: J1530.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 25 mL
Analysis Date: 11/29/2016 1237	Units: ug/L	Final Weight/Volume: 25 mL
Prep Date: 11/29/2016 1237		25 mL
Leach Date: N/A		

Analyte	<u>% Rec.</u>		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Vinyl chloride	123	125	50 - 150	2	20		
Surrogate	LCS % Rec		LCSD % Rec		Acceptance Limits		
Dibromofluoromethane (Surr)	98		97		50 - 150		
TBA-d9 (Surr)	113		121		50 - 150		

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

**Laboratory Control/
Laboratory Duplicate Data Report - Batch: 480-333833**

**Method: 8260C SIM
Preparation: 5030C**

LCS Lab Sample ID: LCS 480-333833/4 Units: ug/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/29/2016 1213
Prep Date: 11/29/2016 1213
Leach Date: N/A

LCSD Lab Sample ID: LCSD 480-333833/5
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/29/2016 1237
Prep Date: 11/29/2016 1237
Leach Date: N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Vinyl chloride	0.200	0.200	0.246	0.250

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

Method Blank - Batch: 480-334146

**Method: 8260C SIM
Preparation: 5030C**

Lab Sample ID: MB 480-334146/8	Analysis Batch: 480-334146	Instrument ID: HP5973J
Client Matrix: Water	Prep Batch: N/A	Lab File ID: J1578.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 25 mL
Analysis Date: 12/01/2016 0226	Units: ug/L	Final Weight/Volume: 25 mL
Prep Date: 12/01/2016 0226		
Leach Date: N/A		

Analyte	Result	Qual	MDL	RL
Vinyl chloride	ND		0.0040	0.020

Surrogate	% Rec	Acceptance Limits
Dibromofluoromethane (Surr)	95	50 - 150
TBA-d9 (Surr)	131	50 - 150

Lab Control Sample/

**Method: 8260C SIM
Preparation: 5030C**

Lab Control Sample Duplicate Recovery Report - Batch: 480-334146

LCS Lab Sample ID: LCS 480-334146/5	Analysis Batch: 480-334146	Instrument ID: HP5973J
Client Matrix: Water	Prep Batch: N/A	Lab File ID: J1575.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 25 mL
Analysis Date: 12/01/2016 0049	Units: ug/L	Final Weight/Volume: 25 mL
Prep Date: 12/01/2016 0049		25 mL
Leach Date: N/A		

LCSD Lab Sample ID: LCSD 480-334146/6	Analysis Batch: 480-334146	Instrument ID: HP5973J
Client Matrix: Water	Prep Batch: N/A	Lab File ID: J1576.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 25 mL
Analysis Date: 12/01/2016 0113	Units: ug/L	Final Weight/Volume: 25 mL
Prep Date: 12/01/2016 0113		25 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Vinyl chloride	125	128	50 - 150	2	20		
Surrogate	LCS % Rec		LCSD % Rec		Acceptance Limits		
Dibromofluoromethane (Surr)	95		95		50 - 150		
TBA-d9 (Surr)	120		122		50 - 150		

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

**Laboratory Control/
Laboratory Duplicate Data Report - Batch: 480-334146**

**Method: 8260C SIM
Preparation: 5030C**

LCS Lab Sample ID: LCS 480-334146/5 Units: ug/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/01/2016 0049
Prep Date: 12/01/2016 0049
Leach Date: N/A

LCSD Lab Sample ID: LCSD 480-334146/6
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/01/2016 0113
Prep Date: 12/01/2016 0113
Leach Date: N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Vinyl chloride	0.200	0.200	0.250	0.256

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

Method Blank - Batch: 280-353059

Lab Sample ID: MB 280-353059/1-A
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/08/2016 2234
 Prep Date: 11/30/2016 0735
 Leach Date: N/A

Analysis Batch: 280-354936
 Prep Batch: 280-353059
 Leach Batch: N/A
 Units: mg/L

**Method: 6010B
 Preparation: 3005A
 Total Recoverable**

Instrument ID: MT_025
 Lab File ID: 25D120816.asc
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL	RL
Cobalt, Total	ND		0.0030	0.0030
Iron, Total	ND		0.060	0.060

Lab Control Sample - Batch: 280-353059

Lab Sample ID: LCS 280-353059/2-A
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/08/2016 2236
 Prep Date: 11/30/2016 0735
 Leach Date: N/A

Analysis Batch: 280-354936
 Prep Batch: 280-353059
 Leach Batch: N/A
 Units: mg/L

**Method: 6010B
 Preparation: 3005A
 Total Recoverable**

Instrument ID: MT_025
 Lab File ID: 25D120816.asc
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Cobalt, Total	0.500	0.525	105	89 - 111	
Iron, Total	1.00	1.06	106	89 - 115	

**Matrix Spike/
 Matrix Spike Duplicate Recovery Report - Batch: 280-353059**

**Method: 6010B
 Preparation: 3005A
 Dissolved**

MS Lab Sample ID: 280-91196-C-1-B MS
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/08/2016 2251
 Prep Date: 11/30/2016 0735
 Leach Date: N/A

Analysis Batch: 280-354936
 Prep Batch: 280-353059
 Leach Batch: N/A

Instrument ID: MT_025
 Lab File ID: 25D120816.asc
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

MSD Lab Sample ID: 280-91196-C-1-C MSD
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/08/2016 2254
 Prep Date: 11/30/2016 0735
 Leach Date: N/A

Analysis Batch: 280-354936
 Prep Batch: 280-353059
 Leach Batch: N/A

Instrument ID: MT_025
 Lab File ID: 25D120816.asc
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Cobalt, Total	101	101	82 - 119	0	20		
Iron, Total	108	104	52 - 155	4	20		

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-353059**

**Method: 6010B
Preparation: 3005A
Dissolved**

MS Lab Sample ID: 280-91196-C-1-B MS Units: mg/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/08/2016 2251
Prep Date: 11/30/2016 0735
Leach Date: N/A

MSD Lab Sample ID: 280-91196-C-1-C MSD
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/08/2016 2254
Prep Date: 11/30/2016 0735
Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Cobalt, Total	ND	0.500	0.500	0.507	0.507
Iron, Total	ND	1.00	1.00	1.08	1.04

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

Method Blank - Batch: 280-353084

Lab Sample ID: MB 280-353084/1-A
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/10/2016 0012
 Prep Date: 12/01/2016 0731
 Leach Date: N/A

Analysis Batch: 280-355067
 Prep Batch: 280-353084
 Leach Batch: N/A
 Units: mg/L

**Method: 6010B
 Preparation: 3005A
 Total Recoverable**

Instrument ID: MT_025
 Lab File ID: 25D120916.asc
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL	RL
Calcium, Dissolved	ND		0.040	0.040
Iron, Dissolved	ND		0.060	0.060
Magnesium, Dissolved	ND		0.050	0.050
Potassium, Dissolved	ND		1.0	1.0
Sodium, Dissolved	ND		1.0	1.0

Lab Control Sample - Batch: 280-353084

Lab Sample ID: LCS 280-353084/2-A
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/10/2016 0014
 Prep Date: 12/01/2016 0731
 Leach Date: N/A

Analysis Batch: 280-355067
 Prep Batch: 280-353084
 Leach Batch: N/A
 Units: mg/L

**Method: 6010B
 Preparation: 3005A
 Total Recoverable**

Instrument ID: MT_025
 Lab File ID: 25D120916.asc
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Calcium, Dissolved	50.0	51.9	104	90 - 111	
Iron, Dissolved	1.00	0.983	98	89 - 115	
Magnesium, Dissolved	50.0	53.5	107	90 - 113	
Potassium, Dissolved	50.0	51.8	104	89 - 114	
Sodium, Dissolved	50.0	53.0	106	90 - 115	

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-353084**

**Method: 6010B
Preparation: 3005A
Dissolved**

MS Lab Sample ID: 280-91292-C-1-B MS	Analysis Batch: 280-355067	Instrument ID: MT_025
Client Matrix: Water	Prep Batch: 280-353084	Lab File ID: 25D120916.asc
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 50 mL
Analysis Date: 12/10/2016 0032		Final Weight/Volume: 50 mL
Prep Date: 12/01/2016 0731		
Leach Date: N/A		

MSD Lab Sample ID: 280-91292-C-1-C MSD	Analysis Batch: 280-355067	Instrument ID: MT_025
Client Matrix: Water	Prep Batch: 280-353084	Lab File ID: 25D120916.asc
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 50 mL
Analysis Date: 12/10/2016 0034		Final Weight/Volume: 50 mL
Prep Date: 12/01/2016 0731		
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Calcium, Dissolved	102	97	48 - 153	2	20		
Iron, Dissolved	104	101	52 - 155	2	20		
Magnesium, Dissolved	106	102	62 - 146	2	20		
Potassium, Dissolved	104	102	76 - 132	2	20		
Sodium, Dissolved	105	100	70 - 203	3	20		

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-353084**

**Method: 6010B
Preparation: 3005A
Dissolved**

MS Lab Sample ID: 280-91292-C-1-B MS	Units: mg/L	MSD Lab Sample ID: 280-91292-C-1-C MSD
Client Matrix: Water		Client Matrix: Water
Dilution: 1.0		Dilution: 1.0
Analysis Date: 12/10/2016 0032		Analysis Date: 12/10/2016 0034
Prep Date: 12/01/2016 0731		Prep Date: 12/01/2016 0731
Leach Date: N/A		Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Calcium, Dissolved	56	50.0	50.0	107	104
Iron, Dissolved	ND	1.00	1.00	1.04	1.01
Magnesium, Dissolved	22	50.0	50.0	74.9	73.3
Potassium, Dissolved	1.0	50.0	50.0	53.2	52.2
Sodium, Dissolved	42	50.0	50.0	94.8	92.1

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

Method Blank - Batch: 280-352794

Lab Sample ID: MB 280-352794/1-A
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/30/2016 1816
 Prep Date: 11/30/2016 0735
 Leach Date: N/A

Analysis Batch: 280-353835
 Prep Batch: 280-352794
 Leach Batch: N/A
 Units: mg/L

**Method: 6020
 Preparation: 3005A
 Total Recoverable**

Instrument ID: MT_077
 Lab File ID: 091_BLK.d
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL	RL
Manganese, Dissolved	ND		0.0010	0.0010

Lab Control Sample - Batch: 280-352794

Lab Sample ID: LCS 280-352794/2-A
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/30/2016 1820
 Prep Date: 11/30/2016 0735
 Leach Date: N/A

Analysis Batch: 280-353835
 Prep Batch: 280-352794
 Leach Batch: N/A
 Units: mg/L

**Method: 6020
 Preparation: 3005A
 Total Recoverable**

Instrument ID: MT_077
 Lab File ID: 092_LCS.d
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Manganese, Dissolved	0.0400	0.0410	102	85 - 117	

**Matrix Spike/
 Matrix Spike Duplicate Recovery Report - Batch: 280-352794**

MS Lab Sample ID: 280-91068-E-1-C MS
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/30/2016 1831
 Prep Date: 11/30/2016 0735
 Leach Date: N/A

Analysis Batch: 280-353835
 Prep Batch: 280-352794
 Leach Batch: N/A

**Method: 6020
 Preparation: 3005A
 Dissolved**

Instrument ID: MT_077
 Lab File ID: 095SMPL.d
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

MSD Lab Sample ID: 280-91068-E-1-D MSD
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/30/2016 1835
 Prep Date: 11/30/2016 0735
 Leach Date: N/A

Analysis Batch: 280-353835
 Prep Batch: 280-352794
 Leach Batch: N/A

Instrument ID: MT_077
 Lab File ID: 096SMPL.d
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Manganese, Dissolved	305	171	85 - 117	2	20	4	4

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-352794**

**Method: 6020
Preparation: 3005A
Dissolved**

MS Lab Sample ID: 280-91068-E-1-C MS Units: mg/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/30/2016 1831
Prep Date: 11/30/2016 0735
Leach Date: N/A

MSD Lab Sample ID: 280-91068-E-1-D MSD
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/30/2016 1835
Prep Date: 11/30/2016 0735
Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Manganese, Dissolved	2.8	0.0400	0.0400	2.92 4	2.87 4

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

Method Blank - Batch: 280-353082

Lab Sample ID: MB 280-353082/1-A
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/02/2016 0232
Prep Date: 12/01/2016 1405
Leach Date: N/A

Analysis Batch: 280-354033
Prep Batch: 280-353082
Leach Batch: N/A
Units: mg/L

Method: 6020 Preparation: 3005A Total Recoverable

Instrument ID: MT_077
Lab File ID: 209_BLK.d
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL	RL
Barium, Total	ND		0.0010	0.0010
Cadmium, Total	ND		0.00020	0.00020
Chromium, Total	ND		0.0030	0.0030
Copper, Total	ND		0.0020	0.0020
Lead, Total	ND		0.0010	0.0010
Nickel, Total	ND		0.0040	0.0040
Selenium, Total	ND		0.0010	0.0010
Silver, Total	ND		0.0020	0.0020
Thallium, Total	ND		0.0010	0.0010
Vanadium, Total	ND		0.0020	0.0020
Zinc, Total	ND		0.0050	0.0050

Method Blank - Batch: 280-353082

Lab Sample ID: MB 280-353082/1-A
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/07/2016 1717
Prep Date: 12/01/2016 1405
Leach Date: N/A

Analysis Batch: 280-354791
Prep Batch: 280-353082
Leach Batch: N/A
Units: mg/L

Method: 6020 Preparation: 3005A Total Recoverable

Instrument ID: MT_077
Lab File ID: 024_BLK.d
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL	RL
Antimony, Total	ND		0.0010	0.0010
Beryllium, Total	ND		0.0010	0.0010
Manganese, Total	ND		0.0010	0.0010

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

Lab Control Sample - Batch: 280-353082

Method: 6020
Preparation: 3005A
Total Recoverable

Lab Sample ID: LCS 280-353082/2-A	Analysis Batch: 280-354033	Instrument ID: MT_077
Client Matrix: Water	Prep Batch: 280-353082	Lab File ID: 210_LCS.d
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 50 mL
Analysis Date: 12/02/2016 0235	Units: mg/L	Final Weight/Volume: 50 mL
Prep Date: 12/01/2016 1405		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Barium, Total	0.0400	0.0368	92	85 - 118	
Cadmium, Total	0.0400	0.0405	101	85 - 115	
Chromium, Total	0.0400	0.0391	98	84 - 121	
Copper, Total	0.0400	0.0401	100	85 - 119	
Lead, Total	0.0400	0.0387	97	85 - 118	
Nickel, Total	0.0400	0.0409	102	85 - 119	
Selenium, Total	0.0400	0.0357	89	77 - 122	
Silver, Total	0.0400	0.0416	104	85 - 115	
Thallium, Total	0.0400	0.0382	96	85 - 118	
Vanadium, Total	0.0400	0.0375	94	85 - 120	
Zinc, Total	0.0400	0.0413	103	83 - 122	

Lab Control Sample - Batch: 280-353082

Method: 6020
Preparation: 3005A
Total Recoverable

Lab Sample ID: LCS 280-353082/2-A	Analysis Batch: 280-354791	Instrument ID: MT_077
Client Matrix: Water	Prep Batch: 280-353082	Lab File ID: 025_LCS.d
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 50 mL
Analysis Date: 12/07/2016 1721	Units: mg/L	Final Weight/Volume: 50 mL
Prep Date: 12/01/2016 1405		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Antimony, Total	0.0400	0.0368	92	85 - 115	
Beryllium, Total	0.0400	0.0399	100	80 - 125	
Manganese, Total	0.0400	0.0382	95	85 - 117	

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-353082**

**Method: 6020
Preparation: 3005A
Total Recoverable**

MS Lab Sample ID: 280-91197-3
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/02/2016 0407
Prep Date: 12/01/2016 1405
Leach Date: N/A

Analysis Batch: 280-354033
Prep Batch: 280-353082
Leach Batch: N/A

Instrument ID: MT_077
Lab File ID: 234SMPL.d
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

MSD Lab Sample ID: 280-91197-3
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/02/2016 0410
Prep Date: 12/01/2016 1405
Leach Date: N/A

Analysis Batch: 280-354033
Prep Batch: 280-353082
Leach Batch: N/A

Instrument ID: MT_077
Lab File ID: 235SMPL.d
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Barium, Total	108	104	85 - 118	3	20		
Cadmium, Total	108	99	85 - 115	8	20		
Chromium, Total	102	97	84 - 121	5	20		
Copper, Total	101	100	85 - 119	2	20		
Lead, Total	100	99	85 - 118	1	20		
Nickel, Total	99	100	85 - 119	1	20		
Selenium, Total	103	103	77 - 122	1	20		
Silver, Total	100	99	85 - 115	1	20		
Thallium, Total	96	96	85 - 118	0	20		
Vanadium, Total	100	98	85 - 120	2	20		
Zinc, Total	106	107	83 - 122	2	20		

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-353082**

**Method: 6020
Preparation: 3005A
Total Recoverable**

MS Lab Sample ID: 280-91197-3
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/07/2016 1736
Prep Date: 12/01/2016 1405
Leach Date: N/A

Analysis Batch: 280-354791
Prep Batch: 280-353082
Leach Batch: N/A

Instrument ID: MT_077
Lab File ID: 029SMPL.d
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

MSD Lab Sample ID: 280-91197-3
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/07/2016 1740
Prep Date: 12/01/2016 1405
Leach Date: N/A

Analysis Batch: 280-354791
Prep Batch: 280-353082
Leach Batch: N/A

Instrument ID: MT_077
Lab File ID: 030SMPL.d
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Antimony, Total	98	90	85 - 115	9	20		
Beryllium, Total	95	96	80 - 125	0	20		
Manganese, Total	82	90	85 - 117	3	20	F1	

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-353082**

**Method: 6020
Preparation: 3005A
Total Recoverable**

MS Lab Sample ID: 280-91197-3 Units: mg/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/02/2016 0407
Prep Date: 12/01/2016 1405
Leach Date: N/A

MSD Lab Sample ID: 280-91197-3
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/02/2016 0410
Prep Date: 12/01/2016 1405
Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Barium, Total	0.0024	0.0400	0.0400	0.0455	0.0441
Cadmium, Total	ND	0.0400	0.0400	0.0431	0.0397
Chromium, Total	ND	0.0400	0.0400	0.0408	0.0388
Copper, Total	ND	0.0400	0.0400	0.0405	0.0399
Lead, Total	ND	0.0400	0.0400	0.0400	0.0397
Nickel, Total	ND	0.0400	0.0400	0.0396	0.0399
Selenium, Total	ND	0.0400	0.0400	0.0411	0.0414
Silver, Total	ND	0.0400	0.0400	0.0398	0.0396
Thallium, Total	ND	0.0400	0.0400	0.0385	0.0385
Vanadium, Total	0.0032	0.0400	0.0400	0.0430	0.0422
Zinc, Total	ND	0.0400	0.0400	0.0422	0.0430

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-353082**

**Method: 6020
Preparation: 3005A
Total Recoverable**

MS Lab Sample ID: 280-91197-3 Units: mg/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/07/2016 1736
Prep Date: 12/01/2016 1405
Leach Date: N/A

MSD Lab Sample ID: 280-91197-3
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/07/2016 1740
Prep Date: 12/01/2016 1405
Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Antimony, Total	ND	0.0400	0.0400	0.0393	0.0361
Beryllium, Total	ND	0.0400	0.0400	0.0382	0.0382
Manganese, Total	0.083	0.0400	0.0400	0.116 F1	0.119

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

Method Blank - Batch: 280-355156

Method: 300.0
Preparation: N/A

Lab Sample ID: MB 280-355156/6	Analysis Batch: 280-355156	Instrument ID: WC_IonChrom11
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 0006.d
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 12/12/2016 1118	Units: mg/L	Final Weight/Volume: 5 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	Result	Qual	RL	RL
Chloride	ND		1.0	1.0
Sulfate	ND		1.0	1.0

Method Reporting Limit Check - Batch: 280-355156

Method: 300.0
Preparation: N/A

Lab Sample ID: MRL 280-355156/3	Analysis Batch: 280-355156	Instrument ID: WC_IonChrom11
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 0003.d
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 12/12/2016 1018	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	91	50 - 150	
Sulfate	2.50	ND	84	50 - 150	

Lab Control Sample/

Method: 300.0
Preparation: N/A

Lab Control Sample Duplicate Recovery Report - Batch: 280-355156

LCS Lab Sample ID: LCS 280-355156/4	Analysis Batch: 280-355156	Instrument ID: WC_IonChrom11
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 0004.d
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 12/12/2016 1038	Units: mg/L	Final Weight/Volume: 5 mL
Prep Date: N/A		10 uL
Leach Date: N/A		

LCSD Lab Sample ID: LCSD 280-355156/5	Analysis Batch: 280-355156	Instrument ID: WC_IonChrom11
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 0005.d
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 mL
Analysis Date: 12/12/2016 1058	Units: mg/L	Final Weight/Volume: 5 mL
Prep Date: N/A		10 uL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Chloride	96	96	90 - 110	0	10		
Sulfate	96	96	90 - 110	0	10		

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

**Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-355156**

**Method: 300.0
Preparation: N/A**

LCS Lab Sample ID: LCS 280-355156/4 Units: mg/L
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/12/2016 1038
 Prep Date: N/A
 Leach Date: N/A

LCSD Lab Sample ID: LCSD 280-355156/5
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/12/2016 1058
 Prep Date: N/A
 Leach Date: N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Chloride	100	100	96.5	96.5
Sulfate	100	100	95.8	95.9

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-355156**

**Method: 300.0
Preparation: N/A**

MS Lab Sample ID: 280-91292-A-11 MS
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/13/2016 0011
 Prep Date: N/A
 Leach Date: N/A

Analysis Batch: 280-355156
 Prep Batch: N/A
 Leach Batch: N/A

Instrument ID: WC_IonChrom11
 Lab File ID: 0026.d
 Initial Weight/Volume: 5 mL
 Final Weight/Volume: 5 mL
 10 uL

MSD Lab Sample ID: 280-91292-A-11 MSD
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/13/2016 0031
 Prep Date: N/A
 Leach Date: N/A

Analysis Batch: 280-355156
 Prep Batch: N/A
 Leach Batch: N/A

Instrument ID: WC_IonChrom11
 Lab File ID: 0027.d
 Initial Weight/Volume: 5 mL
 Final Weight/Volume: 5 mL
 10 uL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Chloride	86	87	80 - 120	2	20		
Sulfate	94	96	80 - 120	1	20		

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-355156**

**Method: 300.0
Preparation: N/A**

MS Lab Sample ID: 280-91292-A-11 MS Units: mg/L
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/13/2016 0011
 Prep Date: N/A
 Leach Date: N/A

MSD Lab Sample ID: 280-91292-A-11 MSD
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/13/2016 0031
 Prep Date: N/A
 Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Chloride	5.7	25.0	25.0	27.2	27.6
Sulfate	14	25.0	25.0	37.7	38.2

Duplicate - Batch: 280-355156

**Method: 300.0
Preparation: N/A**

Lab Sample ID: 280-91292-A-11 DU
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 12/12/2016 2351
 Prep Date: N/A
 Leach Date: N/A

Analysis Batch: 280-355156
 Prep Batch: N/A
 Leach Batch: N/A
 Units: mg/L

Instrument ID: WC_IonChrom11
 Lab File ID: 0025.d
 Initial Weight/Volume: 5 mL
 Final Weight/Volume: 5 mL
 10 uL

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Chloride	5.7	5.78	1	15	
Sulfate	14	14.2	0.1	15	

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

Method Blank - Batch: 280-353602

**Method: 350.1
Preparation: N/A**

Lab Sample ID: MB 280-353602/20	Analysis Batch: 280-353602	Instrument ID: WC_Alp 3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: C:\FLOW_4\112916.RS
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 11/29/2016 1421	Units: mg/L	Final Weight/Volume:
Prep Date: N/A		
Leach Date: N/A		

Analyte	Result	Qual	RL	RL
Ammonia (as N)	ND		0.030	0.030

**Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-353602**

**Method: 350.1
Preparation: N/A**

LCS Lab Sample ID: LCS 280-353602/18	Analysis Batch: 280-353602	Instrument ID: WC_Alp 3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: C:\FLOW_4\112916.RS
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 100 mL
Analysis Date: 11/29/2016 1417	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

LCSD Lab Sample ID: LCSD 280-353602/19	Analysis Batch: 280-353602	Instrument ID: WC_Alp 3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: C:\FLOW_4\112916.RS
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 100 mL
Analysis Date: 11/29/2016 1419	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Ammonia (as N)	100	98	90 - 110	1	10		

**Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-353602**

**Method: 350.1
Preparation: N/A**

LCS Lab Sample ID: LCS 280-353602/18	Units: mg/L	LCSD Lab Sample ID: LCSD 280-353602/19
Client Matrix: Water		Client Matrix: Water
Dilution: 1.0		Dilution: 1.0
Analysis Date: 11/29/2016 1417		Analysis Date: 11/29/2016 1419
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	2.49	2.46

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-353602**

**Method: 350.1
Preparation: N/A**

MS Lab Sample ID: 440-166999-B-1 MS	Analysis Batch: 280-353602	Instrument ID: WC_Alp 3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: C:\FLOW_4\112916.RS
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 10 mL
Analysis Date: 11/29/2016 1425		Final Weight/Volume: 10 mL
Prep Date: N/A		
Leach Date: N/A		

MSD Lab Sample ID: 440-166999-B-1 MSD	Analysis Batch: 280-353602	Instrument ID: WC_Alp 3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: C:\FLOW_4\112916.RS
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 10 mL
Analysis Date: 11/29/2016 1427		Final Weight/Volume: 10 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Ammonia (as N)	109	106	90 - 110	2	10		

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-353602**

**Method: 350.1
Preparation: N/A**

MS Lab Sample ID: 440-166999-B-1 MS	Units: mg/L	MSD Lab Sample ID: 440-166999-B-1 MSD
Client Matrix: Water		Client Matrix: Water
Dilution: 1.0		Dilution: 1.0
Analysis Date: 11/29/2016 1425		Analysis Date: 11/29/2016 1427
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)	0.050	1.00	1.00	1.14	1.11

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

Method Blank - Batch: 280-355401

Method: 353.2
Preparation: N/A

Lab Sample ID:	MB 280-355401/1	Analysis Batch:	280-355401	Instrument ID:	No Equipment Assigned
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	12/13/2016 1028	Units:	mg/L	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	RL	RL
Nitrate as N	ND		0.050	0.050

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

Method Blank - Batch: 280-353180

Method: SM 2320B

Preparation: N/A

Lab Sample ID: MB 280-353180/5	Analysis Batch: 280-353180	Instrument ID: WC-AT3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 112316 alk.TXT
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 11/23/2016 1224	Units: mg/L	Final Weight/Volume:
Prep Date: N/A		
Leach Date: N/A		

Analyte	Result	Qual	RL	RL
Alkalinity, Total (As CaCO3)	ND		5.0	5.0
Alkalinity, Bicarbonate (As CaCO3)	ND		5.0	5.0

Lab Control Sample - Batch: 280-353180

Method: SM 2320B

Preparation: N/A

Lab Sample ID: LCS 280-353180/4	Analysis Batch: 280-353180	Instrument ID: WC-AT3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 112316 alk.TXT
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 11/23/2016 1220	Units: mg/L	Final Weight/Volume:
Prep Date: N/A		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Alkalinity, Total (As CaCO3)	200	202	101	90 - 110	

Duplicate - Batch: 280-353180

Method: SM 2320B

Preparation: N/A

Lab Sample ID: 280-91292-A-3 DU	Analysis Batch: 280-353180	Instrument ID: WC-AT3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 112316 alk.TXT
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 11/23/2016 1234	Units: mg/L	Final Weight/Volume:
Prep Date: N/A		
Leach Date: N/A		

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Alkalinity, Total (As CaCO3)	180	194	6	10	

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

Method Blank - Batch: 280-352854

Method: SM 2540C
Preparation: N/A

Lab Sample ID: MB 280-352854/1	Analysis Batch: 280-352854	Instrument ID: No Equipment Assigned
Client Matrix: Water	Prep Batch: N/A	Lab File ID: N/A
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 100 mL
Analysis Date: 11/23/2016 0955	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	Result	Qual	RL	RL
Total Dissolved Solids (TDS)	ND		5.0	5.0

Lab Control Sample - Batch: 280-352854

Method: SM 2540C
Preparation: N/A

Lab Sample ID: LCS 280-352854/2	Analysis Batch: 280-352854	Instrument ID: No Equipment Assigned
Client Matrix: Water	Prep Batch: N/A	Lab File ID: N/A
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 100 mL
Analysis Date: 11/23/2016 0955	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Total Dissolved Solids (TDS)	500	487	97	86 - 110	

Duplicate - Batch: 280-352854

Method: SM 2540C
Preparation: N/A

Lab Sample ID: 280-91197-1	Analysis Batch: 280-352854	Instrument ID: No Equipment Assigned
Client Matrix: Water	Prep Batch: N/A	Lab File ID: N/A
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 100 mL
Analysis Date: 11/23/2016 0955	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Total Dissolved Solids (TDS)	95	96.0	1	10	

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

Method Blank - Batch: 280-353679

Method: SM 2540C

Preparation: N/A

Lab Sample ID: MB 280-353679/1	Analysis Batch: 280-353679	Instrument ID: No Equipment Assigned
Client Matrix: Water	Prep Batch: N/A	Lab File ID: N/A
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 100 mL
Analysis Date: 11/30/2016 0904	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	Result	Qual	RL	RL
Total Dissolved Solids (TDS)	ND		5.0	5.0

Lab Control Sample/

Method: SM 2540C

Lab Control Sample Duplicate Recovery Report - Batch: 280-353679

Preparation: N/A

LCS Lab Sample ID: LCS 280-353679/2	Analysis Batch: 280-353679	Instrument ID: No Equipment Assigned
Client Matrix: Water	Prep Batch: N/A	Lab File ID: N/A
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 100 mL
Analysis Date: 11/30/2016 0904	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

LCSD Lab Sample ID: LCSD 280-353679/3	Analysis Batch: 280-353679	Instrument ID: No Equipment Assigned
Client Matrix: Water	Prep Batch: N/A	Lab File ID: N/A
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 100 mL
Analysis Date: 11/30/2016 0904	Units: mg/L	Final Weight/Volume: 100 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Total Dissolved Solids (TDS)	97	99	86 - 110	1	20		

Laboratory Control/

Method: SM 2540C

Laboratory Duplicate Data Report - Batch: 280-353679

Preparation: N/A

LCS Lab Sample ID: LCS 280-353679/2	Units: mg/L	LCSD Lab Sample ID: LCSD 280-353679/3
Client Matrix: Water		Client Matrix: Water
Dilution: 1.0		Dilution: 1.0
Analysis Date: 11/30/2016 0904		Analysis Date: 11/30/2016 0904
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
Total Dissolved Solids (TDS)	501	501	488	494

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

Duplicate - Batch: 280-353679

Method: SM 2540C

Preparation: N/A

Lab Sample ID:	280-91498-B-2 DU	Analysis Batch:	280-353679	Instrument ID:	No Equipment Assigned
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	11/30/2016 0904	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Total Dissolved Solids (TDS)	280	284	2	10	

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

Method Blank - Batch: 280-352912

Method: SM 2540D
Preparation: N/A

Lab Sample ID: MB 280-352912/2	Analysis Batch: 280-352912	Instrument ID: No Equipment Assigned
Client Matrix: Water	Prep Batch: N/A	Lab File ID: N/A
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 250 mL
Analysis Date: 11/23/2016 1539	Units: mg/L	Final Weight/Volume: 250 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	Result	Qual	RL	RL
Total Suspended Solids	ND		4.0	4.0

Lab Control Sample - Batch: 280-352912

Method: SM 2540D
Preparation: N/A

Lab Sample ID: LCS 280-352912/1	Analysis Batch: 280-352912	Instrument ID: No Equipment Assigned
Client Matrix: Water	Prep Batch: N/A	Lab File ID: N/A
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 250 mL
Analysis Date: 11/23/2016 1539	Units: mg/L	Final Weight/Volume: 250 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Total Suspended Solids	100	97.2	97	86 - 114	

Duplicate - Batch: 280-352912

Method: SM 2540D
Preparation: N/A

Lab Sample ID: 280-91197-3	Analysis Batch: 280-352912	Instrument ID: No Equipment Assigned
Client Matrix: Water	Prep Batch: N/A	Lab File ID: N/A
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 250 mL
Analysis Date: 11/23/2016 1539	Units: mg/L	Final Weight/Volume: 250 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Total Suspended Solids	8.4	8.00	5	10	

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

Method Blank - Batch: 280-354778

Method: SM 5310B

Preparation: N/A

Lab Sample ID: MB 280-354778/4	Analysis Batch: 280-354778	Instrument ID: WC_SHI3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 120716B.txt
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 12/07/2016 1252	Units: mg/L	Final Weight/Volume:
Prep Date: N/A		
Leach Date: N/A		

Analyte	Result	Qual	RL	RL
Total Organic Carbon - Average	ND		1.0	1.0

Lab Control Sample - Batch: 280-354778

Method: SM 5310B

Preparation: N/A

Lab Sample ID: LCS 280-354778/3	Analysis Batch: 280-354778	Instrument ID: WC_SHI3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 120716B.txt
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 12/07/2016 1237	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	24.4	98	88 - 112	

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-354778**

Method: SM 5310B

Preparation: N/A

MS Lab Sample ID: 280-91182-G-1 MS	Analysis Batch: 280-354778	Instrument ID: WC_SHI3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 120716B.txt
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 12/07/2016 1336		Final Weight/Volume: 50 mL
Prep Date: N/A		
Leach Date: N/A		

MSD Lab Sample ID: 280-91182-G-1 MSD	Analysis Batch: 280-354778	Instrument ID: WC_SHI3
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 120716B.txt
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume:
Analysis Date: 12/07/2016 1351		Final Weight/Volume: 50 mL
Prep Date: N/A		
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Total Organic Carbon - Average	100	100	88 - 112	0	15		

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-354778**

**Method: SM 5310B
Preparation: N/A**

MS Lab Sample ID: 280-91182-G-1 MS Units: mg/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/07/2016 1336
Prep Date: N/A
Leach Date: N/A

MSD Lab Sample ID: 280-91182-G-1 MSD
Client Matrix: Water
Dilution: 1.0
Analysis Date: 12/07/2016 1351
Prep 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	17	25.0	25.0	42.2	42.1

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

Laboratory Chronicle

Lab ID: 280-91197-1

Client ID: MW-33C

Sample Date/Time: 11/17/2016 10:50 Received Date/Time: 11/18/2016 10:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	280-91197-F-1		480-333995		11/30/2016 11:44	1	TAL BUF	SWO
A:8260C	280-91197-F-1		480-333995		11/30/2016 11:44	1	TAL BUF	SWO
P:5030C	280-91197-G-1		480-333833		11/29/2016 19:22	1	TAL BUF	JWG
A:8260C SIM	280-91197-G-1		480-333833		11/29/2016 19:22	1	TAL BUF	JWG
P:3005A	280-91197-E-1-A		280-354936	280-353059	11/30/2016 07:35	1	TAL DEN	TEB
A:6010B	280-91197-E-1-A		280-354936	280-353059	12/08/2016 23:22	1	TAL DEN	CRR
P:3005A	280-91197-E-1-B		280-355067	280-353084	12/01/2016 07:31	1	TAL DEN	SUR
A:6010B	280-91197-E-1-B		280-355067	280-353084	12/10/2016 00:17	1	TAL DEN	LRD
P:3005A	280-91197-E-1-C		280-353835	280-352794	11/30/2016 07:35	1	TAL DEN	SUR
A:6020	280-91197-E-1-C		280-353835	280-352794	11/30/2016 19:09	1	TAL DEN	LMT
P:3005A	280-91197-D-1-A		280-354033	280-353082	12/01/2016 14:05	1	TAL DEN	MLS
A:6020	280-91197-D-1-A		280-354033	280-353082	12/02/2016 03:48	1	TAL DEN	LMT
P:3005A	280-91197-D-1-A		280-354791	280-353082	12/01/2016 14:05	1	TAL DEN	MLS
A:6020	280-91197-D-1-A		280-354791	280-353082	12/07/2016 17:25	1	TAL DEN	LMT
A:300.0	280-91197-B-1		280-355156		12/13/2016 03:10	1	TAL DEN	AFB
A:350.1	280-91197-C-1		280-353602		11/29/2016 14:29	1	TAL DEN	MAS
A:353.2	280-91197-A-1		280-355401		12/13/2016 10:28	1	TAL DEN	AJA
A:SM 2320B	280-91197-B-1		280-353180		11/23/2016 12:57	1	TAL DEN	MMC
A:SM 2540C	280-91197-A-1		280-352854		11/23/2016 09:55	1	TAL DEN	JAP
A:SM 2540D	280-91197-B-1		280-352912		11/23/2016 15:39	1	TAL DEN	SVC
A:SM 5310B	280-91197-C-1		280-354778		12/07/2016 14:22	1	TAL DEN	CCJ
A:Field Sampling	280-91197-A-1		280-352756		11/17/2016 11:50	1	TAL DEN	C1K

Lab ID: 280-91197-1 DU

Client ID: MW-33C

Sample Date/Time: 11/17/2016 10:50 Received Date/Time: 11/18/2016 10:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:SM 2540C	280-91197-A-1 DU		280-352854		11/23/2016 09:55	1	TAL DEN	JAP

Lab ID: 280-91197-2

Client ID: TRIP BLANK

Sample Date/Time: 11/17/2016 00:00 Received Date/Time: 11/18/2016 10:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	280-91197-A-2		480-333995		11/30/2016 12:07	1	TAL BUF	SWO
A:8260C	280-91197-A-2		480-333995		11/30/2016 12:07	1	TAL BUF	SWO
P:5030C	280-91197-B-2		480-334146		12/01/2016 02:50	1	TAL BUF	JWG
A:8260C SIM	280-91197-B-2		480-334146		12/01/2016 02:50	1	TAL BUF	JWG

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

Laboratory Chronicle

Lab ID: 280-91197-3

Client ID: MW-33A

Sample Date/Time: 11/17/2016 09:50 Received Date/Time: 11/18/2016 10:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	280-91197-F-3		480-333995		11/30/2016 12:30	1	TAL BUF	SWO
A:8260C	280-91197-F-3		480-333995		11/30/2016 12:30	1	TAL BUF	SWO
P:5030C	280-91197-J-3		480-334146		12/01/2016 03:15	1	TAL BUF	JWG
A:8260C SIM	280-91197-J-3		480-334146		12/01/2016 03:15	1	TAL BUF	JWG
P:3005A	280-91197-E-3-A		280-354936	280-353059	11/30/2016 07:35	1	TAL DEN	TEB
A:6010B	280-91197-E-3-A		280-354936	280-353059	12/08/2016 23:24	1	TAL DEN	CRR
P:3005A	280-91197-E-3-B		280-355067	280-353084	12/01/2016 07:31	1	TAL DEN	SUR
A:6010B	280-91197-E-3-B		280-355067	280-353084	12/10/2016 00:19	1	TAL DEN	LRD
P:3005A	280-91197-E-3-C		280-353835	280-352794	11/30/2016 07:35	1	TAL DEN	SUR
A:6020	280-91197-E-3-C		280-353835	280-352794	11/30/2016 19:13	1	TAL DEN	LMT
P:3005A	280-91197-D-3-A		280-354033	280-353082	12/01/2016 14:05	1	TAL DEN	MLS
A:6020	280-91197-D-3-A		280-354033	280-353082	12/02/2016 03:59	1	TAL DEN	LMT
P:3005A	280-91197-D-3-A		280-354791	280-353082	12/01/2016 14:05	1	TAL DEN	MLS
A:6020	280-91197-D-3-A		280-354791	280-353082	12/07/2016 17:29	1	TAL DEN	LMT
A:300.0	280-91197-B-3		280-355156		12/13/2016 03:30	1	TAL DEN	AFB
A:350.1	280-91197-C-3		280-353602		11/29/2016 14:31	1	TAL DEN	MAS
A:353.2	280-91197-A-3		280-355401		12/13/2016 10:28	1	TAL DEN	AJA
A:SM 2320B	280-91197-B-3		280-353180		11/23/2016 13:02	1	TAL DEN	MMC
A:SM 2540C	280-91197-A-3		280-352854		11/23/2016 09:55	1	TAL DEN	JAP
A:SM 2540D	280-91197-B-3		280-352912		11/23/2016 15:39	1	TAL DEN	SVC
A:SM 5310B	280-91197-C-3		280-354778		12/07/2016 14:39	1	TAL DEN	CCJ
A:Field Sampling	280-91197-A-3		280-352756		11/17/2016 10:50	1	TAL DEN	C1K

Lab ID: 280-91197-3 MS

Client ID: MW-33A

Sample Date/Time: 11/17/2016 09:50 Received Date/Time: 11/18/2016 10:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3005A	280-91197-D-3-B MS		280-354033	280-353082	12/01/2016 14:05	1	TAL DEN	MLS
A:6020	280-91197-D-3-B MS		280-354033	280-353082	12/02/2016 04:07	1	TAL DEN	LMT
P:3005A	280-91197-D-3-B MS		280-354791	280-353082	12/01/2016 14:05	1	TAL DEN	MLS
A:6020	280-91197-D-3-B MS		280-354791	280-353082	12/07/2016 17:36	1	TAL DEN	LMT

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

Laboratory Chronicle

Lab ID: 280-91197-3 MSD

Client ID: MW-33A

Sample Date/Time: 11/17/2016 09:50 Received Date/Time: 11/18/2016 10:00

Method	Bottle ID	Run	Analysis		Date Prepared /		Dil	Lab	Analyst
			Batch	Prep Batch	AnalYZed				
P:3005A	280-91197-D-3-C MSD		280-354033	280-353082	12/01/2016	14:05	1	TAL DEN	MLS
A:6020	280-91197-D-3-C MSD		280-354033	280-353082	12/02/2016	04:10	1	TAL DEN	LMT
P:3005A	280-91197-D-3-C MSD		280-354791	280-353082	12/01/2016	14:05	1	TAL DEN	MLS
A:6020	280-91197-D-3-C MSD		280-354791	280-353082	12/07/2016	17:40	1	TAL DEN	LMT

Lab ID: 280-91197-3 DU

Client ID: MW-33A

Sample Date/Time: 11/17/2016 09:50 Received Date/Time: 11/18/2016 10:00

Method	Bottle ID	Run	Analysis		Date Prepared /		Dil	Lab	Analyst
			Batch	Prep Batch	AnalYZed				
A:SM 2540D	280-91197-B-3 DU		280-352912		11/23/2016	15:39	1	TAL DEN	SVC

Lab ID: 280-91197-4

Client ID: DUP1

Sample Date/Time: 11/17/2016 11:00 Received Date/Time: 11/18/2016 10:00

Method	Bottle ID	Run	Analysis		Date Prepared /		Dil	Lab	Analyst
			Batch	Prep Batch	AnalYZed				
P:5030C	280-91197-F-4		480-333995		11/30/2016	12:54	1	TAL BUF	SWO
A:8260C	280-91197-F-4		480-333995		11/30/2016	12:54	1	TAL BUF	SWO
P:5030C	280-91197-K-4		480-333833		11/29/2016	14:29	1	TAL BUF	JWG
A:8260C SIM	280-91197-K-4		480-333833		11/29/2016	14:29	1	TAL BUF	JWG
P:3005A	280-91197-E-4-A		280-354936	280-353059	11/30/2016	07:35	1	TAL DEN	TEB
A:6010B	280-91197-E-4-A		280-354936	280-353059	12/08/2016	23:27	1	TAL DEN	CRR
P:3005A	280-91197-E-4-B		280-355067	280-353084	12/01/2016	07:31	1	TAL DEN	SUR
A:6010B	280-91197-E-4-B		280-355067	280-353084	12/10/2016	00:22	1	TAL DEN	LRD
P:3005A	280-91197-E-4-C		280-353835	280-352794	11/30/2016	07:35	1	TAL DEN	SUR
A:6020	280-91197-E-4-C		280-353835	280-352794	11/30/2016	19:17	1	TAL DEN	LMT
P:3005A	280-91197-D-4-A		280-354033	280-353082	12/01/2016	14:05	1	TAL DEN	MLS
A:6020	280-91197-D-4-A		280-354033	280-353082	12/02/2016	04:18	1	TAL DEN	LMT
P:3005A	280-91197-D-4-A		280-354791	280-353082	12/01/2016	14:05	1	TAL DEN	MLS
A:6020	280-91197-D-4-A		280-354791	280-353082	12/07/2016	17:48	1	TAL DEN	LMT
A:300.0	280-91197-B-4		280-355156		12/13/2016	03:50	1	TAL DEN	AFB
A:350.1	280-91197-C-4		280-353602		11/29/2016	14:33	1	TAL DEN	MAS
A:353.2	280-91197-A-4		280-355401		12/13/2016	10:28	1	TAL DEN	AJA
A:SM 2320B	280-91197-B-4		280-353180		11/23/2016	13:07	1	TAL DEN	MMC
A:SM 2540C	280-91197-A-4		280-352854		11/23/2016	09:55	1	TAL DEN	JAP
A:SM 2540D	280-91197-B-4		280-352912		11/23/2016	15:39	1	TAL DEN	SVC
A:SM 5310B	280-91197-C-4		280-354778		12/07/2016	14:54	1	TAL DEN	CCJ

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

Laboratory Chronicle

Lab ID: 280-91197-5

Client ID: MW-24

Sample Date/Time: 11/17/2016 13:20 Received Date/Time: 11/18/2016 10:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	280-91197-F-5		480-333995		11/30/2016 13:17	1	TAL BUF	SWO
A:8260C	280-91197-F-5		480-333995		11/30/2016 13:17	1	TAL BUF	SWO
P:5030C	280-91197-K-5		480-333833		11/29/2016 14:54	1	TAL BUF	JWG
A:8260C SIM	280-91197-K-5		480-333833		11/29/2016 14:54	1	TAL BUF	JWG
P:3005A	280-91197-E-5-A		280-354936	280-353059	11/30/2016 07:35	1	TAL DEN	TEB
A:6010B	280-91197-E-5-A		280-354936	280-353059	12/08/2016 23:29	1	TAL DEN	CRR
P:3005A	280-91197-E-5-B		280-355067	280-353084	12/01/2016 07:31	1	TAL DEN	SUR
A:6010B	280-91197-E-5-B		280-355067	280-353084	12/10/2016 00:24	1	TAL DEN	LRD
P:3005A	280-91197-E-5-C		280-353835	280-352794	11/30/2016 07:35	1	TAL DEN	SUR
A:6020	280-91197-E-5-C		280-353835	280-352794	11/30/2016 19:21	1	TAL DEN	LMT
P:3005A	280-91197-D-5-A		280-354033	280-353082	12/01/2016 14:05	1	TAL DEN	MLS
A:6020	280-91197-D-5-A		280-354033	280-353082	12/02/2016 04:22	1	TAL DEN	LMT
P:3005A	280-91197-D-5-A		280-354791	280-353082	12/01/2016 14:05	1	TAL DEN	MLS
A:6020	280-91197-D-5-A		280-354791	280-353082	12/07/2016 17:52	1	TAL DEN	LMT
A:300.0	280-91197-B-5		280-355156		12/13/2016 04:10	1	TAL DEN	AFB
A:350.1	280-91197-C-5		280-353602		11/29/2016 14:35	1	TAL DEN	MAS
A:353.2	280-91197-A-5		280-355401		12/13/2016 10:28	1	TAL DEN	AJA
A:SM 2320B	280-91197-B-5		280-353180		11/23/2016 13:11	1	TAL DEN	MMC
A:SM 2540C	280-91197-A-5		280-353679		11/30/2016 09:04	1	TAL DEN	JAP
A:SM 2540D	280-91197-B-5		280-352912		11/23/2016 15:39	1	TAL DEN	SVC
A:SM 5310B	280-91197-C-5		280-354778		12/07/2016 15:08	1	TAL DEN	CCJ
A:Field Sampling	280-91197-A-5		280-352756		11/17/2016 14:20	1	TAL DEN	C1K

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

Laboratory Chronicle

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 480-333995/6		480-333995		11/30/2016 10:41	1	TAL BUF	SWO
A:8260C	MB 480-333995/6		480-333995		11/30/2016 10:41	1	TAL BUF	SWO
P:5030C	MB 480-333833/7		480-333833		11/29/2016 13:26	1	TAL BUF	JWG
A:8260C SIM	MB 480-333833/7		480-333833		11/29/2016 13:26	1	TAL BUF	JWG
P:5030C	MB 480-334146/8		480-334146		12/01/2016 02:26	1	TAL BUF	JWG
A:8260C SIM	MB 480-334146/8		480-334146		12/01/2016 02:26	1	TAL BUF	JWG
P:3005A	MB 280-353059/1-A		280-354936	280-353059	11/30/2016 07:35	1	TAL DEN	TEB
A:6010B	MB 280-353059/1-A		280-354936	280-353059	12/08/2016 22:34	1	TAL DEN	CRR
P:3005A	MB 280-353084/1-A		280-355067	280-353084	12/01/2016 07:31	1	TAL DEN	SUR
A:6010B	MB 280-353084/1-A		280-355067	280-353084	12/10/2016 00:12	1	TAL DEN	LRD
P:3005A	MB 280-352794/1-A		280-353835	280-352794	11/30/2016 07:35	1	TAL DEN	SUR
A:6020	MB 280-352794/1-A		280-353835	280-352794	11/30/2016 18:16	1	TAL DEN	LMT
P:3005A	MB 280-353082/1-A		280-354033	280-353082	12/01/2016 14:05	1	TAL DEN	MLS
A:6020	MB 280-353082/1-A		280-354033	280-353082	12/02/2016 02:32	1	TAL DEN	LMT
P:3005A	MB 280-353082/1-A		280-354791	280-353082	12/01/2016 14:05	1	TAL DEN	MLS
A:6020	MB 280-353082/1-A		280-354791	280-353082	12/07/2016 17:17	1	TAL DEN	LMT
A:300.0	MB 280-355156/6		280-355156		12/12/2016 11:18	1	TAL DEN	AFB
A:350.1	MB 280-353602/20		280-353602		11/29/2016 14:21	1	TAL DEN	MAS
A:353.2	MB 280-355401/1		280-355401		12/13/2016 10:28	1	TAL DEN	AJA
A:SM 2320B	MB 280-353180/5		280-353180		11/23/2016 12:24	1	TAL DEN	MMC
A:SM 2540C	MB 280-352854/1		280-352854		11/23/2016 09:55	1	TAL DEN	JAP
A:SM 2540C	MB 280-353679/1		280-353679		11/30/2016 09:04	1	TAL DEN	JAP
A:SM 2540D	MB 280-352912/2		280-352912		11/23/2016 15:39	1	TAL DEN	SVC
A:SM 5310B	MB 280-354778/4		280-354778		12/07/2016 12:52	1	TAL DEN	CCJ

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

Laboratory Chronicle

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 480-333995/4		480-333995		11/30/2016 09:54	1	TAL BUF	SWO
A:8260C	LCS 480-333995/4		480-333995		11/30/2016 09:54	1	TAL BUF	SWO
P:5030C	LCS 480-333833/4		480-333833		11/29/2016 12:13	1	TAL BUF	JWG
A:8260C SIM	LCS 480-333833/4		480-333833		11/29/2016 12:13	1	TAL BUF	JWG
P:5030C	LCS 480-334146/5		480-334146		12/01/2016 00:49	1	TAL BUF	JWG
A:8260C SIM	LCS 480-334146/5		480-334146		12/01/2016 00:49	1	TAL BUF	JWG
P:3005A	LCS 280-353059/2-A		280-354936	280-353059	11/30/2016 07:35	1	TAL DEN	TEB
A:6010B	LCS 280-353059/2-A		280-354936	280-353059	12/08/2016 22:36	1	TAL DEN	CRR
P:3005A	LCS 280-353084/2-A		280-355067	280-353084	12/01/2016 07:31	1	TAL DEN	SUR
A:6010B	LCS 280-353084/2-A		280-355067	280-353084	12/10/2016 00:14	1	TAL DEN	LRD
P:3005A	LCS 280-352794/2-A		280-353835	280-352794	11/30/2016 07:35	1	TAL DEN	SUR
A:6020	LCS 280-352794/2-A		280-353835	280-352794	11/30/2016 18:20	1	TAL DEN	LMT
P:3005A	LCS 280-353082/2-A		280-354033	280-353082	12/01/2016 14:05	1	TAL DEN	MLS
A:6020	LCS 280-353082/2-A		280-354033	280-353082	12/02/2016 02:35	1	TAL DEN	LMT
P:3005A	LCS 280-353082/2-A		280-354791	280-353082	12/01/2016 14:05	1	TAL DEN	MLS
A:6020	LCS 280-353082/2-A		280-354791	280-353082	12/07/2016 17:21	1	TAL DEN	LMT
A:300.0	LCS 280-355156/4		280-355156		12/12/2016 10:38	1	TAL DEN	AFB
A:350.1	LCS 280-353602/18		280-353602		11/29/2016 14:17	1	TAL DEN	MAS
A:SM 2320B	LCS 280-353180/4		280-353180		11/23/2016 12:20	1	TAL DEN	MMC
A:SM 2540C	LCS 280-352854/2		280-352854		11/23/2016 09:55	1	TAL DEN	JAP
A:SM 2540C	LCS 280-353679/2		280-353679		11/30/2016 09:04	1	TAL DEN	JAP
A:SM 2540D	LCS 280-352912/1		280-352912		11/23/2016 15:39	1	TAL DEN	SVC
A:SM 5310B	LCS 280-354778/3		280-354778		12/07/2016 12:37	1	TAL DEN	CCJ

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 480-333833/5		480-333833		11/29/2016 12:37	1	TAL BUF	JWG
A:8260C SIM	LCSD 480-333833/5		480-333833		11/29/2016 12:37	1	TAL BUF	JWG
P:5030C	LCSD 480-334146/6		480-334146		12/01/2016 01:13	1	TAL BUF	JWG
A:8260C SIM	LCSD 480-334146/6		480-334146		12/01/2016 01:13	1	TAL BUF	JWG
A:300.0	LCSD 280-355156/5		280-355156		12/12/2016 10:58	1	TAL DEN	AFB
A:350.1	LCSD 280-353602/19		280-353602		11/29/2016 14:19	1	TAL DEN	MAS
A:SM 2540C	LCSD 280-353679/3		280-353679		11/30/2016 09:04	1	TAL DEN	JAP

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 280-355156/3		280-355156		12/12/2016 10:18	1	TAL DEN	AFB

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

Laboratory Chronicle

Lab ID: MS

Client ID: N/A

Sample Date/Time: 11/17/2016 11:42 Received Date/Time: 11/18/2016 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	480-109984-E-3 MS		480-333995		11/30/2016 18:18	1	TAL BUF	SWO
A:8260C	480-109984-E-3 MS		480-333995		11/30/2016 18:18	1	TAL BUF	SWO
P:3005A	280-91196-C-1-B MS		280-354936	280-353059	11/30/2016 07:35	1	TAL DEN	TEB
A:6010B	280-91196-C-1-B MS		280-354936	280-353059	12/08/2016 22:51	1	TAL DEN	CRR
P:3005A	280-91292-C-1-B MS		280-355067	280-353084	12/01/2016 07:31	1	TAL DEN	SUR
A:6010B	280-91292-C-1-B MS		280-355067	280-353084	12/10/2016 00:32	1	TAL DEN	LRD
P:3005A	280-91068-E-1-C MS		280-353835	280-352794	11/30/2016 07:35	1	TAL DEN	SUR
A:6020	280-91068-E-1-C MS		280-353835	280-352794	11/30/2016 18:31	1	TAL DEN	LMT
A:300.0	280-91292-A-11 MS		280-355156		12/13/2016 00:11	1	TAL DEN	AFB
A:350.1	440-166999-B-1 MS		280-353602		11/29/2016 14:25	1	TAL DEN	MAS
A:SM 5310B	280-91182-G-1 MS		280-354778		12/07/2016 13:36	1	TAL DEN	CCJ

Lab ID: MSD

Client ID: N/A

Sample Date/Time: 11/17/2016 11:42 Received Date/Time: 11/18/2016 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	480-109984-E-3 MSD		480-333995		11/30/2016 18:41	1	TAL BUF	SWO
A:8260C	480-109984-E-3 MSD		480-333995		11/30/2016 18:41	1	TAL BUF	SWO
P:3005A	280-91196-C-1-C MSD		280-354936	280-353059	11/30/2016 07:35	1	TAL DEN	TEB
A:6010B	280-91196-C-1-C MSD		280-354936	280-353059	12/08/2016 22:54	1	TAL DEN	CRR
P:3005A	280-91292-C-1-C MSD		280-355067	280-353084	12/01/2016 07:31	1	TAL DEN	SUR
A:6010B	280-91292-C-1-C MSD		280-355067	280-353084	12/10/2016 00:34	1	TAL DEN	LRD
P:3005A	280-91068-E-1-D MSD		280-353835	280-352794	11/30/2016 07:35	1	TAL DEN	SUR
A:6020	280-91068-E-1-D MSD		280-353835	280-352794	11/30/2016 18:35	1	TAL DEN	LMT
A:300.0	280-91292-A-11 MSD		280-355156		12/13/2016 00:31	1	TAL DEN	AFB
A:350.1	440-166999-B-1 MSD		280-353602		11/29/2016 14:27	1	TAL DEN	MAS
A:SM 5310B	280-91182-G-1 MSD		280-354778		12/07/2016 13:51	1	TAL DEN	CCJ

Quality Control Results

Client: Waste Management

Job Number: 280-91197-1

Laboratory Chronicle

Lab ID: DU

Client ID: N/A

Sample Date/Time: 11/17/2016 10:45 Received Date/Time: 11/19/2016 08:40

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:300.0	280-91292-A-11 DU		280-355156		12/12/2016 23:51	1	TAL DEN	AFB
A:SM 2320B	280-91292-A-3 DU		280-353180		11/23/2016 12:34	1	TAL DEN	MMC
A:SM 2540C	280-91498-B-2 DU		280-353679		11/30/2016 09:04	1	TAL DEN	JAP

Lab References:

TAL BUF = TestAmerica Buffalo

TAL DEN = TestAmerica Denver

Chain of Custody Record

Client Information Client Contact: Mr. Patrick Madej Company: Waste Management Address: 2615 Davis Street City: San Leandro State, Zip: CA, 94577 Phone: 612-940-2980 Email: sscrubar@scsanswers.com Project Name: WA02(Olympic View Samitary LF) Event Desc: Quarterly GW App/III - Mar Jun Sep Dec Site: Washington		Sampler: Sam Gruber Lab PM: Sara, Betsy A E-Mail: betsy.sara@testamericainc.com Phone: 612-940-2980		Carrier Tracking No(s): 910491516971 Job #: 010491516960 COC No: 280-17318-3224.1 Page: of 1	
Due Date Requested: Standard TAT Requested (days): PO #: WO #: Project #: 28002692 SSOW#:		Analysis Requested Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> Y Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/> Y TDS/AI/CS/IS/NO3(cad) <input checked="" type="checkbox"/> X Dissolved Metals <input checked="" type="checkbox"/> X Ammonia/TOC <input checked="" type="checkbox"/> X 8260B - long list (TA Buffalo) <input checked="" type="checkbox"/> X 8260B SIM (TA Buffalo) <input checked="" type="checkbox"/> X Total Metals <input checked="" type="checkbox"/> X TSS <input checked="" type="checkbox"/> X Total Arsenic (direct sub to ARI) <input checked="" type="checkbox"/> X			
Sample Identification MW-33A MW-33C Dup 1 MW-24 Trip blank		Sample Date 11/17/16 ↓ ↓ ↓	Sample Time 950 1050 1100 1320 - -	Sample Type (C=Comp, G=grab) B ↓ ↓ ↓ - -	Matrix (W=water, S=solid, O=wastewater, BT=tissue, A=air) W ↓ ↓ ↓ - -
Preservation Code:		Preservation Codes: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 G - Amchlor H - Ascorbic Acid I - Ice U - Acetone J - DI Water V - MCAA W - ph 4-5 K - EDTA L - EDA Z - other (specify) Other:			
Special Instructions/Note: Short Hold: NO3(cad) Arsenic - Direct sub to ARI		Total Number of containers: 11 11 11 11 2			
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months			
Empty Kit Relinquished by:		Special Instructions/QC Requirements:			
Relinquished by: [Signature] Date/Time: 11/17/16 1500 Company: SCS		Method of Shipment:			
Relinquished by: [Signature] Date/Time: 11-18-16 1000 Company: TAB		Received by: [Signature] Date/Time: 11-18-16 1000 Company: TAB			
Relinquished by: [Signature] Date/Time: 11-18-16 1000 Company: TAB		Received by: [Signature] Date/Time: 11-18-16 1000 Company: TAB			
Custody Seal No.: 876302, 876301 Custody Seals Intact: Δ Yes Δ No		Cooler Temperature(s) °C and Other Remarks: 0.4, 3.1 IFS 4-0-2 transferred SPC 11-18-16			

FIELD INFORMATION FORM



Site Name: MSL
 Site No.: Sample Point: 42-24
 Sample ID:

This Waste Management Field Information Form is Required
 This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO
 PURGE DATE (MM DD YY): 11/17/16 PURGE TIME (2400 Hr Clock): 12:57 ELAPSED HRS (hrs:min): 23
 WATER VOL IN CASING (Gallons): ACTUAL VOL PURGED (Gallons): WELL VOLS PURGED:

PURGE/SAMPLE EQUIPMENT
 Purging and Sampling Equipment... Dedicated: Y or N
 Purging Device: C A-Submersible Pump D-Bailer
 Sampling Device: C B-Peristaltic Pump E-Piston Pump
 X-Other: C-QED Bladder Pump F-Dipper/Bottle
 Filter Device: Y or N 0.45 μ or μ (circle or fill in)
 Filter Type: A A-In-line Disposable C-Vacuum
 B-Pressure X-Other
 Sample Tube Type: D A-Teflon C-PVC X-Other:
 B-Stainless Steel D-Polypropylene

WELL DATA
 Well Elevation (at TOC): (ft) Depth to Water (DTW) (from TOC): 322 (ft)
 Groundwater Elevation (site datum, from TOC): (ft)
 Total Well Depth (from TOC): (ft) Stick Up (from ground elevation): (ft)
 Casing ID: (in) Casing Material:
Note: Total Well Depth, Stick Up, Casing Id, etc, are optional and can be from historical data, unless required by State/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit (gpm/ft)	pH (std)	Conductance (SC/EC) (μ mhos/cm @ 25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
113100	300	6.76	1197	12.19		1370	1135	
113105		6.62	1126	11.79		1071	1116	
113108		6.63	1125	11.78		1050	1100	
113111		6.63	1126	11.79		1037	1091	
113114		6.63	1127	11.72		1027	1085	
113117		6.63	1126	11.75		1025	1081	3220
113120	✓	6.63	1127	11.66	2.12	1024	1079	

Suggested range for 3 consec. readings or note Permit/State requirements:
 pH: ± 0.2 Conductance: $\pm 3\%$ Temp: $-$ Turbidity: $-$ D.O.: $\pm 10\%$ eH/ORP: ± 25 mV DTW: Stabilize

FIELD DATA
 SAMPLE DATE (MM DD YY): 11/17/16 pH (std): 6.63 CONDUCTANCE (umhos/cm @ 25°C): 127 TEMP. (°C): 11.66
 TURBIDITY (ntu): 2.12 DO (mg/L-ppm): 0.24 eH/ORP (mV): 1079 Other: 7.22 Units: 1320
Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site).

Sample Appearance: Clear Odor: - Color: - Other: -
 Weather Conditions (required daily, or as conditions change): Direction/Speed: Outlook: Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required):

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):
11/17/16 Sam Graber [Signature] SCS
 Date Name Signature Company

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

Chain of Custody Record

Client Information (Sub Contract Lab)		Lab PM: Sara, Betsy A	Carrier Tracking No(s): 280-378736.1							
Client Contact: Shipping/Receiving		E-Mail: betsy.sara@testamericainc.com	Page: Page 1 of 1							
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Oregon	Jobs #: 280-91197-1							
Address: 10 Hazelwood Drive, Amherst, NY, 14228-2298		Due Date Requested: 12/7/2016	Analysis Requested							
City: Amherst, State, Zip: NY, 14228-2298		TAT Requested (days):								
Phone: 716-691-2600 (Tel) 716-691-7991 (Fax)		PO #:	M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 X - EDTA Y - EDA Z - other (specify)							
Email:		WO #:								
Project Name: WA02/Olympic View Sanitary LF		Project #: 28002692	A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:							
Site: WA02/Olympic View Sanitary LF		SSOW#:								
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/soil, B= tissue, A=air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C/5030C (MOD) Appendix II Volatiles	8260C SIM/5030C (MOD) Local Method	Total Number of Containers	Special Instructions/Note:
MW-33C (280-91197-1)	11/17/16	10:50 Pacific	Water	Water	X	X	X	X	6	
TRIP BLANK (280-91197-2)	11/17/16	Pacific	Water	Water	X	X	X	X	2	
MW-33A (280-91197-3)	11/17/16	09:50 Pacific	Water	Water	X	X	X	X	6	
DUP1 (280-91197-4)	11/17/16	11:00 Pacific	Water	Water	X	X	X	X	6	
MW-24 (280-91197-5)	11/17/16	13:20 Pacific	Water	Water	X	X	X	X	6	
<p>Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analysis & 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/test/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 compliance to TestAmerica Laboratories, Inc.</p>										
Possible Hazard Identification										
<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months										
Special Instructions/QC Requirements:										
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2										
Empty Kit Relinquished By: _____ Date: _____ Time: _____										
Relinquished by: _____ Date/Time: 11-22-16 17:55 Company: Per TAD										
Relinquished by: _____ Date/Time: _____ Company: _____										
Relinquished by: _____ Date/Time: _____ Company: _____										
Custody Seals Intact: _____ Custody Seal No.: _____										
Cooler Temperature(s) °C and Other Remarks: HI 2.90 C										

Client Information (Sub Contract Lab) Client Contact: Shipping/Receiving Company: TestAmerica Laboratories, Inc. Address: 10 Hazelwood Drive, City: Amherst State/Zip: NY, 14228-2298 Phone: 716-691-2600(Tel) 716-691-7991(Fax) Email:		Lab PM: Sara, Betsy A E-Mail: betsy.sara@testamericainc.com State of Origin: Washington Carrier Tracking No(s): Page: Page 1 of 1 Job #: 280-91197-1	
Due Date Requested: 12/7/2016 TAT Requested (days):		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:	
Project #: 28002692 Site: WAO2Olympic View Sanitary LF		Analysis Requested: 8260C/8030C (MOD) Appendix II Volatiles 8260C/SIM/5030C (MOD) Local Method Total Number of Containers: 6	
Sample Identification - Client ID (Lab ID) MW-33C (280-91197-1) TRIP BLANK (280-91197-2) MW-33A (280-91197-3)		Special Instructions/Note: 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/test/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 compliance to TestAmerica Laboratories, Inc.	
Sample Date 11/17/16 11/17/16 11/17/16		Sample Time 10:50 Pacific Pacific 09:50 Pacific	
Sample Type (C=comp, G=grab) Matrix (W=water, S=solid, O=wastewat, BT=tissue, A=AU)		Field Filtered Sample (Yes or No) 8260C/8030C (MOD) Appendix II Volatiles 8260C/SIM/5030C (MOD) Local Method	
Preservation Code Water Water Water		Special Instructions/Note: 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/test/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 compliance to TestAmerica Laboratories, Inc.	
Possible Hazard Identification Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2 Empty Kit Relinquished by: Date: Time: Method of Shipment: Relinquished by: Date/Time: Company: Received by: Date/Time: Company:			
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months Special Instructions/QC Requirements:			
Cooler Temperature(s) °C and Other Remarks: # 3.3°C			

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-91197-1

Login Number: 91197
List Number: 1
Creator: True, Joshua A

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.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	N/A	
COC is filled out with all pertinent information.	N/A	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the sample IDs on the containers and the COC.	N/A	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-91197-1

Login Number: 91197
List Number: 2
Creator: Hulbert, Michael J

List Source: TestAmerica Buffalo
List Creation: 11/23/16 03:29 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	

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-91197-1

Login Number: 91197
List Number: 3
Creator: Hulbert, Michael J

List Source: TestAmerica Buffalo
List Creation: 11/29/16 03:02 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	3.3 #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	

APPENDIX C

2016 ANNUAL TIME SERIES, TREND TEST
AND PREDICTION LIMIT EVALUATION

Olympic View Sanitary Landfill
Annual Statistical Evaluation & Summary
2016 Monitoring Year

Prepared for:

SCS ENGINEERS

2405 140th Ave NE, Ste 107
Bellevue, Washington 98005
(425) 746-4600

Prepared by:

GeoChem Applications
Geochemical and Statistical Data Analysis

3941 Park Drive, Suite 20-249
El Dorado Hills, CA 95762
916 ♦ 939 ♦ 2307
www.geochemapplications.com

FEBRUARY 2017

CONTENTS:

1. *Statistical Trend Analysis (showing status through Q4 2016)*
 2. *Prediction Limits for Detection Monitoring*
 - a. *2016 Prediction Limits (showing status through Q4 2016)*
 - b. *Updated Prediction Limits for Use in 2017 Monitoring Year*
 3. *2016 Annual UCL Calculations for Preliminary Groundwater Cleanup Goals*
-

1. Statistical Trend Analysis

- Trend Results Summary Table (showing status through Q4 2016) (Table 1-1)
- Time-Series Graphs Depicting Significant Trends for “Trend Test A”
- Time-Series Graphs Depicting Significant Trends for “Trend Test B”

TABLE 1-1

Results of Sen's Non-Parametric Test for Trend

FOURTH QUARTER 2016 REPORT

Trend Test Period: January 2005 through December 2016

Trend Test Wells:

- Compliance Wells: MW-15R, MW-34A, MW-34C, MW-39, MW-42, MW-43
- Performance Wells: MW-2B1, MW-4, MW-19C, MW-20, MW-23A, MW-24
- Downgradient Wells: MW-29A*, MW-32, MW-33A*, MW-33C, MW-36A
- Upgradient Wells MW-13A, MW-13B, MW-16, MW-35,

*sampled semi-annually

Trend Test A = all organic parameters listed in Appendix I and Appendix II of WAC 173-351-990 that have been detected at least once in at least one of 22 wells comprising the network of 1) compliance, 2) performance, 3) downgradient, and 4) upgradient site monitoring wells, during the trend test period. This includes the following constituents:

	Significant Increasing Trends	Significant Decreasing Trends
1,1-Dichloroethane	None	None
1,2-Dichloroethene (total)	None	None
1,2-Dichlorobenzene	None	None
1,4-Dichlorobenzene	None	None
Acetone	None	None
Benzene	None	None
Carbon Disulfide	None	None
Chlorobenzene	None	None
Chlorodifluoromethane	None	None
Chloroethane	None	None
Chloroform	None	None
Chloromethane	None	None
cis-1,2-dichloroethene	None	None
Dichlorodifluoromethane	None	None
Ethyl Ether	None	None
Methylene Chloride	None	None
Naphthalene	None	None
n-Butyl Alcohol	None	None
tert-Butyl Alcohol	None	None
Tetrachloroethene	None	None
Tetrahydrofuran	None	None
Toluene	None	None
trans-1,2-Dichloroethene	None	None
Trichloroethene	None	MW-19C (graph 509)
Vinyl Chloride	None	MW-19C (graph 530) MW-34C (graph 540)

TABLE 1-1

Chloride	None	MW-13B (graph 191) MW-15R (graph 192) MW-16 (graph 193) MW-19C (graph 194) MW-23A (graph 196) MW-2B1 (graph 199) MW-33A (graph 201) MW-34A (graph 203) MW-34C (graph 204) MW-35 (graph 205) MW-36A (graph 206) MW-4 (graph 208)
Chromium, total	None	None
Cobalt, total	None	None
Copper, total	None	None
Iron, total	None	MW-24 (graph 281)
Lead, total	None	None
Magnesium, dissolved	None	MW-15R (graph 318) MW-23A (graph 322) MW-24 (graph 323) MW-2B1 (graph 325) MW-33A (graph 327) MW-34A (graph 329) MW-34C (graph 330) MW-42 (graph 335)
Manganese, total	None	None
Nickel, total	None	None
Nitrate (as N)	MW-20 (graph 384) MW-35 (graph 394) MW-36A (graph 395)	None
pH	MW-32 (graph 410) MW-34C (graph 414) MW-42 (graph 419)	None
Potassium, dissolved	MW-42 (graph 440)	None
Selenium, total	None	None
Silver, total	None	None
Sodium, dissolved		MW-15R (graph 486) MW-19C (graph 488) MW-23A (graph 490) MW-24 (graph 491) MW-2B1 (graph 493) MW-34A (graph 497) MW-34C (graph 498)

TABLE 1-1

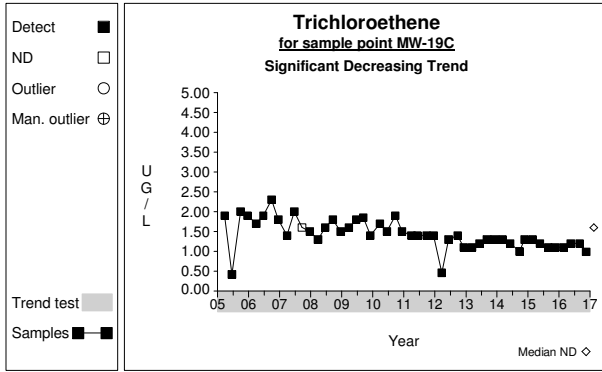
Specific Conductivity	None	MW-15R (graph 507) MW-19C (graph 509) MW-23A (graph 511) MW-24 (graph 512) MW-29A (graph 513) MW-2B1 (graph 514) MW-32 (graph 515) MW-33A (graph 516) MW-34A (graph 518) MW-34C (graph 519) MW-4 (graph 523)
Sulfate	MW-24 (graph 533)	MW-13A (graph 526) MW-13B (graph 527) MW-19C (graph 530) MW-23A (graph 532) MW-36A (graph 542) MW-4 (graph 544) MW-42 (graph 545)
Temperature	MW-13A (graph 547) MW-15R (graph 549) MW-20 (graph 552) MW-2B1 (graph 556) MW-32 (graph 557) MW-33C (graph 559) MW-34A (graph 560) MW-34C (graph 561) MW-35 (graph 562) MW-4 (graph 565)	MW-24 (graph 554)
Thallium, total	None	None
Total Dissolved Solids	None	MW-15R (graph 591) MW-23A (graph 595) MW-24 (graph 596) MW-2B1 (graph 598) MW-32 (graph 599) MW-33A (graph 600) MW-34C (graph 603)
Total Organic Carbon	None	None
Vanadium, total	None	None
Zinc, total	None	None

TABLE 1-1

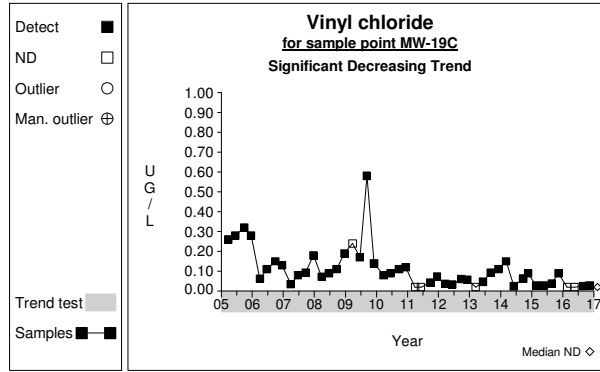
Trend Test B = all metals and groundwater quality parameters listed in Appendix I and Appendix II of WAC (173-351-990)

	Significant Increasing Trends	Significant Decreasing Trends
Alkalinity, bicarbonate (as CaCO ₃)	MW-13B (graph 2) MW-35 (graph 16)	MW-15R (graph 3) MW-23A (graph 7) MW-24 (graph 8) MW-2B1 (graph 10) MW-34A (graph 14) MW-34C (graph 15) MW-36A (graph 17)
Alkalinity, total (as CaCO ₃)	MW-13B (graph 23) MW-35 (graph 37)	MW-15R (graph 24) MW-23A (graph 28) MW-24 (graph 29) MW-2B1 (graph 31) MW-34A (graph 35) MW-34C (graph 36) MW-36A (graph 38)
Ammonia (as N)	None	MW-29A (graph 51) MW-43 (graph 63)
Antimony, total	None	None
Arsenic, total	None	MW-19C (graph 89) MW-24 (graph 92) MW-35 (graph 100)
Barium, total	None	MW-32 (graph 116)
Beryllium, total	None	None
Cadmium, total	None	None
Calcium, dissolved	None	MW-15R (graph 171) MW-23A (graph 175) MW-24 (graph 176) MW-29A (graph 177) MW-2B1 (graph 178) MW-32 (graph 179) MW-33A (graph 180) MW-34A (graph 182) MW-34C (graph 183) MW-36A (graph 185)

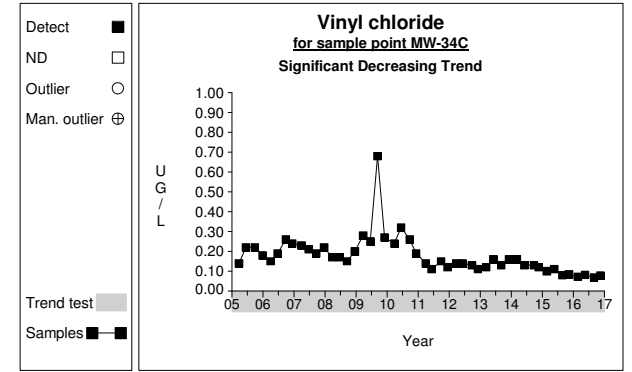
Time Series



Graph 509

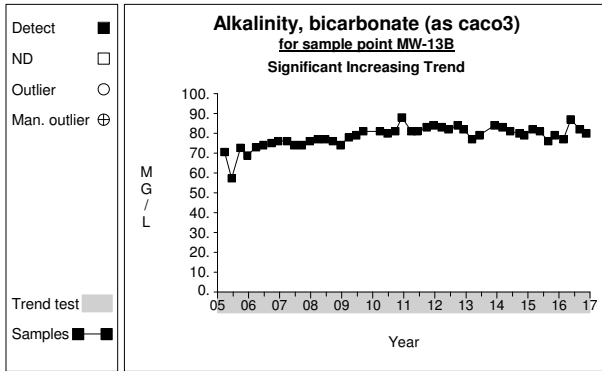


Graph 530

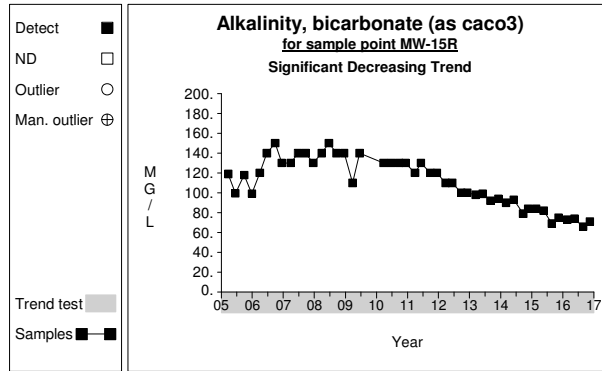


Graph 540

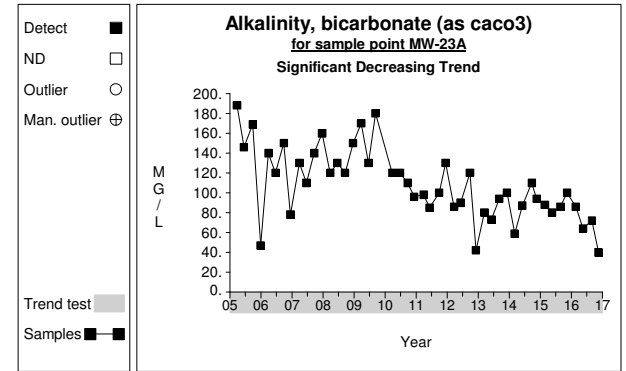
Time Series



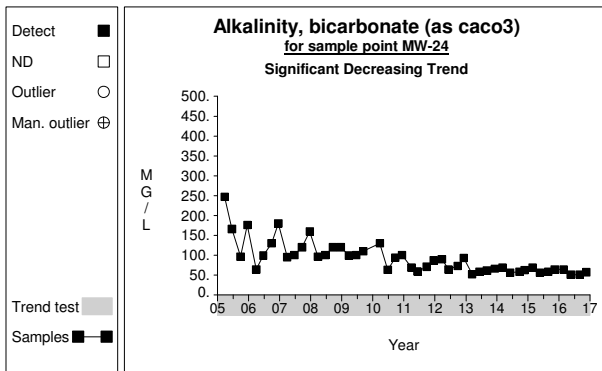
Graph 2



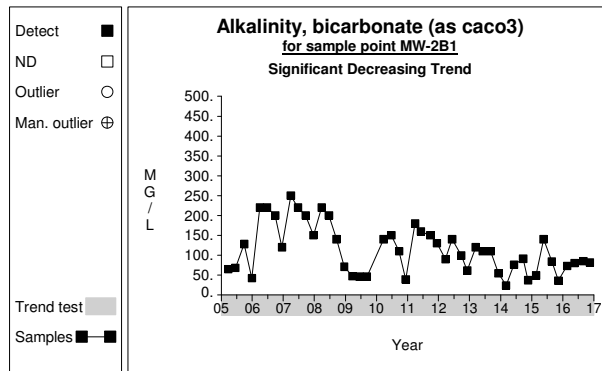
Graph 3



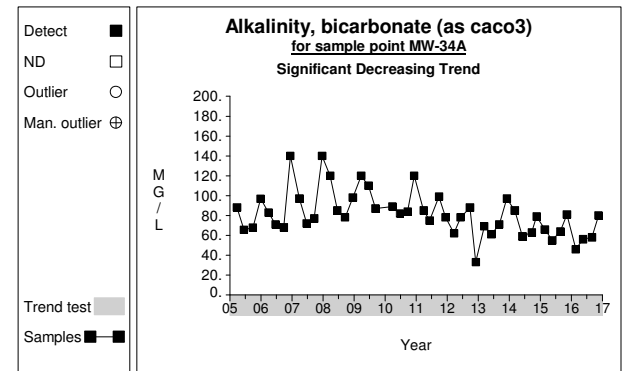
Graph 7



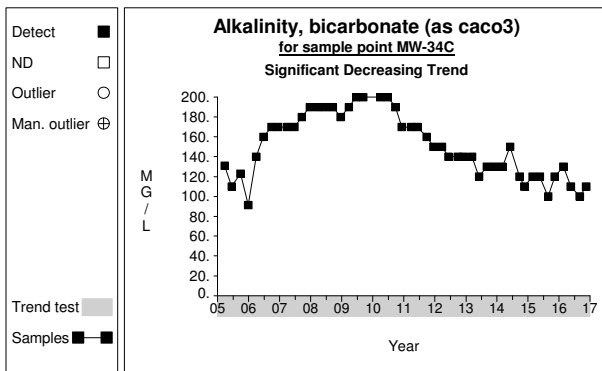
Graph 8



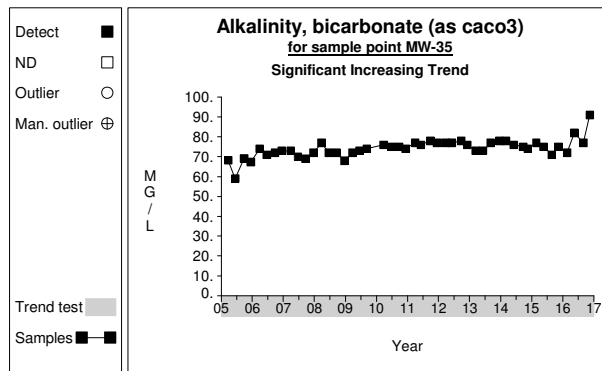
Graph 10



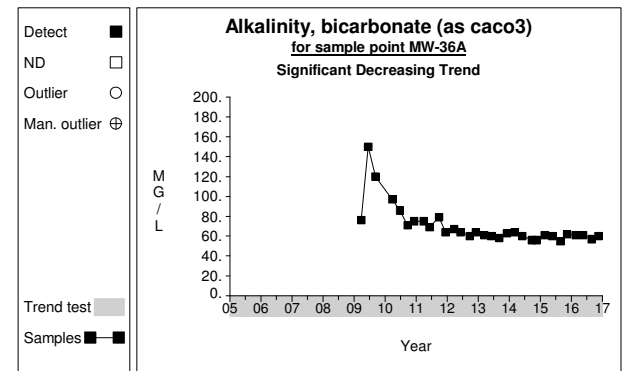
Graph 14



Graph 15

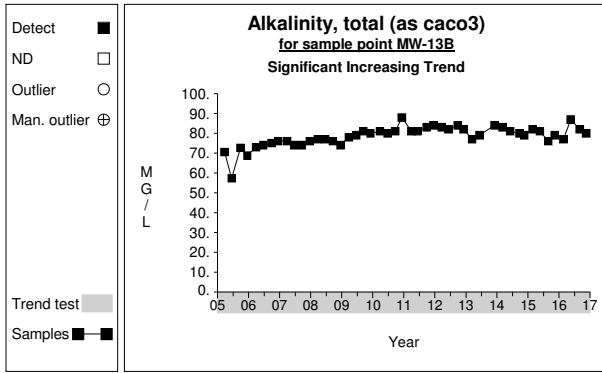


Graph 16

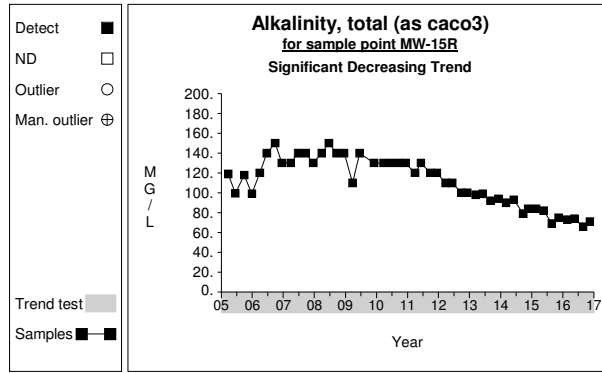


Graph 17

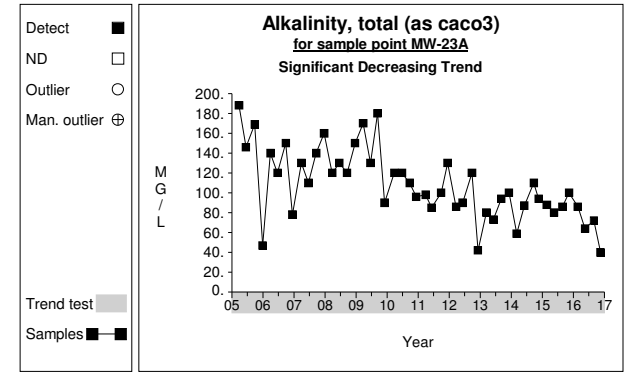
Time Series



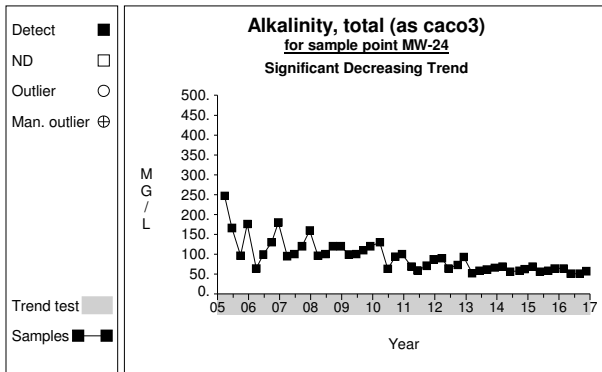
Graph 23



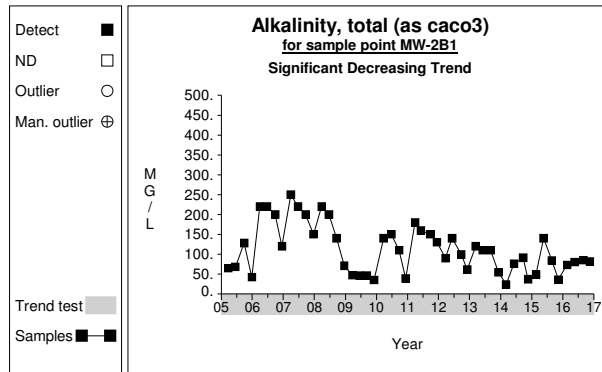
Graph 24



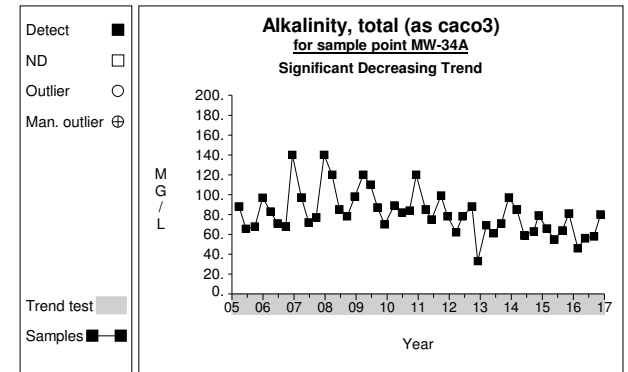
Graph 28



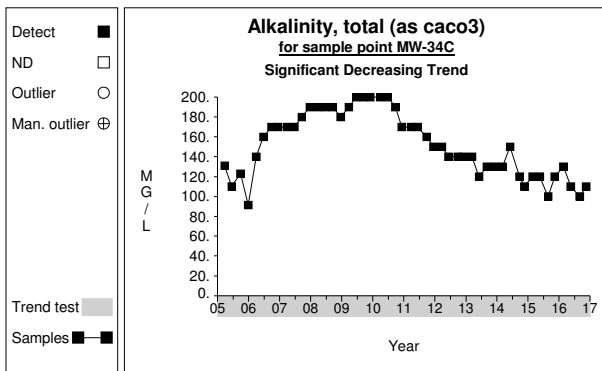
Graph 29



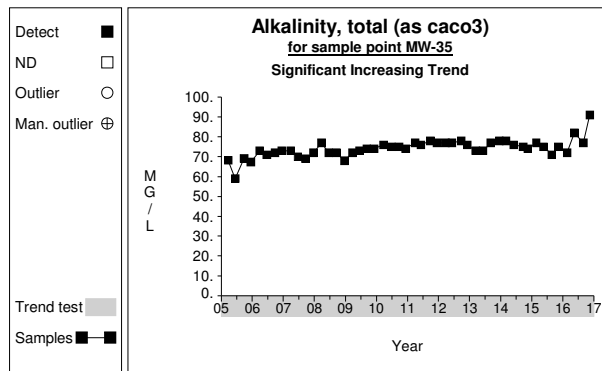
Graph 31



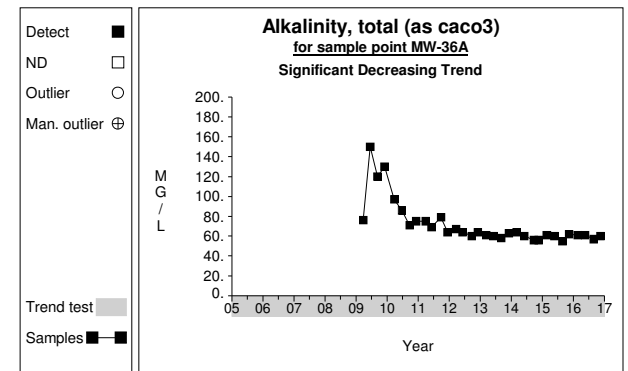
Graph 35



Graph 36

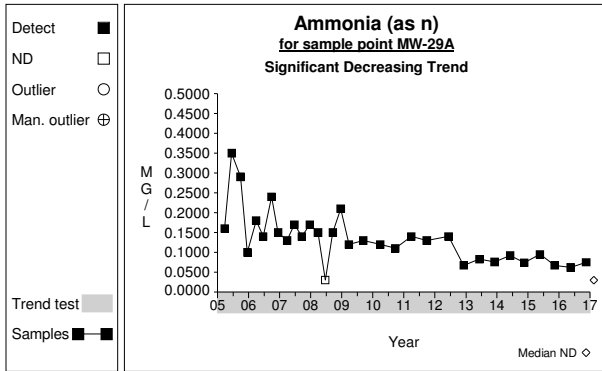


Graph 37

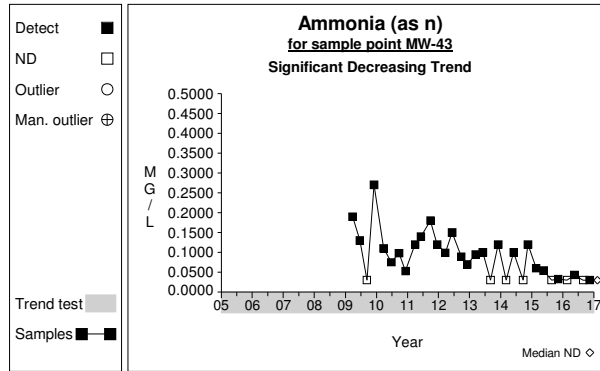


Graph 38

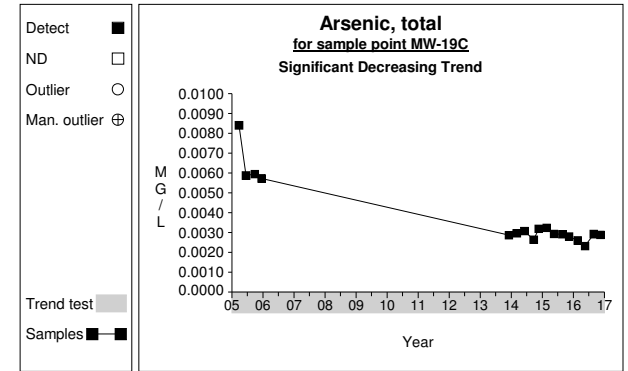
Time Series



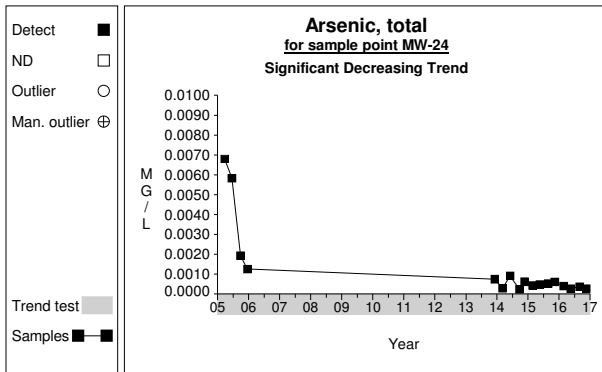
Graph 51



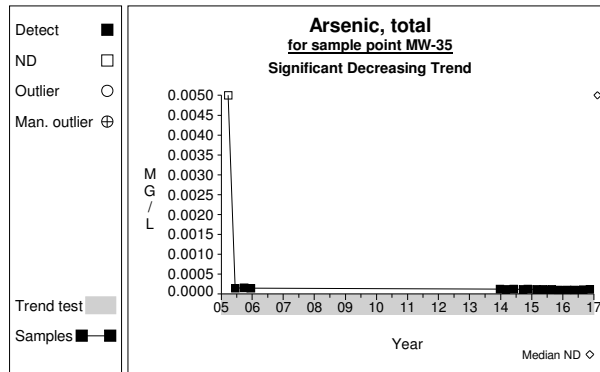
Graph 63



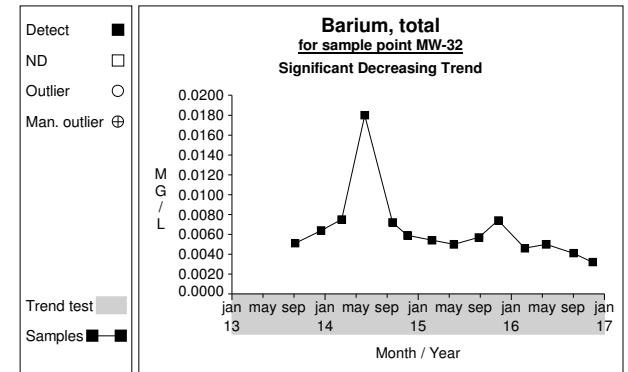
Graph 89



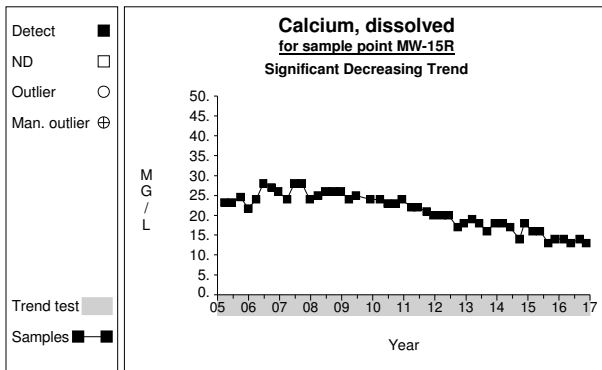
Graph 92



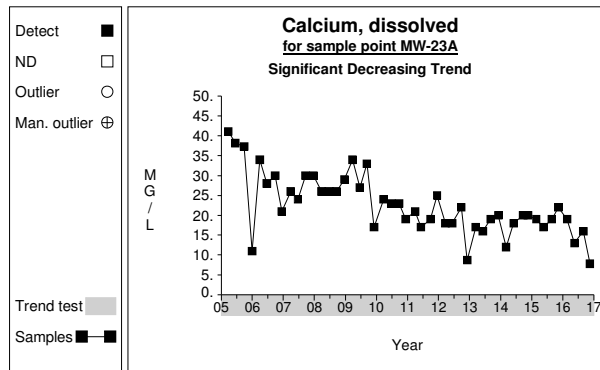
Graph 100



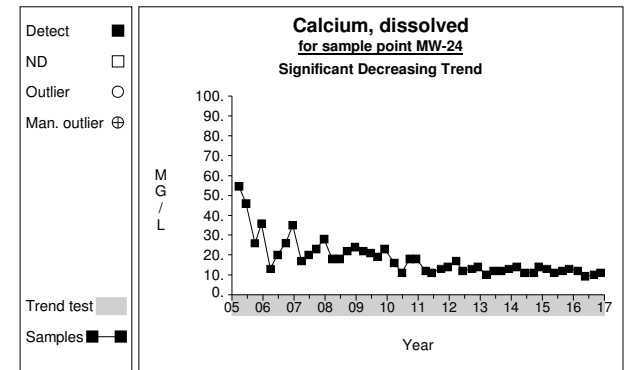
Graph 116



Graph 171

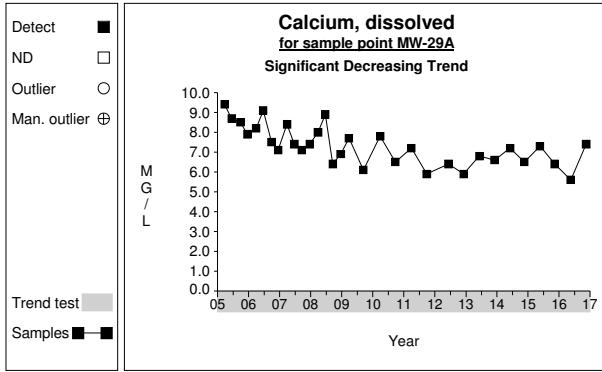


Graph 175

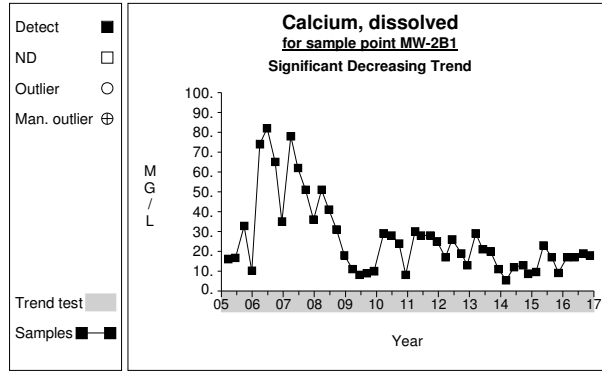


Graph 176

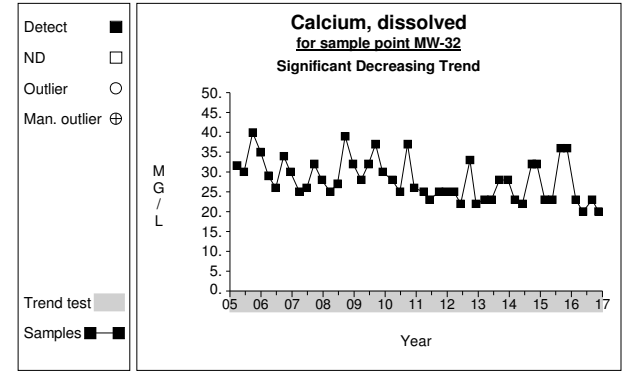
Time Series



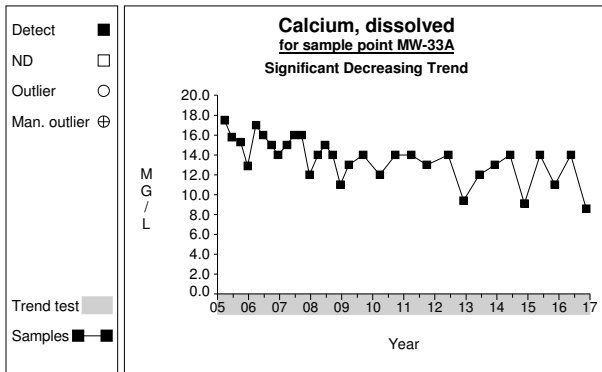
Graph 177



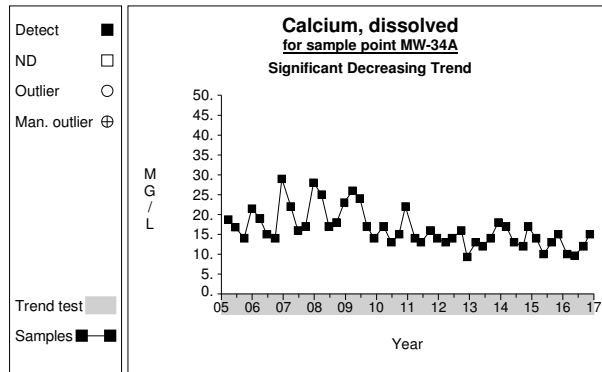
Graph 178



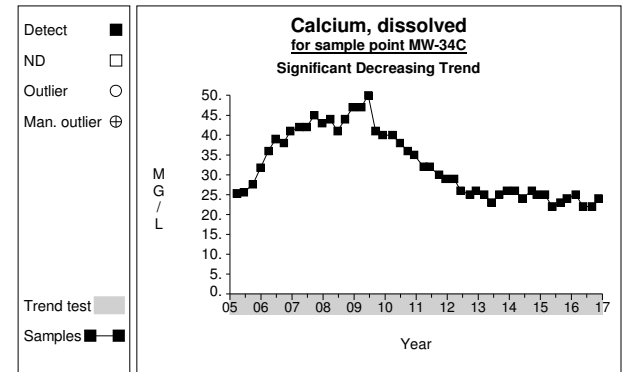
Graph 179



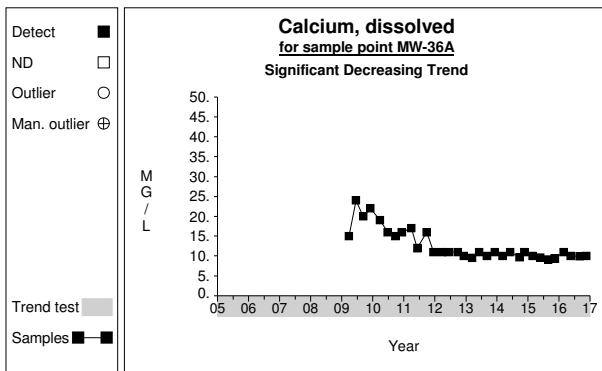
Graph 180



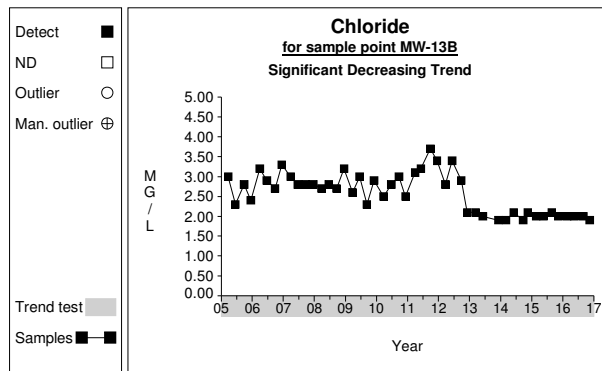
Graph 182



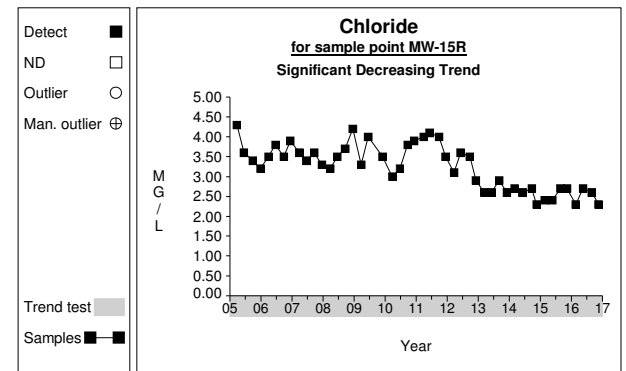
Graph 183



Graph 185

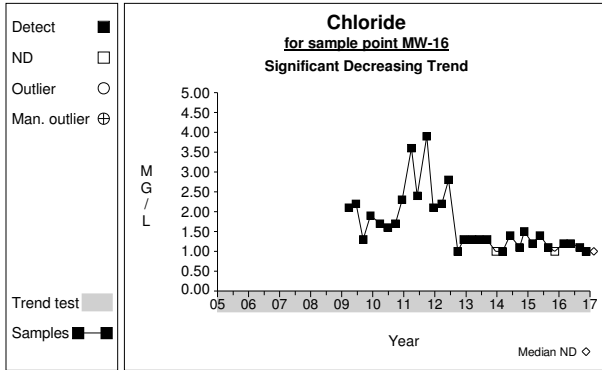


Graph 191

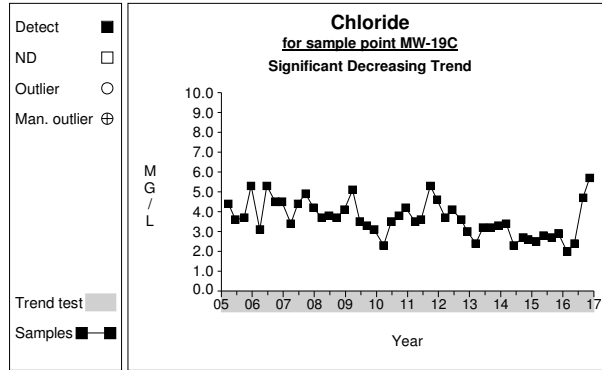


Graph 192

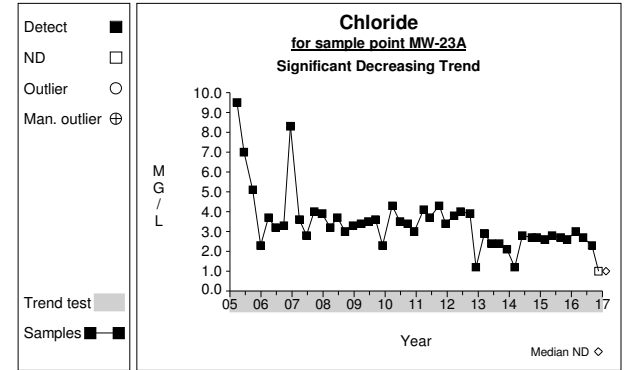
Time Series



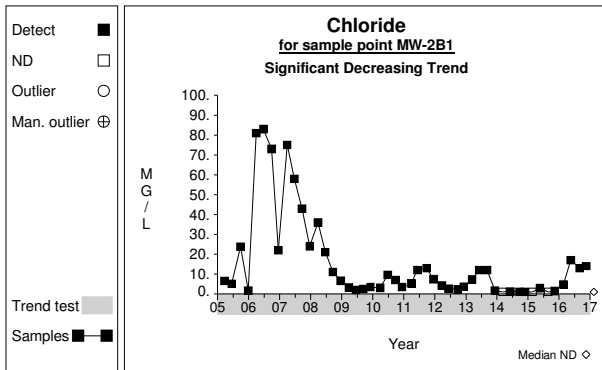
Graph 193



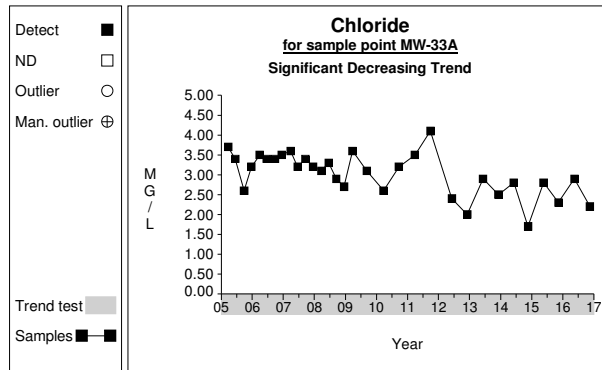
Graph 194



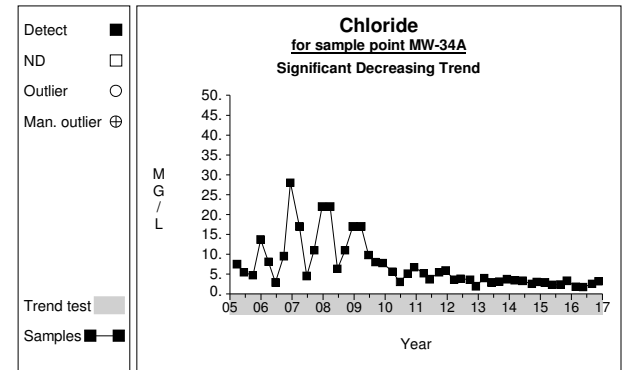
Graph 196



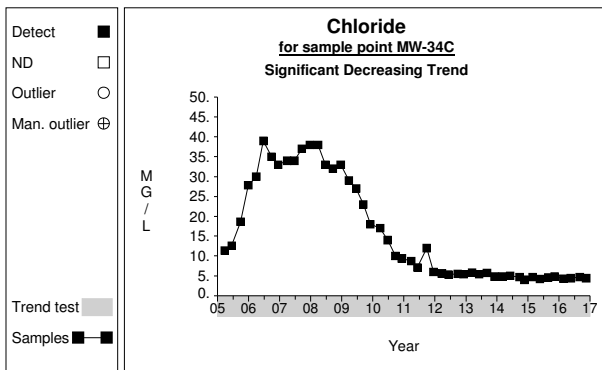
Graph 199



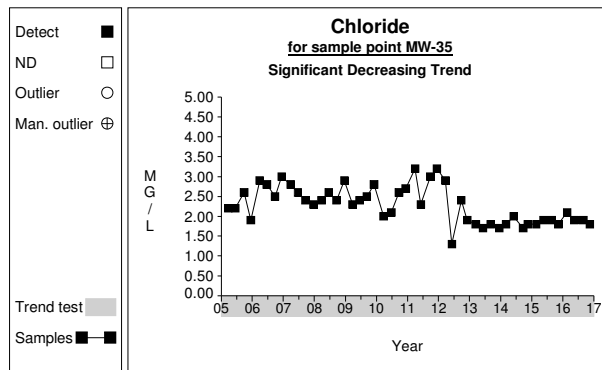
Graph 201



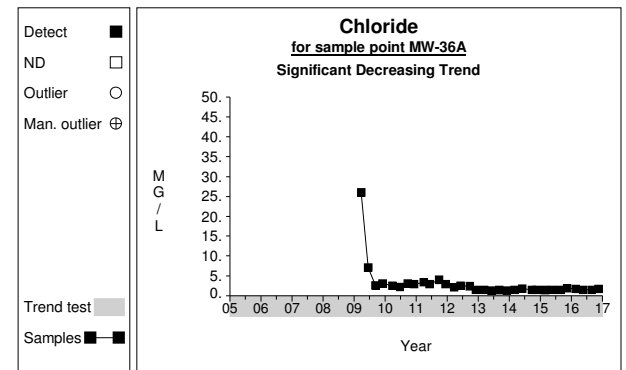
Graph 203



Graph 204

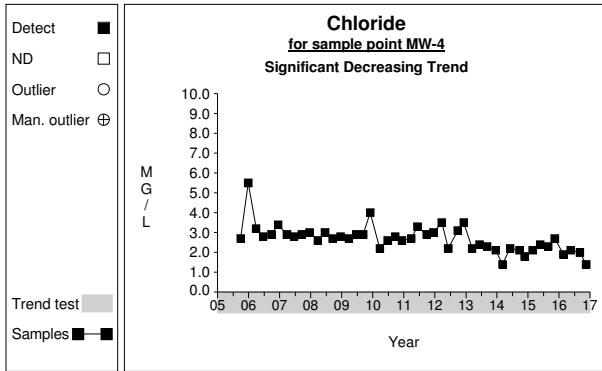


Graph 205

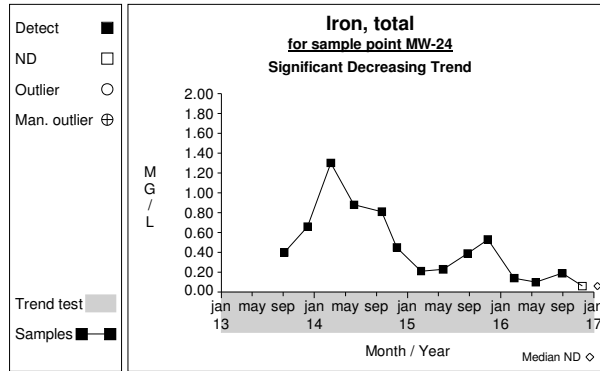


Graph 206

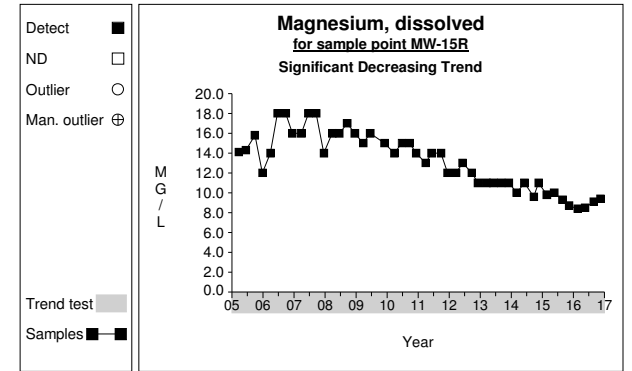
Time Series



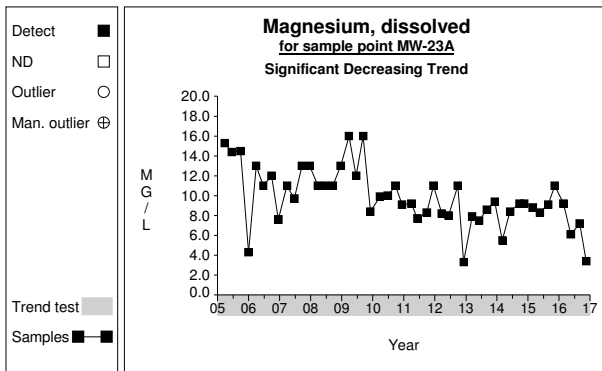
Graph 208



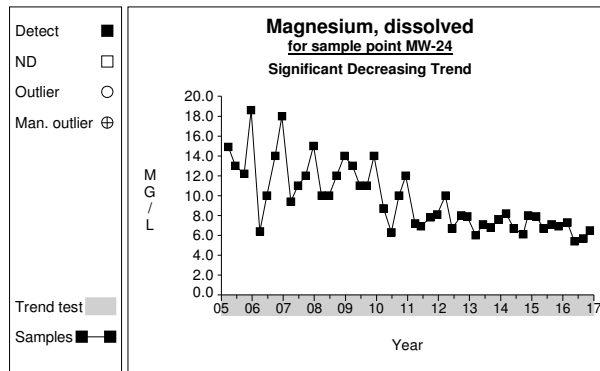
Graph 281



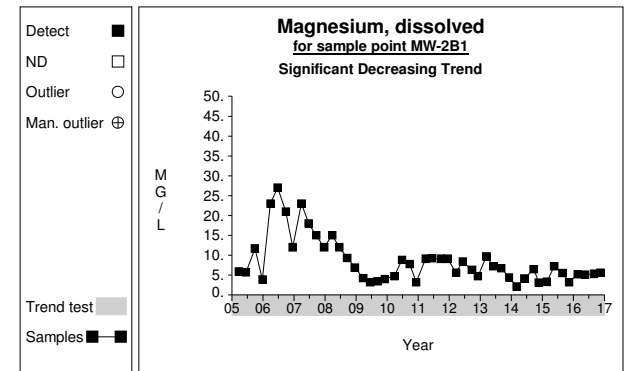
Graph 318



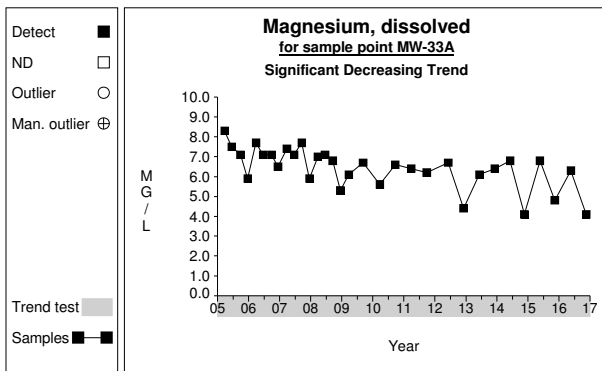
Graph 322



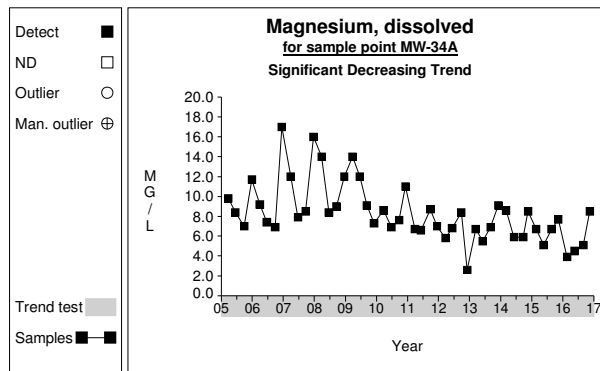
Graph 323



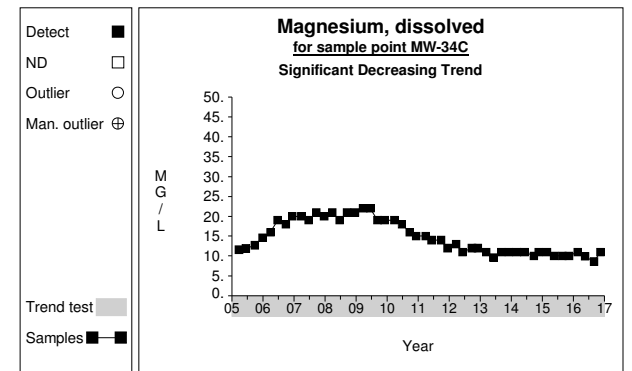
Graph 325



Graph 327

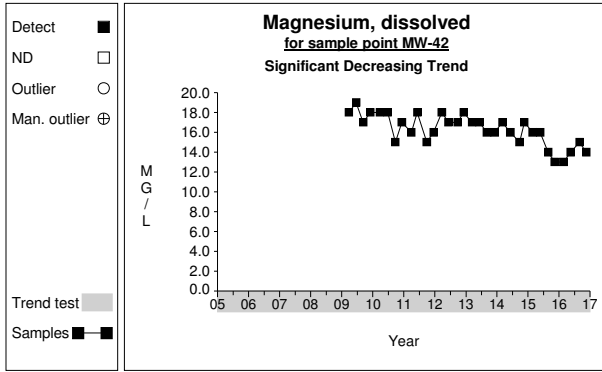


Graph 329

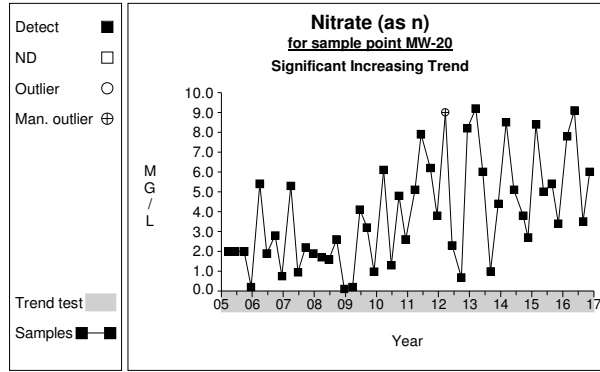


Graph 330

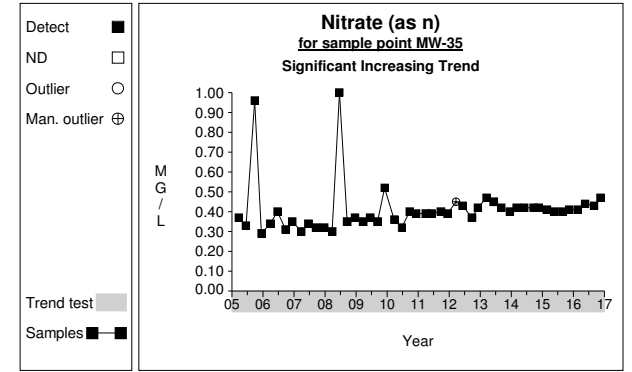
Time Series



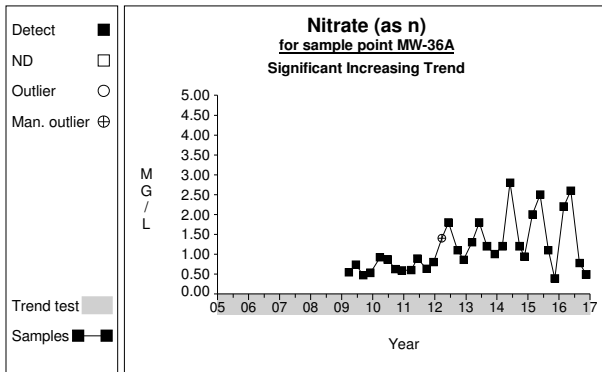
Graph 335



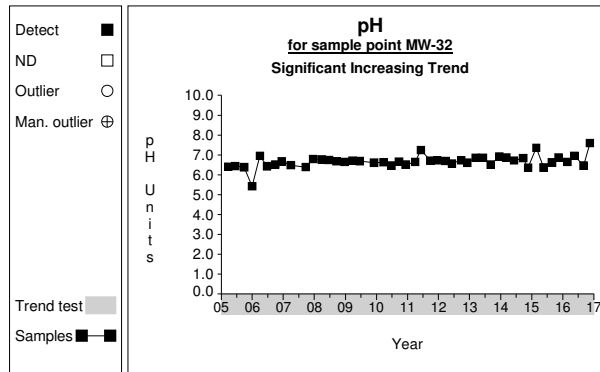
Graph 384



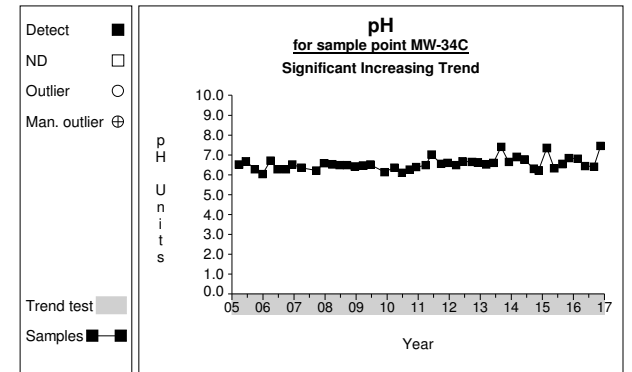
Graph 394



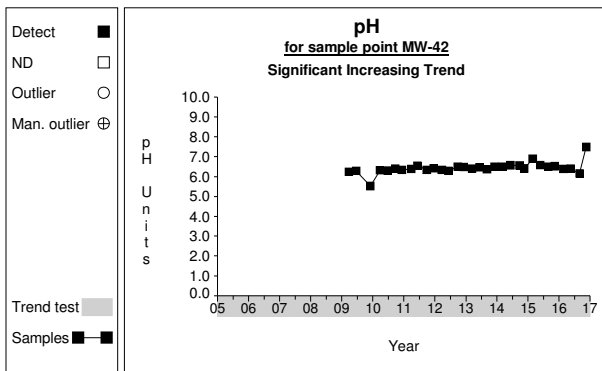
Graph 395



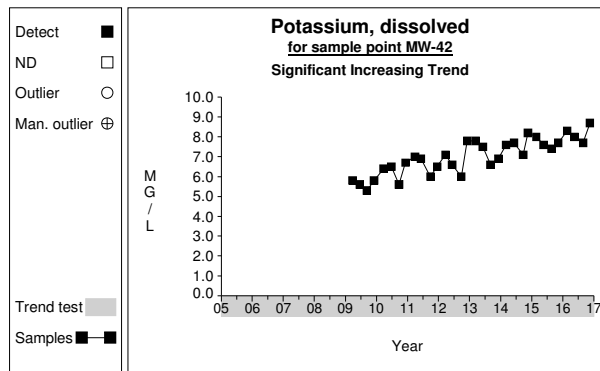
Graph 410



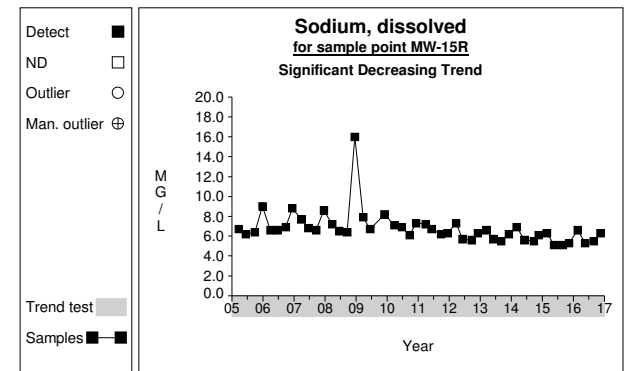
Graph 414



Graph 419

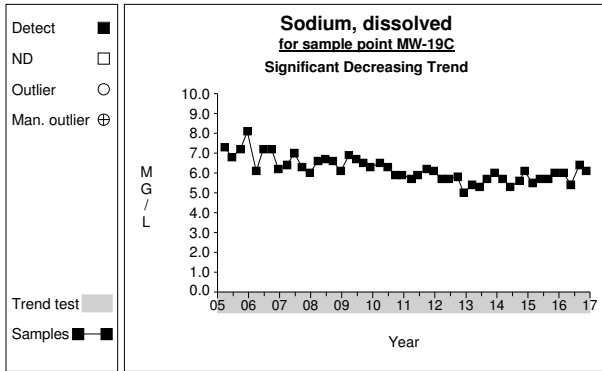


Graph 440

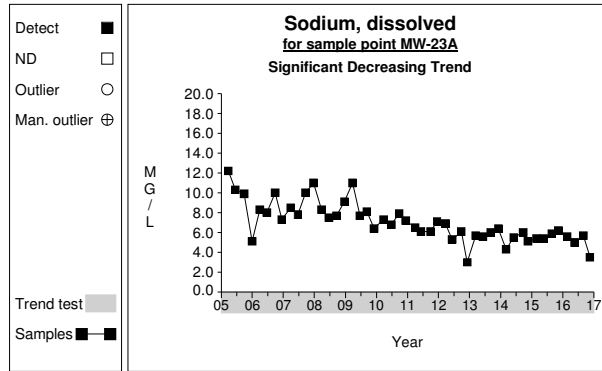


Graph 486

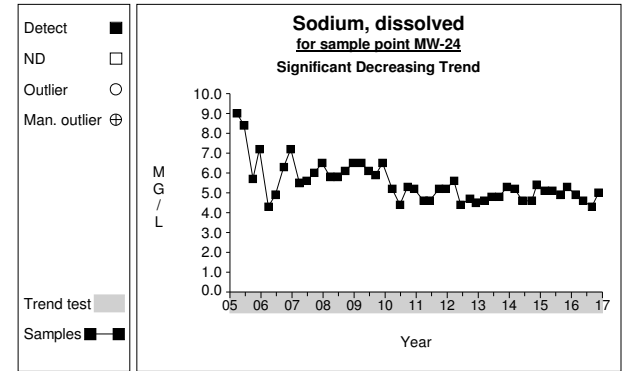
Time Series



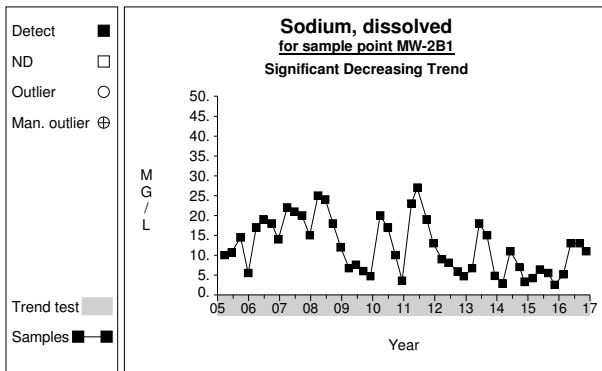
Graph 488



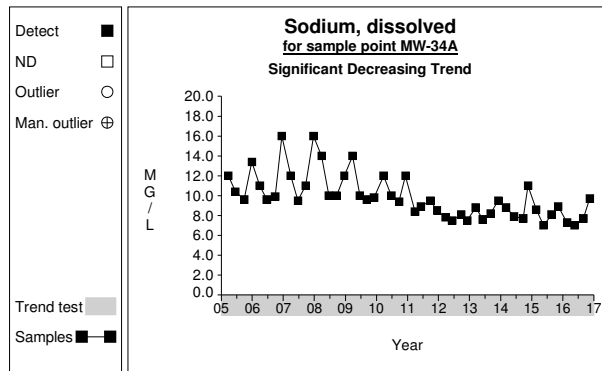
Graph 490



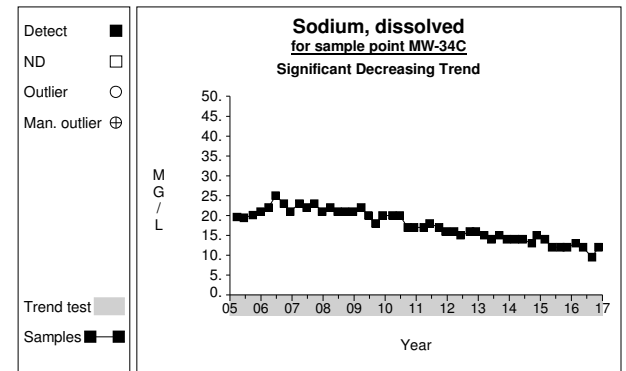
Graph 491



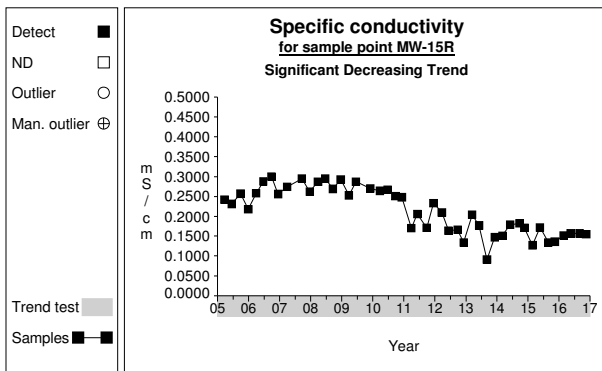
Graph 493



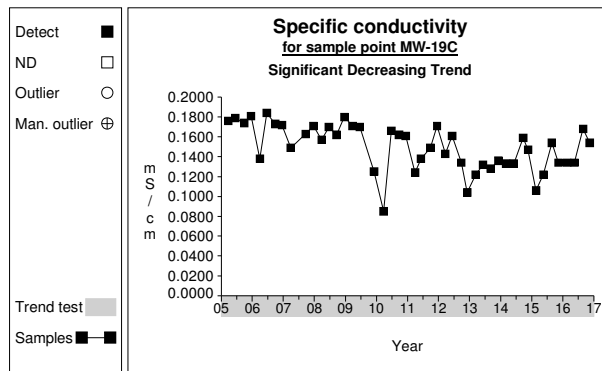
Graph 497



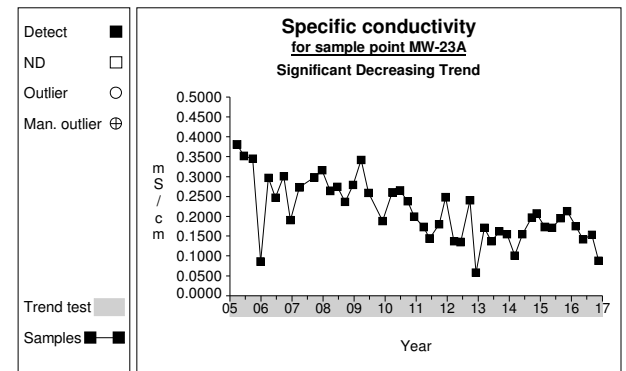
Graph 498



Graph 507

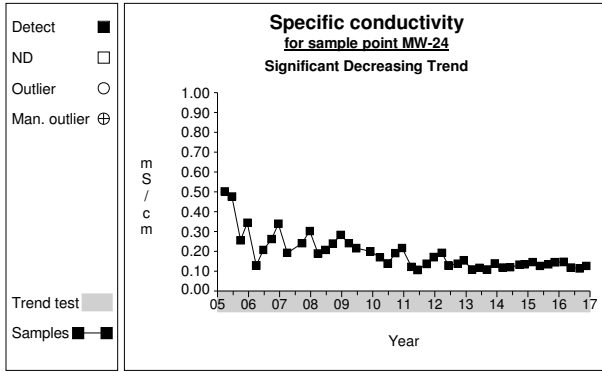


Graph 509

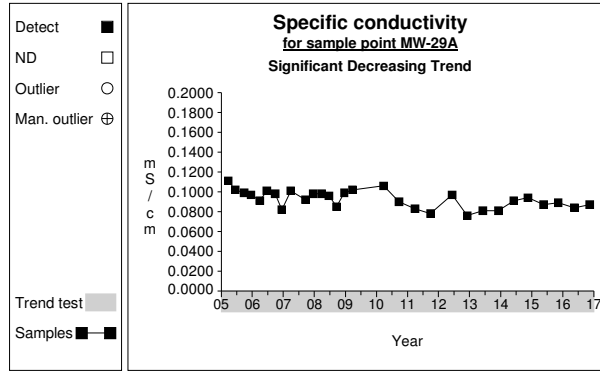


Graph 511

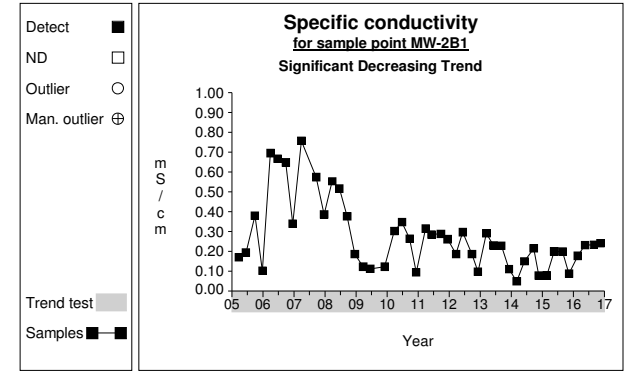
Time Series



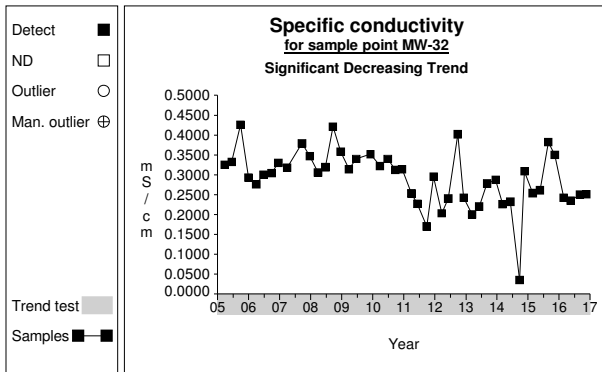
Graph 512



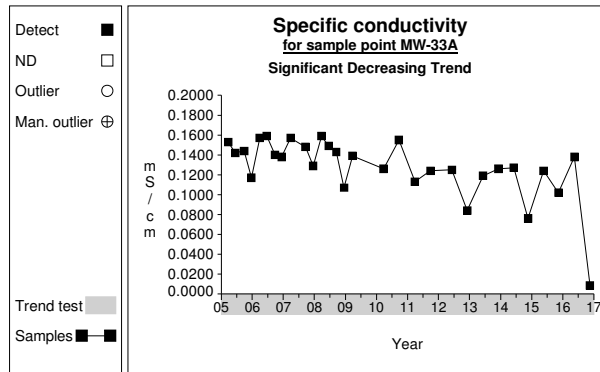
Graph 513



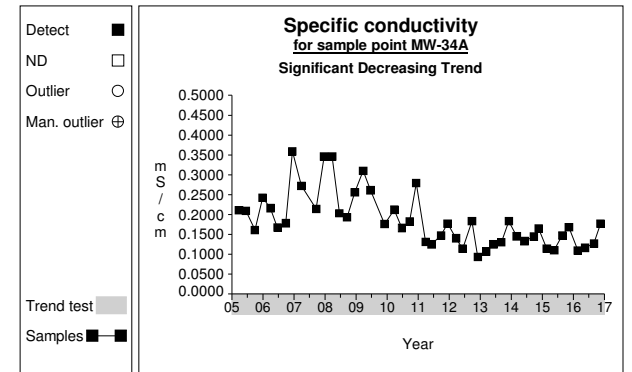
Graph 514



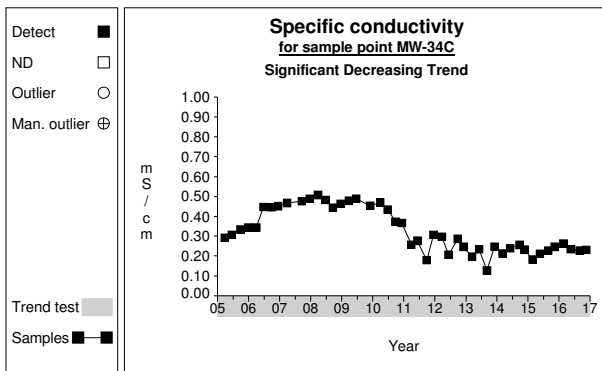
Graph 515



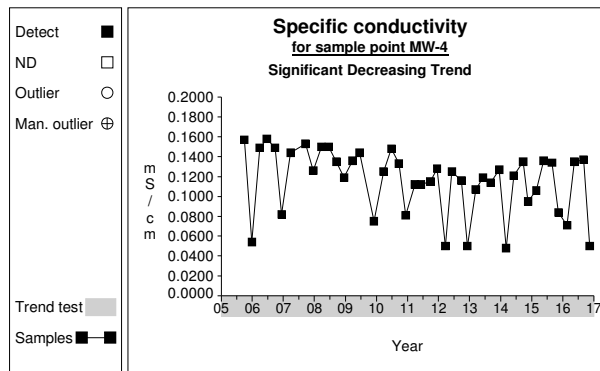
Graph 516



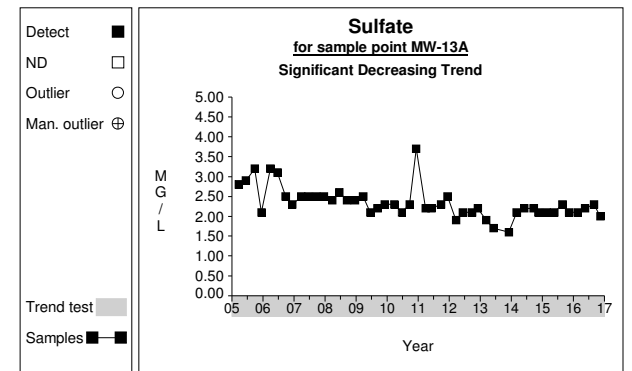
Graph 518



Graph 519

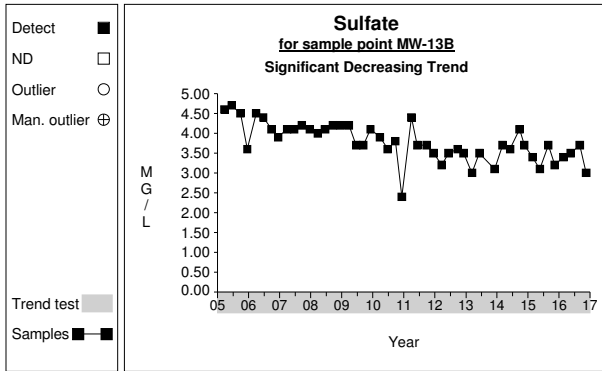


Graph 523

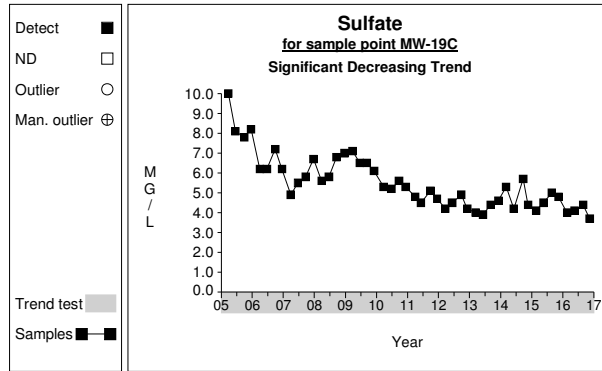


Graph 526

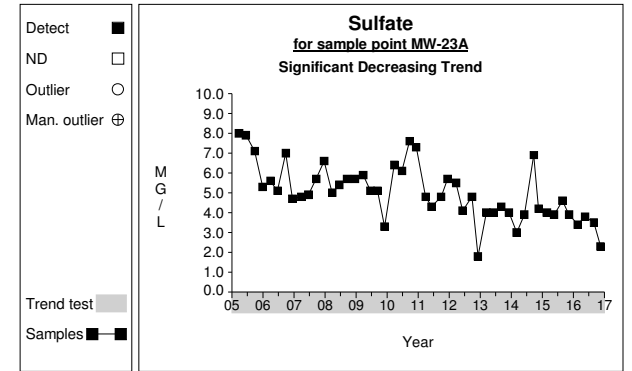
Time Series



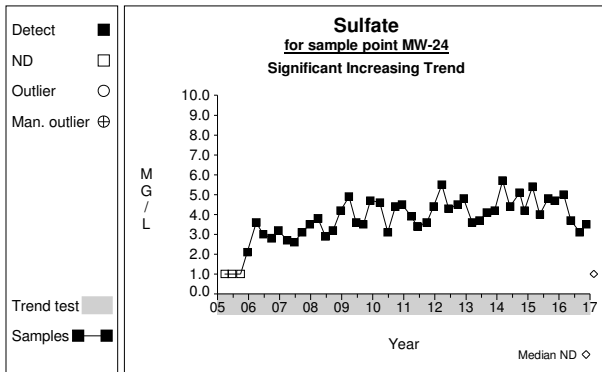
Graph 527



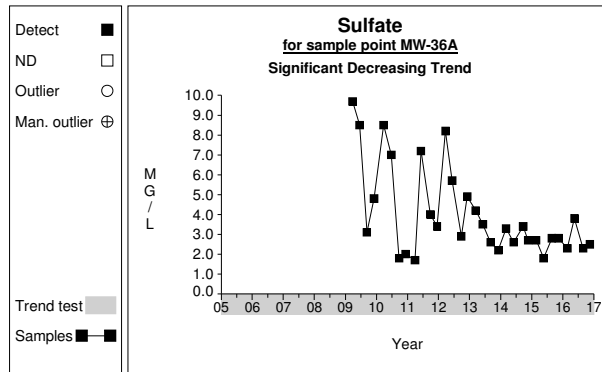
Graph 530



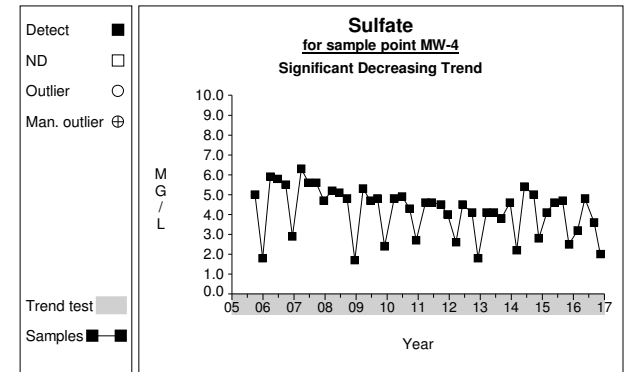
Graph 532



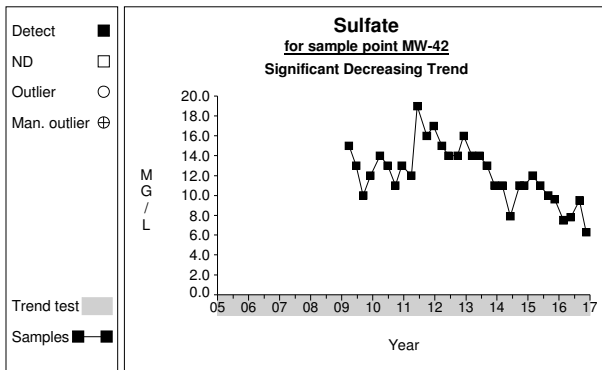
Graph 533



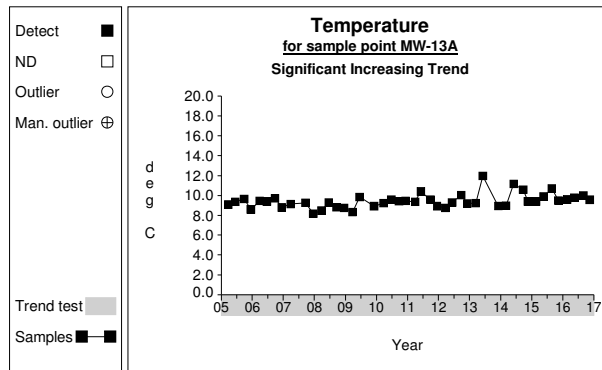
Graph 542



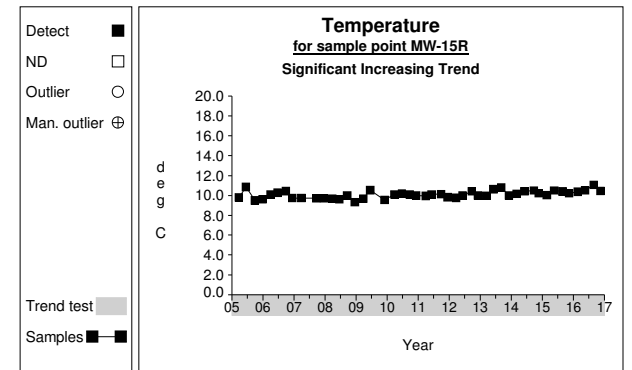
Graph 544



Graph 545

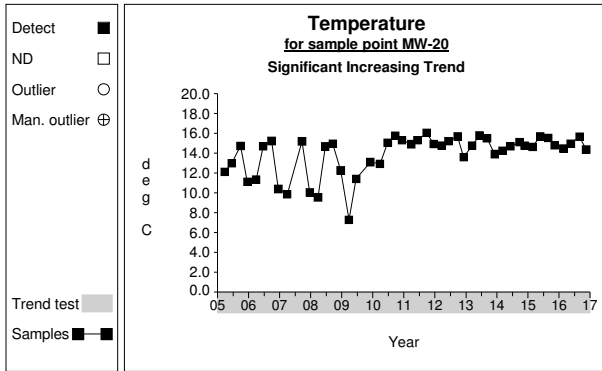


Graph 547

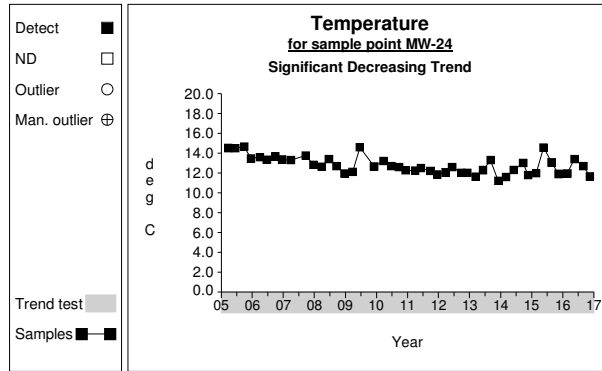


Graph 549

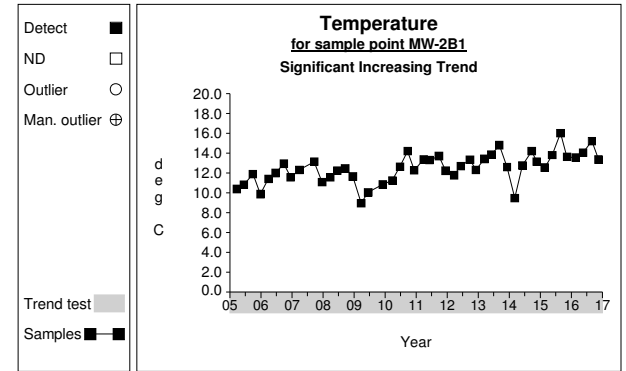
Time Series



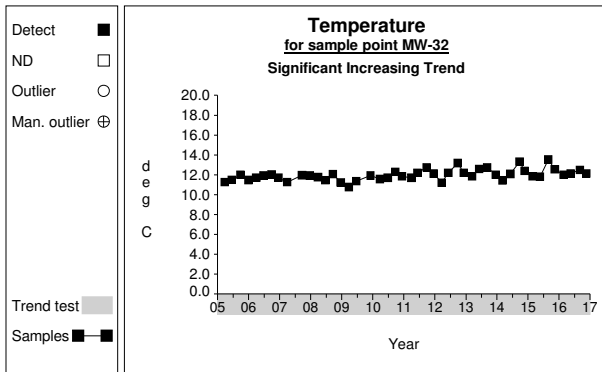
Graph 552



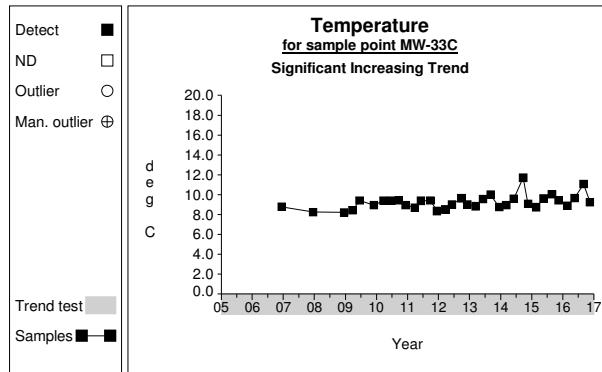
Graph 554



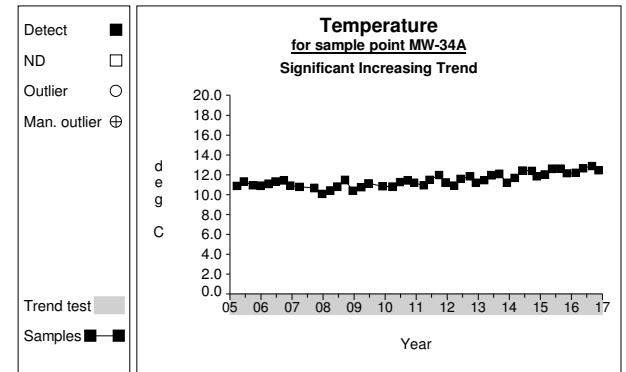
Graph 556



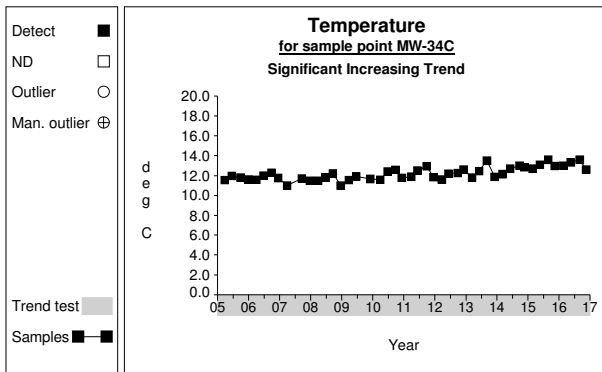
Graph 557



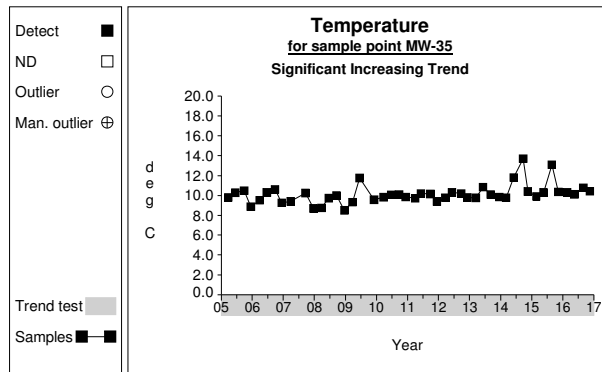
Graph 559



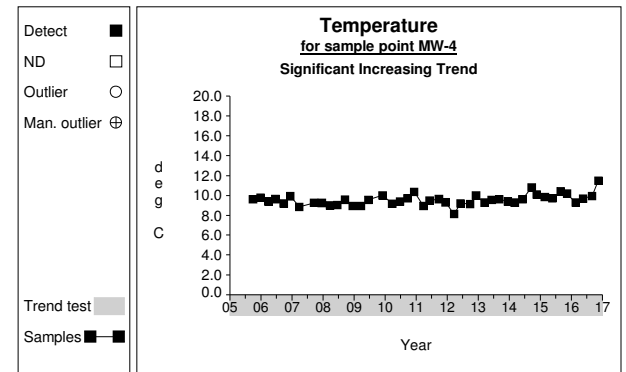
Graph 560



Graph 561

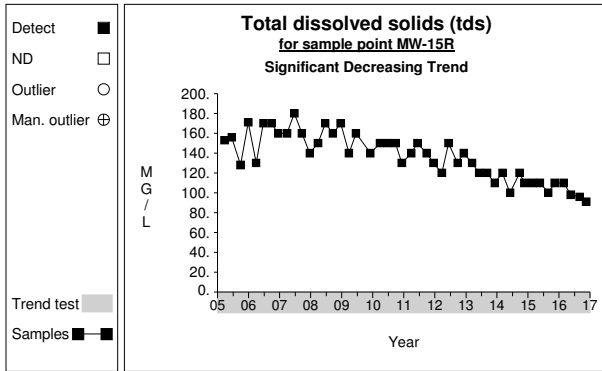


Graph 562

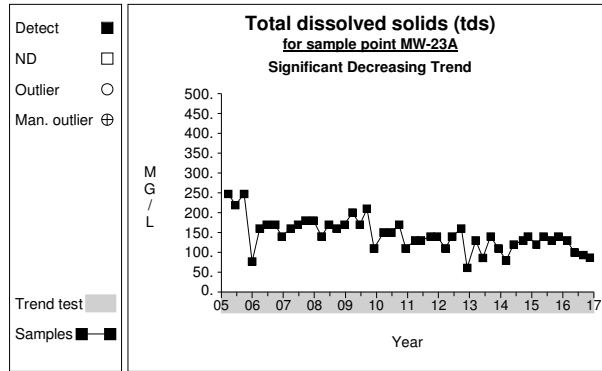


Graph 565

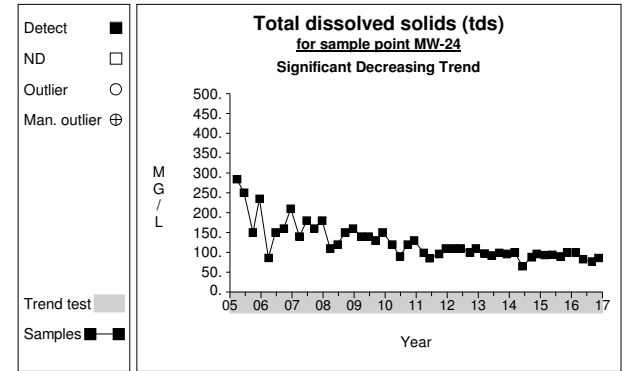
Time Series



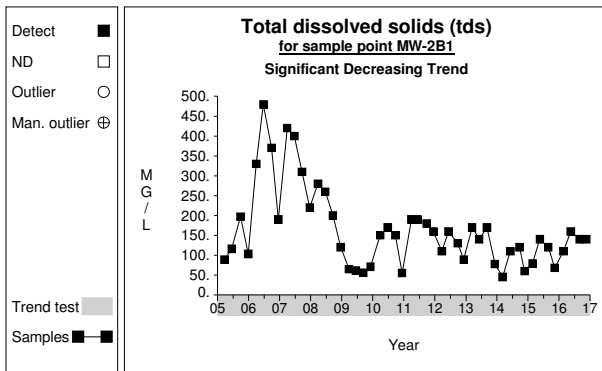
Graph 591



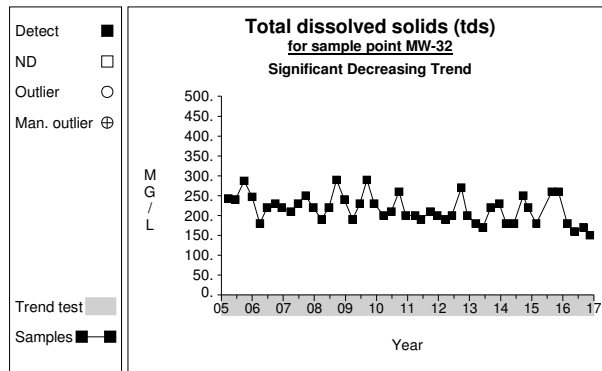
Graph 595



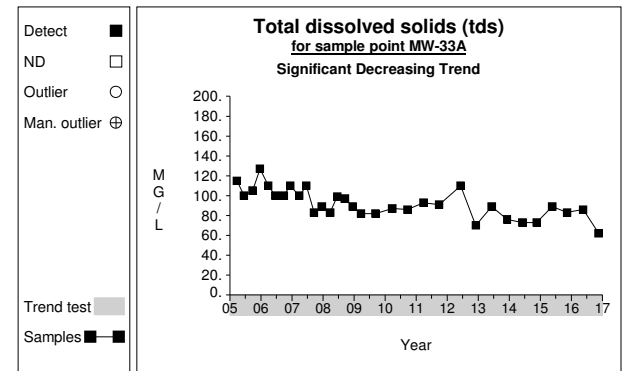
Graph 596



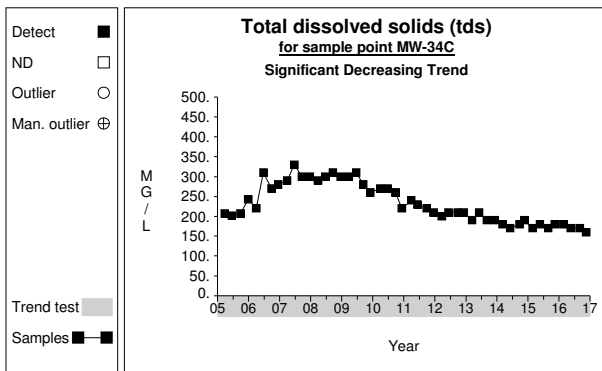
Graph 598



Graph 599



Graph 600



Graph 603

2. Prediction Limits for Detection Monitoring

- 2016 Prediction Limits and Q4 2016 Exceedance Summary Table (Table 2-1)
- Updated Prediction Limits for Use During 2017 Monitoring Year (Table 2-2)
- Upgradient Data used in 2017 Prediction Limit Calculations (Table 2-3)
- Results of Shapiro-Wilk Test for Normality for 2017 Upgradient Data (Table 2-4)
- Comparison of 2016 Prediction Limits with 2017 Prediction Limits (Table 2-5)

TABLE 2-1
SUMMARY OF CURRENT PREDICTION LIMIT EXCEEDANCES
Q4 2016
Olympic View Sanitary Landfill

Statistical Methodology:

1. Inter-Well Prediction Limits using DUMPStat™
2. Upgradient Data Set: pooled data from wells MW-13A, MW-13B, MW-16, and MW-35
3. "Detection Monitoring" well comparisons:
 - compliance wells: MW-15R, MW-34A, MW-34C, MW-39, MW-42, MW-43
 - downgradient wells: MW-29A*, MW-32, MW-33A*, MW-33C, MW-36A

*sampled semi-annually, most current results presented
4. Parameters: all Appendix I and II inorganic and ground water quality parameters
5. Background Data Sets: January 2005 - December 2016
6. Arsenic: only low-level Method 200.8 data used
7. Units: mg/L = milligrams per liter; ug/L = micrograms per liter; mS/cm = millisiemens per centimeter; deg C = d

Parameter	Unit	Well	Latest Result	Date Sampled	Prediction Limit
Alkalinity, bicarbonate (as cacO3)	mg/L	MW-32	110	11/16/2016	96
Alkalinity, bicarbonate (as cacO3)	mg/L	MW-34C	110	11/15/2016	96
Alkalinity, bicarbonate (as cacO3)	mg/L	MW-42	220	11/16/2016	96
Alkalinity, total (as cacO3)	mg/L	MW-32	110	11/16/2016	96
Alkalinity, total (as cacO3)	mg/L	MW-34C	110	11/15/2016	96
Alkalinity, total (as cacO3)	mg/L	MW-42	220	11/16/2016	96
Ammonia (as n)	mg/L	MW-42	5.4	11/16/2016	0.30
Arsenic, total	ug/L	MW-29A	1.99	11/14/2016	0.479
Arsenic, total	ug/L	MW-32	9.95	11/16/2016	0.479
Arsenic, total	ug/L	MW-33A	0.509	11/17/2016	0.479
Arsenic, total	ug/L	MW-33C	2.53	11/17/2016	0.479
Arsenic, total	ug/L	MW-34C	5.42	11/15/2016	0.479
Arsenic, total	ug/L	MW-36A	0.566	11/15/2016	0.479
Arsenic, total	ug/L	MW-42	1.86	11/16/2016	0.479
Barium, total	mg/L	MW-29A	0.01	11/14/2016	0.0045
Barium, total	mg/L	MW-33C	0.0048	11/17/2016	0.0045
Barium, total	mg/L	MW-34A	0.0045	11/15/2016	0.0045
Barium, total	mg/L	MW-34C	0.037	11/15/2016	0.0045
Barium, total	mg/L	MW-39	0.0086	11/14/2016	0.0045
Barium, total	mg/L	MW-42	0.11	11/16/2016	0.0045
Calcium, dissolved	mg/L	MW-32	20	11/16/2016	17.1
Calcium, dissolved	mg/L	MW-34C	24	11/15/2016	17.1
Calcium, dissolved	mg/L	MW-42	42	11/16/2016	17.1
Chloride	mg/L	MW-32	7	11/16/2016	4.4
Chloride	mg/L	MW-42	12	11/16/2016	4.4
Iron, total	mg/L	MW-29A	4.6	11/14/2016	0.31
Iron, total	mg/L	MW-32	0.61	11/16/2016	0.31
Iron, total	mg/L	MW-33A	2.5	11/17/2016	0.31

<u>Parameter</u>	<u>Unit</u>	<u>Well</u>	<u>Latest Result</u>	<u>Date Sampled</u>	<u>Prediction Limit</u>
Iron, total	mg/L	MW-34C	8.4	11/15/2016	0.31
Iron, total	mg/L	MW-39	0.8	11/14/2016	0.31
Iron, total	mg/L	MW-42	27	11/16/2016	0.31
Magnesium, dissolved	mg/L	MW-34C	11	11/15/2016	11.0
Magnesium, dissolved	mg/L	MW-42	14	11/16/2016	11.0
Manganese, total	mg/L	MW-29A	1.4	11/14/2016	0.062
Manganese, total	mg/L	MW-32	1.8	11/16/2016	0.062
Manganese, total	mg/L	MW-33A	0.083	11/17/2016	0.062
Manganese, total	mg/L	MW-33C	0.15	11/17/2016	0.062
Manganese, total	mg/L	MW-34C	0.6	11/15/2016	0.062
Manganese, total	mg/L	MW-42	4.4	11/16/2016	0.062
pH	pH Units	MW-33C	8.31	11/17/2016	5.88 - 8.24
pH	pH Units	MW-39	5.27	11/14/2016	5.88 - 8.24
Potassium, dissolved	mg/L	MW-33C	1.3	11/17/2016	1.2
Potassium, dissolved	mg/L	MW-42	8.7	11/16/2016	1.2
Sodium, dissolved	mg/L	MW-15R	6.3	11/15/2016	6.2
Sodium, dissolved	mg/L	MW-32	12	11/16/2016	6.2
Sodium, dissolved	mg/L	MW-34A	9.7	11/15/2016	6.2
Sodium, dissolved	mg/L	MW-34C	12	11/15/2016	6.2
Sodium, dissolved	mg/L	MW-36A	7.3	11/15/2016	6.2
Sodium, dissolved	mg/L	MW-42	21	11/16/2016	6.2
Specific conductivity	mS/cm	MW-32	0.251	11/16/2016	0.18
Specific conductivity	mS/cm	MW-34C	0.231	11/15/2016	0.18
Specific conductivity	mS/cm	MW-42	0.55	11/16/2016	0.18
Total dissolved solids (tds)	mg/L	MW-42	250	11/16/2016	175
Total organic carbon (toc)	mg/L	MW-42	7.2	11/16/2016	6.0

TABLE 2-2
STATISTICAL PREDICTION LIMITS UPDATED FOR 2017 MONITORING YEAR
Olympic View Sanitary Landfill

Statistical Methodology:

1. Inter-Well Prediction Limits using DUMPStat
2. Upgradient Data Set: pooled data from wells 13A, 13B, 16, and 35
3. "Detection Monitoring" well comparisons:
 - compliance wells
 - performance wells
 - downgradient wells
4. Parameters: all Appendix I and II inorganic and ground water quality parameters
5. Background Data Sets: January 2005 - December 2016 (updated annually)
6. Arsenic: only low-level Method 200.8 data used
7. Units: mg/L = milligrams per liter; ug/L = micrograms per liter; mS/cm = millisiemens per centimeter; deg C = degrees Celcius

Constituent	Units	Distributional Assumption ^[1]	Total N ^[2]	Detected N	Mean	Standard Deviation	Prediction Limit ^[3]	Nonparametric Confidence ^[4]
Alkalinity, bicarbonate (as CaCO ₃)	mg/L	nonparametric	170	170			96	0.99
Alkalinity, total (as CaCO ₃)	mg/L	nonparametric	174	174			96	0.99
Ammonia (as N)	mg/L	nonparametric	170	72			0.300	0.99
Antimony, total	mg/L	nonparametric	54	3			0.0013	0.99
Arsenic, total	ug/L	normal	61	61			0.43	0.99
Barium, total	mg/L	normal	54	54	0.0033	0.0005	0.0045	
Beryllium, total	mg/L	nonparametric	54	0			Current RL*	0.99
Cadmium, total	mg/L	nonparametric	54	0			Current RL*	0.99
Calcium, dissolved	mg/L	nonparametric	174	174			18.00	0.99
Chloride	mg/L	nonparametric	174	172			4.40	0.99
Chromium, total	mg/L	nonparametric	54	24			0.0092	0.99
Cobalt, total	mg/L	nonparametric	54	0			Current RL*	0.99
Copper, total	mg/L	nonparametric	54	1			0.0021	0.99
Iron, total	mg/L	nonparametric	54	7			0.31	0.99
Lead, total	mg/L	nonparametric	54	1			0.0014	0.99
Magnesium, dissolved	mg/L	normal	174	174	8.28	1.209	11.15	
Manganese, total	mg/L	nonparametric	54	15			0.062	0.99
Nickel, total	mg/L	nonparametric	54	1			0.0041	0.99
Nitrate (as N)	mg/L	nonparametric	170	170			1.80	0.99
pH	pH Units	normal	165	165	7.02	0.459	5.81 - 8.23	
Potassium, dissolved	mg/L	nonparametric	174	13			1.20	0.99
Selenium, total	mg/L	nonparametric	54	0			Current RL*	0.99
Silver, total	mg/L	nonparametric	54	0			Current RL*	0.99
Sodium, dissolved	mg/L	nonparametric	174	174			6.30	0.99
Specific conductivity	mS/cm	nonparametric	167	167			0.18	0.99
Sulfate	mg/L	nonparametric	174	173			9.90	0.99
Temperature	deg C	nonparametric	167	167			14.32	0.99
Thallium, total	mg/L	nonparametric	54	0			Current RL*	0.99
Total dissolved solids (tds)	mg/L	nonparametric	174	174			175	0.99
Total organic carbon (toc)	mg/L	nonparametric	162	7			6.0	0.99
Vanadium, total	mg/L	normal	54	54	0.0045	0.0007	0.0063	
Zinc, total	mg/L	nonparametric	54	1			0.0056	0.99

^[1] Distributional Assumption based on Multiple Group Shapiro-Wilk Test (results presented on Table 2-4 herein).

^[2] N = number of background data points from the pooled upgradient well data set AFTER removal of outliers (see Table 2-3 for outliers).

^[3] Prediction Limit calculated at 95% confidence level and adjusted for multiple comparisons and one verification resample per Unified Guidance (USEPA, March 2009).

^[4] Nonparametric confidence level as calculated by DUMPStat.

*Current RL: in cases where all background data are non-detected, a nonparametric prediction limit is set at the current constituent-specific laboratory reporting limit (RL).

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date	Result
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13A	03/22/2005	75.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13A	06/15/2005	63.8000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13A	09/27/2005	75.6000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13A	12/15/2005	72.5000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13A	03/28/2006	80.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13A	06/21/2006	79.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13A	09/26/2006	80.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13A	12/13/2006	82.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13A	03/27/2007	83.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13A	06/19/2007	81.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13A	09/19/2007	79.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13A	12/19/2007	82.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13A	03/25/2008	83.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13A	06/18/2008	82.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13A	09/17/2008	81.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13A	12/17/2008	92.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13A	03/24/2009	81.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13A	06/17/2009	84.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13A	09/10/2009	87.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13A	03/25/2010	86.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13A	06/23/2010	86.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13A	09/23/2010	96.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13A	12/08/2010	82.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13A	03/30/2011	88.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13A	06/06/2011	89.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13A	09/27/2011	89.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13A	12/14/2011	90.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13A	03/21/2012	89.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13A	06/08/2012	87.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13A	09/26/2012	87.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13A	12/03/2012	83.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13A	03/11/2013	81.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13A	06/05/2013	83.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13A	12/03/2013	86.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13A	03/04/2014	87.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13A	06/02/2014	84.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13A	09/22/2014	82.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13A	11/17/2014	79.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13A	02/23/2015	84.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13A	05/19/2015	82.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13A	08/26/2015	77.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13A	11/10/2015	81.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13A	02/22/2016	80.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13A	05/16/2016	90.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13A	08/31/2016	84.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13A	11/14/2016	92.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13B	03/22/2005	70.6000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13B	06/15/2005	57.3000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13B	09/27/2005	72.7000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13B	12/15/2005	68.8000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13B	03/29/2006	73.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13B	06/21/2006	74.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13B	09/26/2006	75.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13B	12/13/2006	76.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13B	03/27/2007	76.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13B	06/19/2007	74.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13B	09/18/2007	74.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13B	12/19/2007	76.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13B	03/25/2008	77.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13B	06/18/2008	77.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13B	09/17/2008	76.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13B	12/16/2008	74.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13B	03/24/2009	78.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13B	06/17/2009	79.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13B	09/10/2009	81.0000

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date	Result
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13B	03/25/2010	81.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13B	06/23/2010	80.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13B	09/23/2010	81.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13B	12/08/2010	88.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13B	03/30/2011	81.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13B	06/06/2011	81.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13B	09/27/2011	83.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13B	12/14/2011	84.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13B	03/21/2012	83.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13B	06/08/2012	82.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13B	09/26/2012	84.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13B	12/03/2012	82.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13B	03/11/2013	77.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13B	06/05/2013	79.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13B	12/03/2013	84.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13B	03/04/2014	83.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13B	06/02/2014	81.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13B	09/22/2014	80.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13B	11/17/2014	79.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13B	02/23/2015	82.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13B	05/19/2015	81.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13B	08/26/2015	76.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13B	11/10/2015	79.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13B	02/22/2016	77.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13B	05/16/2016	87.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13B	08/31/2016	82.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-13B	11/14/2016	80.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-16	03/24/2009	66.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-16	06/16/2009	59.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-16	09/09/2009	66.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-16	03/25/2010	46.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-16	06/24/2010	71.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-16	09/24/2010	74.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-16	12/09/2010	72.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-16	03/30/2011	53.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-16	06/07/2011	59.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-16	09/27/2011	66.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-16	12/13/2011	60.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-16	03/21/2012	50.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-16	06/08/2012	49.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-16	09/27/2012	57.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-16	12/04/2012	64.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-16	03/12/2013	51.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-16	06/04/2013	50.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-16	09/05/2013	62.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-16	12/16/2013	62.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-16	03/05/2014	57.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-16	06/02/2014	44.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-16	09/22/2014	57.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-16	11/18/2014	57.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-16	02/23/2015	52.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-16	05/20/2015	51.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-16	08/26/2015	51.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-16	11/11/2015	65.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-16	02/24/2016	40.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-16	05/16/2016	50.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-16	08/31/2016	60.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-16	11/14/2016	56.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-35	03/22/2005	68.2000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-35	06/14/2005	59.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-35	09/27/2005	69.2000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-35	12/15/2005	67.3000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-35	03/28/2006	74.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-35	06/21/2006	71.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-35	09/26/2006	72.0000

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date	Result
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-35	12/12/2006	73.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-35	03/27/2007	73.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-35	06/20/2007	70.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-35	09/18/2007	69.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-35	12/20/2007	72.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-35	03/25/2008	77.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-35	06/18/2008	72.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-35	09/18/2008	72.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-35	12/19/2008	68.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-35	03/24/2009	72.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-35	06/16/2009	73.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-35	09/10/2009	74.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-35	03/25/2010	76.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-35	06/23/2010	75.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-35	09/23/2010	75.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-35	12/09/2010	74.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-35	03/30/2011	77.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-35	06/06/2011	76.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-35	09/26/2011	78.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-35	12/13/2011	77.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-35	03/21/2012	77.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-35	06/06/2012	77.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-35	09/26/2012	78.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-35	12/04/2012	76.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-35	03/13/2013	73.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-35	06/06/2013	73.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-35	09/05/2013	77.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-35	12/16/2013	78.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-35	03/04/2014	78.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-35	06/02/2014	76.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-35	09/22/2014	75.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-35	11/17/2014	74.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-35	02/25/2015	77.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-35	05/19/2015	75.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-35	08/26/2015	71.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-35	11/10/2015	75.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-35	02/22/2016	72.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-35	05/16/2016	82.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-35	08/31/2016	77.0000
Alkalinity, bicarbonate (as cacO3)	MG/L	MW-35	11/15/2016	91.0000
Alkalinity, total (as cacO3)	MG/L	MW-13A	03/22/2005	75.0000
Alkalinity, total (as cacO3)	MG/L	MW-13A	06/15/2005	63.8000
Alkalinity, total (as cacO3)	MG/L	MW-13A	09/27/2005	75.6000
Alkalinity, total (as cacO3)	MG/L	MW-13A	12/15/2005	72.5000
Alkalinity, total (as cacO3)	MG/L	MW-13A	03/28/2006	80.0000
Alkalinity, total (as cacO3)	MG/L	MW-13A	06/21/2006	79.0000
Alkalinity, total (as cacO3)	MG/L	MW-13A	09/26/2006	80.0000
Alkalinity, total (as cacO3)	MG/L	MW-13A	12/13/2006	82.0000
Alkalinity, total (as cacO3)	MG/L	MW-13A	03/27/2007	83.0000
Alkalinity, total (as cacO3)	MG/L	MW-13A	06/19/2007	81.0000
Alkalinity, total (as cacO3)	MG/L	MW-13A	09/19/2007	79.0000
Alkalinity, total (as cacO3)	MG/L	MW-13A	12/19/2007	82.0000
Alkalinity, total (as cacO3)	MG/L	MW-13A	03/25/2008	83.0000
Alkalinity, total (as cacO3)	MG/L	MW-13A	06/18/2008	82.0000
Alkalinity, total (as cacO3)	MG/L	MW-13A	09/17/2008	81.0000
Alkalinity, total (as cacO3)	MG/L	MW-13A	12/17/2008	92.0000
Alkalinity, total (as cacO3)	MG/L	MW-13A	03/24/2009	81.0000
Alkalinity, total (as cacO3)	MG/L	MW-13A	06/17/2009	84.0000
Alkalinity, total (as cacO3)	MG/L	MW-13A	09/10/2009	87.0000
Alkalinity, total (as cacO3)	MG/L	MW-13A	12/03/2009	84.0000
Alkalinity, total (as cacO3)	MG/L	MW-13A	03/25/2010	86.0000
Alkalinity, total (as cacO3)	MG/L	MW-13A	06/23/2010	86.0000
Alkalinity, total (as cacO3)	MG/L	MW-13A	09/23/2010	96.0000
Alkalinity, total (as cacO3)	MG/L	MW-13A	12/08/2010	82.0000
Alkalinity, total (as cacO3)	MG/L	MW-13A	03/30/2011	88.0000

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date	Result
Alkalinity, total (as cacO3)	MG/L	MW-13A	06/06/2011	89.0000
Alkalinity, total (as cacO3)	MG/L	MW-13A	09/27/2011	89.0000
Alkalinity, total (as cacO3)	MG/L	MW-13A	12/14/2011	90.0000
Alkalinity, total (as cacO3)	MG/L	MW-13A	03/21/2012	89.0000
Alkalinity, total (as cacO3)	MG/L	MW-13A	06/08/2012	87.0000
Alkalinity, total (as cacO3)	MG/L	MW-13A	09/26/2012	87.0000
Alkalinity, total (as cacO3)	MG/L	MW-13A	12/03/2012	83.0000
Alkalinity, total (as cacO3)	MG/L	MW-13A	03/11/2013	81.0000
Alkalinity, total (as cacO3)	MG/L	MW-13A	06/05/2013	83.0000
Alkalinity, total (as cacO3)	MG/L	MW-13A	12/03/2013	86.0000
Alkalinity, total (as cacO3)	MG/L	MW-13A	03/04/2014	87.0000
Alkalinity, total (as cacO3)	MG/L	MW-13A	06/02/2014	84.0000
Alkalinity, total (as cacO3)	MG/L	MW-13A	09/22/2014	82.0000
Alkalinity, total (as cacO3)	MG/L	MW-13A	11/17/2014	79.0000
Alkalinity, total (as cacO3)	MG/L	MW-13A	02/23/2015	84.0000
Alkalinity, total (as cacO3)	MG/L	MW-13A	05/19/2015	82.0000
Alkalinity, total (as cacO3)	MG/L	MW-13A	08/26/2015	77.0000
Alkalinity, total (as cacO3)	MG/L	MW-13A	11/10/2015	81.0000
Alkalinity, total (as cacO3)	MG/L	MW-13A	02/22/2016	80.0000
Alkalinity, total (as cacO3)	MG/L	MW-13A	05/16/2016	90.0000
Alkalinity, total (as cacO3)	MG/L	MW-13A	08/31/2016	84.0000
Alkalinity, total (as cacO3)	MG/L	MW-13A	11/14/2016	92.0000
Alkalinity, total (as cacO3)	MG/L	MW-13B	03/22/2005	70.6000
Alkalinity, total (as cacO3)	MG/L	MW-13B	06/15/2005	57.3000
Alkalinity, total (as cacO3)	MG/L	MW-13B	09/27/2005	72.7000
Alkalinity, total (as cacO3)	MG/L	MW-13B	12/15/2005	68.8000
Alkalinity, total (as cacO3)	MG/L	MW-13B	03/29/2006	73.0000
Alkalinity, total (as cacO3)	MG/L	MW-13B	06/21/2006	74.0000
Alkalinity, total (as cacO3)	MG/L	MW-13B	09/26/2006	75.0000
Alkalinity, total (as cacO3)	MG/L	MW-13B	12/13/2006	76.0000
Alkalinity, total (as cacO3)	MG/L	MW-13B	03/27/2007	76.0000
Alkalinity, total (as cacO3)	MG/L	MW-13B	06/19/2007	74.0000
Alkalinity, total (as cacO3)	MG/L	MW-13B	09/18/2007	74.0000
Alkalinity, total (as cacO3)	MG/L	MW-13B	12/19/2007	76.0000
Alkalinity, total (as cacO3)	MG/L	MW-13B	03/25/2008	77.0000
Alkalinity, total (as cacO3)	MG/L	MW-13B	06/18/2008	77.0000
Alkalinity, total (as cacO3)	MG/L	MW-13B	09/17/2008	76.0000
Alkalinity, total (as cacO3)	MG/L	MW-13B	12/16/2008	74.0000
Alkalinity, total (as cacO3)	MG/L	MW-13B	03/24/2009	78.0000
Alkalinity, total (as cacO3)	MG/L	MW-13B	06/17/2009	79.0000
Alkalinity, total (as cacO3)	MG/L	MW-13B	09/10/2009	81.0000
Alkalinity, total (as cacO3)	MG/L	MW-13B	12/03/2009	80.0000
Alkalinity, total (as cacO3)	MG/L	MW-13B	03/25/2010	81.0000
Alkalinity, total (as cacO3)	MG/L	MW-13B	06/23/2010	80.0000
Alkalinity, total (as cacO3)	MG/L	MW-13B	09/23/2010	81.0000
Alkalinity, total (as cacO3)	MG/L	MW-13B	12/08/2010	88.0000
Alkalinity, total (as cacO3)	MG/L	MW-13B	03/30/2011	81.0000
Alkalinity, total (as cacO3)	MG/L	MW-13B	06/06/2011	81.0000
Alkalinity, total (as cacO3)	MG/L	MW-13B	09/27/2011	83.0000
Alkalinity, total (as cacO3)	MG/L	MW-13B	12/14/2011	84.0000
Alkalinity, total (as cacO3)	MG/L	MW-13B	03/21/2012	83.0000
Alkalinity, total (as cacO3)	MG/L	MW-13B	06/08/2012	82.0000
Alkalinity, total (as cacO3)	MG/L	MW-13B	09/26/2012	84.0000
Alkalinity, total (as cacO3)	MG/L	MW-13B	12/03/2012	82.0000
Alkalinity, total (as cacO3)	MG/L	MW-13B	03/11/2013	77.0000
Alkalinity, total (as cacO3)	MG/L	MW-13B	06/05/2013	79.0000
Alkalinity, total (as cacO3)	MG/L	MW-13B	12/03/2013	84.0000
Alkalinity, total (as cacO3)	MG/L	MW-13B	03/04/2014	83.0000
Alkalinity, total (as cacO3)	MG/L	MW-13B	06/02/2014	81.0000
Alkalinity, total (as cacO3)	MG/L	MW-13B	09/22/2014	80.0000
Alkalinity, total (as cacO3)	MG/L	MW-13B	11/17/2014	79.0000
Alkalinity, total (as cacO3)	MG/L	MW-13B	02/23/2015	82.0000
Alkalinity, total (as cacO3)	MG/L	MW-13B	05/19/2015	81.0000
Alkalinity, total (as cacO3)	MG/L	MW-13B	08/26/2015	76.0000
Alkalinity, total (as cacO3)	MG/L	MW-13B	11/10/2015	79.0000

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date	Result
Alkalinity, total (as cacO3)	MG/L	MW-13B	02/22/2016	77.0000
Alkalinity, total (as cacO3)	MG/L	MW-13B	05/16/2016	87.0000
Alkalinity, total (as cacO3)	MG/L	MW-13B	08/31/2016	82.0000
Alkalinity, total (as cacO3)	MG/L	MW-13B	11/14/2016	80.0000
Alkalinity, total (as cacO3)	MG/L	MW-16	03/24/2009	66.0000
Alkalinity, total (as cacO3)	MG/L	MW-16	06/16/2009	59.0000
Alkalinity, total (as cacO3)	MG/L	MW-16	09/09/2009	66.0000
Alkalinity, total (as cacO3)	MG/L	MW-16	12/03/2009	77.0000
Alkalinity, total (as cacO3)	MG/L	MW-16	03/25/2010	46.0000
Alkalinity, total (as cacO3)	MG/L	MW-16	06/24/2010	71.0000
Alkalinity, total (as cacO3)	MG/L	MW-16	09/24/2010	74.0000
Alkalinity, total (as cacO3)	MG/L	MW-16	12/09/2010	72.0000
Alkalinity, total (as cacO3)	MG/L	MW-16	03/30/2011	53.0000
Alkalinity, total (as cacO3)	MG/L	MW-16	06/07/2011	59.0000
Alkalinity, total (as cacO3)	MG/L	MW-16	09/27/2011	66.0000
Alkalinity, total (as cacO3)	MG/L	MW-16	12/13/2011	60.0000
Alkalinity, total (as cacO3)	MG/L	MW-16	03/21/2012	50.0000
Alkalinity, total (as cacO3)	MG/L	MW-16	06/08/2012	49.0000
Alkalinity, total (as cacO3)	MG/L	MW-16	09/27/2012	57.0000
Alkalinity, total (as cacO3)	MG/L	MW-16	12/04/2012	64.0000
Alkalinity, total (as cacO3)	MG/L	MW-16	03/12/2013	51.0000
Alkalinity, total (as cacO3)	MG/L	MW-16	06/04/2013	50.0000
Alkalinity, total (as cacO3)	MG/L	MW-16	09/05/2013	62.0000
Alkalinity, total (as cacO3)	MG/L	MW-16	12/16/2013	62.0000
Alkalinity, total (as cacO3)	MG/L	MW-16	03/05/2014	57.0000
Alkalinity, total (as cacO3)	MG/L	MW-16	06/02/2014	44.0000
Alkalinity, total (as cacO3)	MG/L	MW-16	09/22/2014	57.0000
Alkalinity, total (as cacO3)	MG/L	MW-16	11/18/2014	57.0000
Alkalinity, total (as cacO3)	MG/L	MW-16	02/23/2015	52.0000
Alkalinity, total (as cacO3)	MG/L	MW-16	05/20/2015	51.0000
Alkalinity, total (as cacO3)	MG/L	MW-16	08/26/2015	51.0000
Alkalinity, total (as cacO3)	MG/L	MW-16	11/11/2015	65.0000
Alkalinity, total (as cacO3)	MG/L	MW-16	02/24/2016	40.0000
Alkalinity, total (as cacO3)	MG/L	MW-16	05/16/2016	50.0000
Alkalinity, total (as cacO3)	MG/L	MW-16	08/31/2016	60.0000
Alkalinity, total (as cacO3)	MG/L	MW-16	11/14/2016	56.0000
Alkalinity, total (as cacO3)	MG/L	MW-35	03/22/2005	68.2000
Alkalinity, total (as cacO3)	MG/L	MW-35	06/14/2005	59.0000
Alkalinity, total (as cacO3)	MG/L	MW-35	09/27/2005	69.2000
Alkalinity, total (as cacO3)	MG/L	MW-35	12/15/2005	67.3000
Alkalinity, total (as cacO3)	MG/L	MW-35	03/28/2006	73.0000
Alkalinity, total (as cacO3)	MG/L	MW-35	06/21/2006	71.0000
Alkalinity, total (as cacO3)	MG/L	MW-35	09/26/2006	72.0000
Alkalinity, total (as cacO3)	MG/L	MW-35	12/12/2006	73.0000
Alkalinity, total (as cacO3)	MG/L	MW-35	03/27/2007	73.0000
Alkalinity, total (as cacO3)	MG/L	MW-35	06/20/2007	70.0000
Alkalinity, total (as cacO3)	MG/L	MW-35	09/18/2007	69.0000
Alkalinity, total (as cacO3)	MG/L	MW-35	12/20/2007	72.0000
Alkalinity, total (as cacO3)	MG/L	MW-35	03/25/2008	77.0000
Alkalinity, total (as cacO3)	MG/L	MW-35	06/18/2008	72.0000
Alkalinity, total (as cacO3)	MG/L	MW-35	09/18/2008	72.0000
Alkalinity, total (as cacO3)	MG/L	MW-35	12/19/2008	68.0000
Alkalinity, total (as cacO3)	MG/L	MW-35	03/24/2009	72.0000
Alkalinity, total (as cacO3)	MG/L	MW-35	06/16/2009	73.0000
Alkalinity, total (as cacO3)	MG/L	MW-35	09/10/2009	74.0000
Alkalinity, total (as cacO3)	MG/L	MW-35	12/03/2009	74.0000
Alkalinity, total (as cacO3)	MG/L	MW-35	03/25/2010	76.0000
Alkalinity, total (as cacO3)	MG/L	MW-35	06/23/2010	75.0000
Alkalinity, total (as cacO3)	MG/L	MW-35	09/23/2010	75.0000
Alkalinity, total (as cacO3)	MG/L	MW-35	12/09/2010	74.0000
Alkalinity, total (as cacO3)	MG/L	MW-35	03/30/2011	77.0000
Alkalinity, total (as cacO3)	MG/L	MW-35	06/06/2011	76.0000
Alkalinity, total (as cacO3)	MG/L	MW-35	09/26/2011	78.0000
Alkalinity, total (as cacO3)	MG/L	MW-35	12/13/2011	77.0000
Alkalinity, total (as cacO3)	MG/L	MW-35	03/21/2012	77.0000

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date		Result
Alkalinity, total (as cacO3)	MG/L	MW-35	06/06/2012		77.0000
Alkalinity, total (as cacO3)	MG/L	MW-35	09/26/2012		78.0000
Alkalinity, total (as cacO3)	MG/L	MW-35	12/04/2012		76.0000
Alkalinity, total (as cacO3)	MG/L	MW-35	03/13/2013		73.0000
Alkalinity, total (as cacO3)	MG/L	MW-35	06/06/2013		73.0000
Alkalinity, total (as cacO3)	MG/L	MW-35	09/05/2013		77.0000
Alkalinity, total (as cacO3)	MG/L	MW-35	12/16/2013		78.0000
Alkalinity, total (as cacO3)	MG/L	MW-35	03/04/2014		78.0000
Alkalinity, total (as cacO3)	MG/L	MW-35	06/02/2014		76.0000
Alkalinity, total (as cacO3)	MG/L	MW-35	09/22/2014		75.0000
Alkalinity, total (as cacO3)	MG/L	MW-35	11/17/2014		74.0000
Alkalinity, total (as cacO3)	MG/L	MW-35	02/25/2015		77.0000
Alkalinity, total (as cacO3)	MG/L	MW-35	05/19/2015		75.0000
Alkalinity, total (as cacO3)	MG/L	MW-35	08/26/2015		71.0000
Alkalinity, total (as cacO3)	MG/L	MW-35	11/10/2015		75.0000
Alkalinity, total (as cacO3)	MG/L	MW-35	02/22/2016		72.0000
Alkalinity, total (as cacO3)	MG/L	MW-35	05/16/2016		82.0000
Alkalinity, total (as cacO3)	MG/L	MW-35	08/31/2016		77.0000
Alkalinity, total (as cacO3)	MG/L	MW-35	11/15/2016		91.0000
Ammonia (as n)	MG/L	MW-13A	03/22/2005		0.0200
Ammonia (as n)	MG/L	MW-13A	06/15/2005		0.1300
Ammonia (as n)	MG/L	MW-13A	09/27/2005		0.0210
Ammonia (as n)	MG/L	MW-13A	12/15/2005	ND	0.0200
Ammonia (as n)	MG/L	MW-13A	03/28/2006		0.0490
Ammonia (as n)	MG/L	MW-13A	06/21/2006		0.0680
Ammonia (as n)	MG/L	MW-13A	09/26/2006		0.0360
Ammonia (as n)	MG/L	MW-13A	12/13/2006	ND	0.0300
Ammonia (as n)	MG/L	MW-13A	03/27/2007	ND	0.0300
Ammonia (as n)	MG/L	MW-13A	06/19/2007	ND	0.0300
Ammonia (as n)	MG/L	MW-13A	09/19/2007	ND	0.0300
Ammonia (as n)	MG/L	MW-13A	12/19/2007		0.0420
Ammonia (as n)	MG/L	MW-13A	03/25/2008		0.0500
Ammonia (as n)	MG/L	MW-13A	06/18/2008	ND	0.0300
Ammonia (as n)	MG/L	MW-13A	09/17/2008	ND	0.0300
Ammonia (as n)	MG/L	MW-13A	12/17/2008		0.0630
Ammonia (as n)	MG/L	MW-13A	03/24/2009		0.0830
Ammonia (as n)	MG/L	MW-13A	06/17/2009		0.0930
Ammonia (as n)	MG/L	MW-13A	09/10/2009	ND	0.0300
Ammonia (as n)	MG/L	MW-13A	12/03/2009		0.0590
Ammonia (as n)	MG/L	MW-13A	03/25/2010		0.0460
Ammonia (as n)	MG/L	MW-13A	06/23/2010	ND	0.0300
Ammonia (as n)	MG/L	MW-13A	09/23/2010		0.0490
Ammonia (as n)	MG/L	MW-13A	12/08/2010		0.0610
Ammonia (as n)	MG/L	MW-13A	03/30/2011		0.0640
Ammonia (as n)	MG/L	MW-13A	06/06/2011	ND	0.0300
Ammonia (as n)	MG/L	MW-13A	09/27/2011		0.0750
Ammonia (as n)	MG/L	MW-13A	12/14/2011		0.0860
Ammonia (as n)	MG/L	MW-13A	03/21/2012		0.0390
Ammonia (as n)	MG/L	MW-13A	06/08/2012		0.2800
Ammonia (as n)	MG/L	MW-13A	09/26/2012		0.0870
Ammonia (as n)	MG/L	MW-13A	12/03/2012		0.1200
Ammonia (as n)	MG/L	MW-13A	03/11/2013	ND	0.0300
Ammonia (as n)	MG/L	MW-13A	06/05/2013	ND	0.0300
Ammonia (as n)	MG/L	MW-13A	12/03/2013	ND	0.0300
Ammonia (as n)	MG/L	MW-13A	03/04/2014	ND	0.0300
Ammonia (as n)	MG/L	MW-13A	06/02/2014	ND	0.0300
Ammonia (as n)	MG/L	MW-13A	09/22/2014	ND	0.0300
Ammonia (as n)	MG/L	MW-13A	11/17/2014	ND	0.0300
Ammonia (as n)	MG/L	MW-13A	02/23/2015	ND	0.0300
Ammonia (as n)	MG/L	MW-13A	05/19/2015	ND	0.0300
Ammonia (as n)	MG/L	MW-13A	08/26/2015	ND	0.0300
Ammonia (as n)	MG/L	MW-13A	11/10/2015	ND	0.0300
Ammonia (as n)	MG/L	MW-13A	02/22/2016	ND	0.0300
Ammonia (as n)	MG/L	MW-13A	05/16/2016	ND	0.0300
Ammonia (as n)	MG/L	MW-13A	08/31/2016	ND	0.0300

* - Outlier for that well and constituent.
ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date		Result
Ammonia (as n)	MG/L	MW-13A	11/14/2016	ND	0.0300
Ammonia (as n)	MG/L	MW-13B	03/22/2005	ND	0.0200
Ammonia (as n)	MG/L	MW-13B	06/15/2005		0.1200
Ammonia (as n)	MG/L	MW-13B	09/27/2005		0.1700
Ammonia (as n)	MG/L	MW-13B	12/15/2005	ND	0.0200
Ammonia (as n)	MG/L	MW-13B	03/29/2006		0.0360
Ammonia (as n)	MG/L	MW-13B	06/21/2006	ND	0.0300
Ammonia (as n)	MG/L	MW-13B	09/26/2006		0.0300
Ammonia (as n)	MG/L	MW-13B	12/13/2006	ND	0.0300
Ammonia (as n)	MG/L	MW-13B	03/27/2007	ND	0.0300
Ammonia (as n)	MG/L	MW-13B	06/19/2007		0.0300
Ammonia (as n)	MG/L	MW-13B	12/19/2007		0.1100
Ammonia (as n)	MG/L	MW-13B	03/25/2008		0.0600
Ammonia (as n)	MG/L	MW-13B	06/18/2008	ND	0.0300
Ammonia (as n)	MG/L	MW-13B	09/17/2008	ND	0.0300
Ammonia (as n)	MG/L	MW-13B	12/16/2008		0.0560
Ammonia (as n)	MG/L	MW-13B	03/24/2009		0.0630
Ammonia (as n)	MG/L	MW-13B	06/17/2009		0.0870
Ammonia (as n)	MG/L	MW-13B	09/10/2009		0.0450
Ammonia (as n)	MG/L	MW-13B	12/03/2009	ND	0.0300
Ammonia (as n)	MG/L	MW-13B	03/25/2010		0.0440
Ammonia (as n)	MG/L	MW-13B	06/23/2010	ND	0.0300
Ammonia (as n)	MG/L	MW-13B	09/23/2010		0.0450
Ammonia (as n)	MG/L	MW-13B	12/08/2010		0.0520
Ammonia (as n)	MG/L	MW-13B	03/30/2011		0.0620
Ammonia (as n)	MG/L	MW-13B	06/06/2011	ND	0.0300
Ammonia (as n)	MG/L	MW-13B	09/27/2011		0.0320
Ammonia (as n)	MG/L	MW-13B	12/14/2011		0.0300
Ammonia (as n)	MG/L	MW-13B	03/21/2012	ND	0.0300
Ammonia (as n)	MG/L	MW-13B	06/08/2012		0.2000
Ammonia (as n)	MG/L	MW-13B	09/26/2012		0.0760
Ammonia (as n)	MG/L	MW-13B	12/03/2012	ND	0.0300
Ammonia (as n)	MG/L	MW-13B	03/11/2013	ND	0.0300
Ammonia (as n)	MG/L	MW-13B	06/05/2013	ND	0.0300
Ammonia (as n)	MG/L	MW-13B	12/03/2013	ND	0.0300
Ammonia (as n)	MG/L	MW-13B	03/04/2014	ND	0.0300
Ammonia (as n)	MG/L	MW-13B	06/02/2014	ND	0.0300
Ammonia (as n)	MG/L	MW-13B	09/22/2014	ND	0.0300
Ammonia (as n)	MG/L	MW-13B	11/17/2014	ND	0.0300
Ammonia (as n)	MG/L	MW-13B	02/23/2015	ND	0.0300
Ammonia (as n)	MG/L	MW-13B	05/19/2015	ND	0.0300
Ammonia (as n)	MG/L	MW-13B	08/26/2015	ND	0.0300
Ammonia (as n)	MG/L	MW-13B	11/10/2015	ND	0.0300
Ammonia (as n)	MG/L	MW-13B	02/22/2016	ND	0.0300
Ammonia (as n)	MG/L	MW-13B	05/16/2016	ND	0.0300
Ammonia (as n)	MG/L	MW-13B	08/31/2016	ND	0.0300
Ammonia (as n)	MG/L	MW-13B	11/14/2016	ND	0.0300
Ammonia (as n)	MG/L	MW-16	03/24/2009		0.0620
Ammonia (as n)	MG/L	MW-16	06/16/2009		0.0930
Ammonia (as n)	MG/L	MW-16	09/09/2009		0.0360
Ammonia (as n)	MG/L	MW-16	12/03/2009		0.0580
Ammonia (as n)	MG/L	MW-16	03/25/2010		0.0460
Ammonia (as n)	MG/L	MW-16	06/24/2010	ND	0.0300
Ammonia (as n)	MG/L	MW-16	09/24/2010	ND	0.0300
Ammonia (as n)	MG/L	MW-16	12/09/2010		0.0590
Ammonia (as n)	MG/L	MW-16	03/30/2011		0.0600
Ammonia (as n)	MG/L	MW-16	06/07/2011		0.0480
Ammonia (as n)	MG/L	MW-16	09/27/2011	ND	0.0300
Ammonia (as n)	MG/L	MW-16	12/13/2011	ND	0.0300
Ammonia (as n)	MG/L	MW-16	03/21/2012		0.0420
Ammonia (as n)	MG/L	MW-16	06/08/2012		0.3400 *
Ammonia (as n)	MG/L	MW-16	09/27/2012		0.3000
Ammonia (as n)	MG/L	MW-16	12/04/2012	ND	0.0300
Ammonia (as n)	MG/L	MW-16	03/12/2013	ND	0.0300
Ammonia (as n)	MG/L	MW-16	06/04/2013	ND	0.0300

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date		Result
Ammonia (as n)	MG/L	MW-16	09/05/2013	ND	0.0300
Ammonia (as n)	MG/L	MW-16	12/16/2013		0.0960
Ammonia (as n)	MG/L	MW-16	03/05/2014		0.0510
Ammonia (as n)	MG/L	MW-16	06/02/2014		0.0580
Ammonia (as n)	MG/L	MW-16	09/22/2014	ND	0.0300
Ammonia (as n)	MG/L	MW-16	11/18/2014	ND	0.0300
Ammonia (as n)	MG/L	MW-16	02/23/2015	ND	0.0300
Ammonia (as n)	MG/L	MW-16	05/20/2015	ND	0.0300
Ammonia (as n)	MG/L	MW-16	08/26/2015	ND	0.0300
Ammonia (as n)	MG/L	MW-16	11/11/2015	ND	0.0300
Ammonia (as n)	MG/L	MW-16	02/24/2016	ND	0.0300
Ammonia (as n)	MG/L	MW-16	05/16/2016	ND	0.0300
Ammonia (as n)	MG/L	MW-16	08/31/2016	ND	0.0300
Ammonia (as n)	MG/L	MW-16	11/14/2016	ND	0.0300
Ammonia (as n)	MG/L	MW-35	03/22/2005	ND	0.0200
Ammonia (as n)	MG/L	MW-35	06/14/2005		0.1200
Ammonia (as n)	MG/L	MW-35	09/27/2005		0.1500
Ammonia (as n)	MG/L	MW-35	12/15/2005	ND	0.0200
Ammonia (as n)	MG/L	MW-35	03/28/2006	ND	0.0300
Ammonia (as n)	MG/L	MW-35	06/21/2006	ND	0.0300
Ammonia (as n)	MG/L	MW-35	09/26/2006		0.0330
Ammonia (as n)	MG/L	MW-35	12/12/2006	ND	0.0300
Ammonia (as n)	MG/L	MW-35	03/27/2007	ND	0.0300
Ammonia (as n)	MG/L	MW-35	06/20/2007		0.0420
Ammonia (as n)	MG/L	MW-35	12/20/2007		0.0600
Ammonia (as n)	MG/L	MW-35	03/25/2008		0.0590
Ammonia (as n)	MG/L	MW-35	06/18/2008	ND	0.0300
Ammonia (as n)	MG/L	MW-35	09/18/2008	ND	0.0300
Ammonia (as n)	MG/L	MW-35	12/19/2008		0.0810
Ammonia (as n)	MG/L	MW-35	03/24/2009		0.0600
Ammonia (as n)	MG/L	MW-35	06/16/2009		0.0660
Ammonia (as n)	MG/L	MW-35	09/10/2009	ND	0.0300
Ammonia (as n)	MG/L	MW-35	12/03/2009		0.0760
Ammonia (as n)	MG/L	MW-35	03/25/2010		0.0410
Ammonia (as n)	MG/L	MW-35	06/23/2010	ND	0.0300
Ammonia (as n)	MG/L	MW-35	09/23/2010		0.0530
Ammonia (as n)	MG/L	MW-35	12/09/2010		0.0550
Ammonia (as n)	MG/L	MW-35	03/30/2011		0.0630
Ammonia (as n)	MG/L	MW-35	06/06/2011		0.1800
Ammonia (as n)	MG/L	MW-35	09/26/2011		0.0650
Ammonia (as n)	MG/L	MW-35	12/13/2011	ND	0.0300
Ammonia (as n)	MG/L	MW-35	03/21/2012		0.0300
Ammonia (as n)	MG/L	MW-35	06/06/2012		0.6000 *
Ammonia (as n)	MG/L	MW-35	09/26/2012		0.0690
Ammonia (as n)	MG/L	MW-35	12/04/2012	ND	0.0300
Ammonia (as n)	MG/L	MW-35	03/13/2013	ND	0.0300
Ammonia (as n)	MG/L	MW-35	06/06/2013	ND	0.0300
Ammonia (as n)	MG/L	MW-35	09/05/2013	ND	0.0300
Ammonia (as n)	MG/L	MW-35	12/16/2013	ND	0.0300
Ammonia (as n)	MG/L	MW-35	03/04/2014	ND	0.0300
Ammonia (as n)	MG/L	MW-35	06/02/2014	ND	0.0300
Ammonia (as n)	MG/L	MW-35	09/22/2014	ND	0.0300
Ammonia (as n)	MG/L	MW-35	11/17/2014	ND	0.0300
Ammonia (as n)	MG/L	MW-35	02/25/2015	ND	0.0300
Ammonia (as n)	MG/L	MW-35	05/19/2015	ND	0.0300
Ammonia (as n)	MG/L	MW-35	08/26/2015	ND	0.0300
Ammonia (as n)	MG/L	MW-35	11/10/2015	ND	0.0300
Ammonia (as n)	MG/L	MW-35	02/22/2016	ND	0.0300
Ammonia (as n)	MG/L	MW-35	05/16/2016	ND	0.0300
Ammonia (as n)	MG/L	MW-35	08/31/2016	ND	0.0300
Ammonia (as n)	MG/L	MW-35	11/15/2016	ND	0.0300
Antimony, total	MG/L	MW-13A	12/03/2013	ND	0.0010
Antimony, total	MG/L	MW-13A	03/04/2014	ND	0.0010
Antimony, total	MG/L	MW-13A	06/02/2014	ND	0.0010
Antimony, total	MG/L	MW-13A	09/22/2014	ND	0.0010

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date		Result
Antimony, total	MG/L	MW-13A	11/17/2014	ND	0.0010
Antimony, total	MG/L	MW-13A	02/23/2015	ND	0.0010
Antimony, total	MG/L	MW-13A	05/19/2015	ND	0.0010
Antimony, total	MG/L	MW-13A	08/26/2015	ND	0.0010
Antimony, total	MG/L	MW-13A	11/10/2015	ND	0.0010
Antimony, total	MG/L	MW-13A	02/22/2016	ND	0.0010
Antimony, total	MG/L	MW-13A	05/16/2016	ND	0.0010
Antimony, total	MG/L	MW-13A	08/31/2016		0.0010
Antimony, total	MG/L	MW-13A	11/14/2016	ND	0.0010
Antimony, total	MG/L	MW-13B	12/03/2013	ND	0.0010
Antimony, total	MG/L	MW-13B	03/04/2014	ND	0.0010
Antimony, total	MG/L	MW-13B	06/02/2014	ND	0.0010
Antimony, total	MG/L	MW-13B	09/22/2014	ND	0.0010
Antimony, total	MG/L	MW-13B	11/17/2014	ND	0.0010
Antimony, total	MG/L	MW-13B	02/23/2015	ND	0.0010
Antimony, total	MG/L	MW-13B	05/19/2015	ND	0.0010
Antimony, total	MG/L	MW-13B	08/26/2015	ND	0.0010
Antimony, total	MG/L	MW-13B	11/10/2015	ND	0.0010
Antimony, total	MG/L	MW-13B	02/22/2016	ND	0.0010
Antimony, total	MG/L	MW-13B	05/16/2016	ND	0.0010
Antimony, total	MG/L	MW-13B	08/31/2016	ND	0.0010
Antimony, total	MG/L	MW-13B	11/14/2016	ND	0.0010
Antimony, total	MG/L	MW-16	09/05/2013	ND	0.0010
Antimony, total	MG/L	MW-16	12/16/2013	ND	0.0010
Antimony, total	MG/L	MW-16	03/05/2014	ND	0.0010
Antimony, total	MG/L	MW-16	06/02/2014	ND	0.0010
Antimony, total	MG/L	MW-16	09/22/2014	ND	0.0010
Antimony, total	MG/L	MW-16	11/18/2014	ND	0.0010
Antimony, total	MG/L	MW-16	02/23/2015		0.0011
Antimony, total	MG/L	MW-16	05/20/2015	ND	0.0010
Antimony, total	MG/L	MW-16	08/26/2015	ND	0.0010
Antimony, total	MG/L	MW-16	11/11/2015		0.0013
Antimony, total	MG/L	MW-16	02/24/2016	ND	0.0010
Antimony, total	MG/L	MW-16	05/16/2016	ND	0.0010
Antimony, total	MG/L	MW-16	08/31/2016	ND	0.0010
Antimony, total	MG/L	MW-16	11/14/2016	ND	0.0010
Antimony, total	MG/L	MW-35	09/05/2013	ND	0.0010
Antimony, total	MG/L	MW-35	12/16/2013	ND	0.0010
Antimony, total	MG/L	MW-35	03/04/2014	ND	0.0010
Antimony, total	MG/L	MW-35	06/02/2014	ND	0.0010
Antimony, total	MG/L	MW-35	09/22/2014	ND	0.0010
Antimony, total	MG/L	MW-35	11/17/2014	ND	0.0010
Antimony, total	MG/L	MW-35	02/25/2015	ND	0.0010
Antimony, total	MG/L	MW-35	05/19/2015	ND	0.0010
Antimony, total	MG/L	MW-35	08/26/2015	ND	0.0010
Antimony, total	MG/L	MW-35	11/10/2015	ND	0.0010
Antimony, total	MG/L	MW-35	02/22/2016	ND	0.0010
Antimony, total	MG/L	MW-35	05/16/2016	ND	0.0010
Antimony, total	MG/L	MW-35	08/31/2016	ND	0.0010
Antimony, total	MG/L	MW-35	11/15/2016	ND	0.0010
Arsenic, total	UG/L	MW-13A	03/22/2005	ND	5.0000 *
Arsenic, total	UG/L	MW-13A	06/15/2005		0.2200
Arsenic, total	UG/L	MW-13A	09/27/2005		0.2300
Arsenic, total	UG/L	MW-13A	12/15/2005		0.2100
Arsenic, total	UG/L	MW-13A	12/03/2013		0.1700
Arsenic, total	UG/L	MW-13A	03/04/2014		0.1800
Arsenic, total	UG/L	MW-13A	06/02/2014		0.2000
Arsenic, total	UG/L	MW-13A	09/22/2014		0.1700
Arsenic, total	UG/L	MW-13A	11/17/2014		0.1800
Arsenic, total	UG/L	MW-13A	02/23/2015		0.2100
Arsenic, total	UG/L	MW-13A	05/19/2015		0.1800
Arsenic, total	UG/L	MW-13A	08/26/2015		0.1900
Arsenic, total	UG/L	MW-13A	11/10/2015		0.2000
Arsenic, total	UG/L	MW-13A	02/22/2016		0.2000
Arsenic, total	UG/L	MW-13A	05/16/2016		0.1600

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date		Result	
Arsenic, total	UG/L	MW-13A	08/31/2016		0.1770	
Arsenic, total	UG/L	MW-13A	11/14/2016		0.1700	
Arsenic, total	UG/L	MW-13B	03/22/2005	ND	5.0000	*
Arsenic, total	UG/L	MW-13B	06/15/2005		0.3700	
Arsenic, total	UG/L	MW-13B	09/27/2005		0.3900	
Arsenic, total	UG/L	MW-13B	12/15/2005		0.3800	
Arsenic, total	UG/L	MW-13B	12/03/2013		0.2800	
Arsenic, total	UG/L	MW-13B	03/04/2014		0.3200	
Arsenic, total	UG/L	MW-13B	06/02/2014		0.3300	
Arsenic, total	UG/L	MW-13B	09/22/2014		0.3000	
Arsenic, total	UG/L	MW-13B	11/17/2014		0.3000	
Arsenic, total	UG/L	MW-13B	02/23/2015		0.3600	
Arsenic, total	UG/L	MW-13B	05/19/2015		0.3100	
Arsenic, total	UG/L	MW-13B	08/26/2015		0.3100	
Arsenic, total	UG/L	MW-13B	11/10/2015		0.3000	
Arsenic, total	UG/L	MW-13B	02/22/2016		0.3000	
Arsenic, total	UG/L	MW-13B	05/16/2016		0.2900	
Arsenic, total	UG/L	MW-13B	08/31/2016		0.3110	
Arsenic, total	UG/L	MW-13B	11/14/2016		0.3140	
Arsenic, total	UG/L	MW-16	12/23/2013		0.2900	
Arsenic, total	UG/L	MW-16	03/05/2014		0.4300	
Arsenic, total	UG/L	MW-16	06/02/2014		0.3300	
Arsenic, total	UG/L	MW-16	09/22/2014		0.3200	
Arsenic, total	UG/L	MW-16	11/18/2014		0.3500	
Arsenic, total	UG/L	MW-16	02/23/2015		0.3700	
Arsenic, total	UG/L	MW-16	05/20/2015		0.3400	
Arsenic, total	UG/L	MW-16	08/26/2015		0.3200	
Arsenic, total	UG/L	MW-16	11/11/2015		0.3000	
Arsenic, total	UG/L	MW-16	02/24/2016		0.3000	
Arsenic, total	UG/L	MW-16	05/16/2016		0.3000	
Arsenic, total	UG/L	MW-16	08/31/2016		0.3110	
Arsenic, total	UG/L	MW-16	11/14/2016		0.3810	
Arsenic, total	UG/L	MW-35	03/22/2005	ND	5.0000	*
Arsenic, total	UG/L	MW-35	06/14/2005		0.1400	
Arsenic, total	UG/L	MW-35	09/27/2005		0.1500	
Arsenic, total	UG/L	MW-35	12/15/2005		0.1400	
Arsenic, total	UG/L	MW-35	12/23/2013		0.1200	
Arsenic, total	UG/L	MW-35	03/04/2014		0.1100	
Arsenic, total	UG/L	MW-35	06/02/2014		0.1200	
Arsenic, total	UG/L	MW-35	09/22/2014		0.1100	
Arsenic, total	UG/L	MW-35	11/17/2014		0.1200	
Arsenic, total	UG/L	MW-35	02/25/2015		0.1100	
Arsenic, total	UG/L	MW-35	05/19/2015		0.1100	
Arsenic, total	UG/L	MW-35	08/26/2015		0.1100	
Arsenic, total	UG/L	MW-35	11/10/2015		0.1000	
Arsenic, total	UG/L	MW-35	02/22/2016		0.1000	
Arsenic, total	UG/L	MW-35	05/16/2016		0.1000	
Arsenic, total	UG/L	MW-35	08/31/2016		0.1090	
Arsenic, total	UG/L	MW-35	11/15/2016		0.1140	
Barium, total	MG/L	MW-13A	12/03/2013		0.0030	
Barium, total	MG/L	MW-13A	03/04/2014		0.0029	
Barium, total	MG/L	MW-13A	06/02/2014		0.0029	
Barium, total	MG/L	MW-13A	09/22/2014		0.0027	
Barium, total	MG/L	MW-13A	11/17/2014		0.0026	
Barium, total	MG/L	MW-13A	02/23/2015		0.0024	
Barium, total	MG/L	MW-13A	05/19/2015		0.0023	
Barium, total	MG/L	MW-13A	08/26/2015		0.0033	
Barium, total	MG/L	MW-13A	11/10/2015		0.0030	
Barium, total	MG/L	MW-13A	02/22/2016		0.0023	
Barium, total	MG/L	MW-13A	05/16/2016		0.0030	
Barium, total	MG/L	MW-13A	08/31/2016		0.0029	
Barium, total	MG/L	MW-13A	11/14/2016		0.0028	
Barium, total	MG/L	MW-13B	12/03/2013		0.0035	
Barium, total	MG/L	MW-13B	03/04/2014		0.0032	
Barium, total	MG/L	MW-13B	06/02/2014		0.0031	

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date		Result
Barium, total	MG/L	MW-13B	09/22/2014		0.0033
Barium, total	MG/L	MW-13B	11/17/2014		0.0037
Barium, total	MG/L	MW-13B	02/23/2015		0.0034
Barium, total	MG/L	MW-13B	05/19/2015		0.0033
Barium, total	MG/L	MW-13B	08/26/2015		0.0039
Barium, total	MG/L	MW-13B	11/10/2015		0.0036
Barium, total	MG/L	MW-13B	02/22/2016		0.0036
Barium, total	MG/L	MW-13B	05/16/2016		0.0034
Barium, total	MG/L	MW-13B	08/31/2016		0.0041
Barium, total	MG/L	MW-13B	11/14/2016		0.0029
Barium, total	MG/L	MW-16	09/05/2013		0.0041
Barium, total	MG/L	MW-16	12/16/2013		0.0043
Barium, total	MG/L	MW-16	03/05/2014		0.0036
Barium, total	MG/L	MW-16	06/02/2014		0.0025
Barium, total	MG/L	MW-16	09/22/2014		0.0033
Barium, total	MG/L	MW-16	11/18/2014		0.0039
Barium, total	MG/L	MW-16	02/23/2015		0.0036
Barium, total	MG/L	MW-16	05/20/2015		0.0034
Barium, total	MG/L	MW-16	08/26/2015		0.0038
Barium, total	MG/L	MW-16	11/11/2015		0.0043
Barium, total	MG/L	MW-16	02/24/2016		0.0027
Barium, total	MG/L	MW-16	05/16/2016		0.0031
Barium, total	MG/L	MW-16	08/31/2016		0.0042
Barium, total	MG/L	MW-16	11/14/2016		0.0045
Barium, total	MG/L	MW-35	09/05/2013		0.0034
Barium, total	MG/L	MW-35	12/16/2013		0.0031
Barium, total	MG/L	MW-35	03/04/2014		0.0030
Barium, total	MG/L	MW-35	06/02/2014		0.0034
Barium, total	MG/L	MW-35	09/22/2014		0.0034
Barium, total	MG/L	MW-35	11/17/2014		0.0034
Barium, total	MG/L	MW-35	02/25/2015		0.0030
Barium, total	MG/L	MW-35	05/19/2015		0.0031
Barium, total	MG/L	MW-35	08/26/2015		0.0029
Barium, total	MG/L	MW-35	11/10/2015		0.0030
Barium, total	MG/L	MW-35	02/22/2016		0.0031
Barium, total	MG/L	MW-35	05/16/2016		0.0033
Barium, total	MG/L	MW-35	08/31/2016		0.0029
Barium, total	MG/L	MW-35	11/15/2016		0.0027
Beryllium, total	MG/L	MW-13A	12/03/2013	ND	0.0010
Beryllium, total	MG/L	MW-13A	03/04/2014	ND	0.0010
Beryllium, total	MG/L	MW-13A	06/02/2014	ND	0.0010
Beryllium, total	MG/L	MW-13A	09/22/2014	ND	0.0010
Beryllium, total	MG/L	MW-13A	11/17/2014	ND	0.0010
Beryllium, total	MG/L	MW-13A	02/23/2015	ND	0.0010
Beryllium, total	MG/L	MW-13A	05/19/2015	ND	0.0010
Beryllium, total	MG/L	MW-13A	08/26/2015	ND	0.0010
Beryllium, total	MG/L	MW-13A	11/10/2015	ND	0.0010
Beryllium, total	MG/L	MW-13A	02/22/2016	ND	0.0010
Beryllium, total	MG/L	MW-13A	05/16/2016	ND	0.0010
Beryllium, total	MG/L	MW-13A	08/31/2016	ND	0.0010
Beryllium, total	MG/L	MW-13A	11/14/2016	ND	0.0010
Beryllium, total	MG/L	MW-13B	12/03/2013	ND	0.0010
Beryllium, total	MG/L	MW-13B	03/04/2014	ND	0.0010
Beryllium, total	MG/L	MW-13B	06/02/2014	ND	0.0010
Beryllium, total	MG/L	MW-13B	09/22/2014	ND	0.0010
Beryllium, total	MG/L	MW-13B	11/17/2014	ND	0.0010
Beryllium, total	MG/L	MW-13B	02/23/2015	ND	0.0010
Beryllium, total	MG/L	MW-13B	05/19/2015	ND	0.0010
Beryllium, total	MG/L	MW-13B	08/26/2015	ND	0.0010
Beryllium, total	MG/L	MW-13B	11/10/2015	ND	0.0010
Beryllium, total	MG/L	MW-13B	02/22/2016	ND	0.0010
Beryllium, total	MG/L	MW-13B	05/16/2016	ND	0.0010
Beryllium, total	MG/L	MW-13B	08/31/2016	ND	0.0010
Beryllium, total	MG/L	MW-13B	11/14/2016	ND	0.0010
Beryllium, total	MG/L	MW-16	09/05/2013	ND	0.0010

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date		Result
Beryllium, total	MG/L	MW-16	12/16/2013	ND	0.0010
Beryllium, total	MG/L	MW-16	03/05/2014	ND	0.0010
Beryllium, total	MG/L	MW-16	06/02/2014	ND	0.0010
Beryllium, total	MG/L	MW-16	09/22/2014	ND	0.0010
Beryllium, total	MG/L	MW-16	11/18/2014	ND	0.0010
Beryllium, total	MG/L	MW-16	02/23/2015	ND	0.0010
Beryllium, total	MG/L	MW-16	05/20/2015	ND	0.0010
Beryllium, total	MG/L	MW-16	08/26/2015	ND	0.0010
Beryllium, total	MG/L	MW-16	11/11/2015	ND	0.0010
Beryllium, total	MG/L	MW-16	02/24/2016	ND	0.0010
Beryllium, total	MG/L	MW-16	05/16/2016	ND	0.0010
Beryllium, total	MG/L	MW-16	08/31/2016	ND	0.0010
Beryllium, total	MG/L	MW-16	11/14/2016	ND	0.0010
Beryllium, total	MG/L	MW-35	09/05/2013	ND	0.0010
Beryllium, total	MG/L	MW-35	12/16/2013	ND	0.0010
Beryllium, total	MG/L	MW-35	03/04/2014	ND	0.0010
Beryllium, total	MG/L	MW-35	06/02/2014	ND	0.0010
Beryllium, total	MG/L	MW-35	09/22/2014	ND	0.0010
Beryllium, total	MG/L	MW-35	11/17/2014	ND	0.0010
Beryllium, total	MG/L	MW-35	02/25/2015	ND	0.0010
Beryllium, total	MG/L	MW-35	05/19/2015	ND	0.0010
Beryllium, total	MG/L	MW-35	08/26/2015	ND	0.0010
Beryllium, total	MG/L	MW-35	11/10/2015	ND	0.0010
Beryllium, total	MG/L	MW-35	02/22/2016	ND	0.0010
Beryllium, total	MG/L	MW-35	05/16/2016	ND	0.0010
Beryllium, total	MG/L	MW-35	08/31/2016	ND	0.0010
Beryllium, total	MG/L	MW-35	11/15/2016	ND	0.0010
Cadmium, total	MG/L	MW-13A	12/03/2013	ND	0.0002
Cadmium, total	MG/L	MW-13A	03/04/2014	ND	0.0002
Cadmium, total	MG/L	MW-13A	06/02/2014	ND	0.0002
Cadmium, total	MG/L	MW-13A	09/22/2014	ND	0.0002
Cadmium, total	MG/L	MW-13A	11/17/2014	ND	0.0002
Cadmium, total	MG/L	MW-13A	02/23/2015	ND	0.0002
Cadmium, total	MG/L	MW-13A	05/19/2015	ND	0.0002
Cadmium, total	MG/L	MW-13A	08/26/2015	ND	0.0002
Cadmium, total	MG/L	MW-13A	11/10/2015	ND	0.0002
Cadmium, total	MG/L	MW-13A	02/22/2016	ND	0.0002
Cadmium, total	MG/L	MW-13A	05/16/2016	ND	0.0002
Cadmium, total	MG/L	MW-13A	08/31/2016	ND	0.0002
Cadmium, total	MG/L	MW-13A	11/14/2016	ND	0.0002
Cadmium, total	MG/L	MW-13B	12/03/2013	ND	0.0002
Cadmium, total	MG/L	MW-13B	03/04/2014	ND	0.0002
Cadmium, total	MG/L	MW-13B	06/02/2014	ND	0.0002
Cadmium, total	MG/L	MW-13B	09/22/2014	ND	0.0002
Cadmium, total	MG/L	MW-13B	11/17/2014	ND	0.0002
Cadmium, total	MG/L	MW-13B	02/23/2015	ND	0.0002
Cadmium, total	MG/L	MW-13B	05/19/2015	ND	0.0002
Cadmium, total	MG/L	MW-13B	08/26/2015	ND	0.0002
Cadmium, total	MG/L	MW-13B	11/10/2015	ND	0.0002
Cadmium, total	MG/L	MW-13B	02/22/2016	ND	0.0002
Cadmium, total	MG/L	MW-13B	05/16/2016	ND	0.0002
Cadmium, total	MG/L	MW-13B	08/31/2016	ND	0.0002
Cadmium, total	MG/L	MW-13B	11/14/2016	ND	0.0002
Cadmium, total	MG/L	MW-16	09/05/2013	ND	0.0002
Cadmium, total	MG/L	MW-16	12/16/2013	ND	0.0002
Cadmium, total	MG/L	MW-16	03/05/2014	ND	0.0002
Cadmium, total	MG/L	MW-16	06/02/2014	ND	0.0002
Cadmium, total	MG/L	MW-16	09/22/2014	ND	0.0002
Cadmium, total	MG/L	MW-16	11/18/2014	ND	0.0002
Cadmium, total	MG/L	MW-16	02/23/2015	ND	0.0002
Cadmium, total	MG/L	MW-16	05/20/2015	ND	0.0002
Cadmium, total	MG/L	MW-16	08/26/2015	ND	0.0002
Cadmium, total	MG/L	MW-16	11/11/2015	ND	0.0002
Cadmium, total	MG/L	MW-16	02/24/2016	ND	0.0002
Cadmium, total	MG/L	MW-16	05/16/2016	ND	0.0002

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date		Result
Cadmium, total	MG/L	MW-16	08/31/2016	ND	0.0002
Cadmium, total	MG/L	MW-16	11/14/2016	ND	0.0002
Cadmium, total	MG/L	MW-35	09/05/2013	ND	0.0002
Cadmium, total	MG/L	MW-35	12/16/2013	ND	0.0002
Cadmium, total	MG/L	MW-35	03/04/2014	ND	0.0002
Cadmium, total	MG/L	MW-35	06/02/2014	ND	0.0002
Cadmium, total	MG/L	MW-35	09/22/2014	ND	0.0002
Cadmium, total	MG/L	MW-35	11/17/2014	ND	0.0002
Cadmium, total	MG/L	MW-35	02/25/2015	ND	0.0002
Cadmium, total	MG/L	MW-35	05/19/2015	ND	0.0002
Cadmium, total	MG/L	MW-35	08/26/2015	ND	0.0002
Cadmium, total	MG/L	MW-35	11/10/2015	ND	0.0002
Cadmium, total	MG/L	MW-35	02/22/2016	ND	0.0002
Cadmium, total	MG/L	MW-35	05/16/2016	ND	0.0002
Cadmium, total	MG/L	MW-35	08/31/2016	ND	0.0002
Cadmium, total	MG/L	MW-35	11/15/2016	ND	0.0002
Calcium, dissolved	MG/L	MW-13A	03/22/2005		15.7000
Calcium, dissolved	MG/L	MW-13A	06/15/2005		14.2000
Calcium, dissolved	MG/L	MW-13A	09/27/2005		14.2000
Calcium, dissolved	MG/L	MW-13A	12/15/2005		15.1000
Calcium, dissolved	MG/L	MW-13A	03/28/2006		16.0000
Calcium, dissolved	MG/L	MW-13A	06/21/2006		16.0000
Calcium, dissolved	MG/L	MW-13A	09/26/2006		15.0000
Calcium, dissolved	MG/L	MW-13A	12/13/2006		15.0000
Calcium, dissolved	MG/L	MW-13A	03/27/2007		15.0000
Calcium, dissolved	MG/L	MW-13A	06/19/2007		16.0000
Calcium, dissolved	MG/L	MW-13A	09/19/2007		16.0000
Calcium, dissolved	MG/L	MW-13A	12/19/2007		15.0000
Calcium, dissolved	MG/L	MW-13A	03/25/2008		16.0000
Calcium, dissolved	MG/L	MW-13A	06/18/2008		16.0000
Calcium, dissolved	MG/L	MW-13A	09/17/2008		15.0000
Calcium, dissolved	MG/L	MW-13A	12/17/2008		16.0000
Calcium, dissolved	MG/L	MW-13A	03/24/2009		15.0000
Calcium, dissolved	MG/L	MW-13A	06/17/2009		17.0000
Calcium, dissolved	MG/L	MW-13A	09/10/2009		15.0000
Calcium, dissolved	MG/L	MW-13A	12/03/2009		15.0000
Calcium, dissolved	MG/L	MW-13A	03/25/2010		16.0000
Calcium, dissolved	MG/L	MW-13A	06/23/2010		15.0000
Calcium, dissolved	MG/L	MW-13A	09/23/2010		15.0000
Calcium, dissolved	MG/L	MW-13A	12/08/2010		16.0000
Calcium, dissolved	MG/L	MW-13A	03/30/2011		16.0000
Calcium, dissolved	MG/L	MW-13A	06/06/2011		16.0000
Calcium, dissolved	MG/L	MW-13A	09/27/2011		16.0000
Calcium, dissolved	MG/L	MW-13A	12/14/2011		16.0000
Calcium, dissolved	MG/L	MW-13A	03/21/2012		16.0000
Calcium, dissolved	MG/L	MW-13A	06/08/2012		15.0000
Calcium, dissolved	MG/L	MW-13A	09/26/2012		15.0000
Calcium, dissolved	MG/L	MW-13A	12/03/2012		16.0000
Calcium, dissolved	MG/L	MW-13A	03/11/2013		16.0000
Calcium, dissolved	MG/L	MW-13A	06/05/2013		16.0000
Calcium, dissolved	MG/L	MW-13A	12/03/2013		16.0000
Calcium, dissolved	MG/L	MW-13A	03/04/2014		16.0000
Calcium, dissolved	MG/L	MW-13A	06/02/2014		16.0000
Calcium, dissolved	MG/L	MW-13A	09/22/2014		15.0000
Calcium, dissolved	MG/L	MW-13A	11/17/2014		15.0000
Calcium, dissolved	MG/L	MW-13A	02/23/2015		15.0000
Calcium, dissolved	MG/L	MW-13A	05/19/2015		16.0000
Calcium, dissolved	MG/L	MW-13A	08/26/2015		15.0000
Calcium, dissolved	MG/L	MW-13A	11/10/2015		15.0000
Calcium, dissolved	MG/L	MW-13A	02/22/2016		16.0000
Calcium, dissolved	MG/L	MW-13A	05/16/2016		15.0000
Calcium, dissolved	MG/L	MW-13A	08/31/2016		17.0000
Calcium, dissolved	MG/L	MW-13A	11/14/2016		16.0000
Calcium, dissolved	MG/L	MW-13B	03/22/2005		16.9000
Calcium, dissolved	MG/L	MW-13B	06/15/2005		16.0000

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date	Result
Calcium, dissolved	MG/L	MW-13B	09/27/2005	17.1000
Calcium, dissolved	MG/L	MW-13B	12/15/2005	16.1000
Calcium, dissolved	MG/L	MW-13B	03/29/2006	17.0000
Calcium, dissolved	MG/L	MW-13B	06/21/2006	17.0000
Calcium, dissolved	MG/L	MW-13B	09/26/2006	16.0000
Calcium, dissolved	MG/L	MW-13B	12/13/2006	17.0000
Calcium, dissolved	MG/L	MW-13B	03/27/2007	16.0000
Calcium, dissolved	MG/L	MW-13B	06/19/2007	16.0000
Calcium, dissolved	MG/L	MW-13B	09/18/2007	17.0000
Calcium, dissolved	MG/L	MW-13B	12/19/2007	15.0000
Calcium, dissolved	MG/L	MW-13B	03/25/2008	16.0000
Calcium, dissolved	MG/L	MW-13B	06/18/2008	17.0000
Calcium, dissolved	MG/L	MW-13B	09/17/2008	16.0000
Calcium, dissolved	MG/L	MW-13B	12/16/2008	16.0000
Calcium, dissolved	MG/L	MW-13B	03/24/2009	16.0000
Calcium, dissolved	MG/L	MW-13B	06/17/2009	17.0000
Calcium, dissolved	MG/L	MW-13B	09/10/2009	16.0000
Calcium, dissolved	MG/L	MW-13B	12/03/2009	16.0000
Calcium, dissolved	MG/L	MW-13B	03/25/2010	17.0000
Calcium, dissolved	MG/L	MW-13B	06/23/2010	16.0000
Calcium, dissolved	MG/L	MW-13B	09/23/2010	16.0000
Calcium, dissolved	MG/L	MW-13B	12/08/2010	16.0000
Calcium, dissolved	MG/L	MW-13B	03/30/2011	16.0000
Calcium, dissolved	MG/L	MW-13B	06/06/2011	16.0000
Calcium, dissolved	MG/L	MW-13B	09/27/2011	16.0000
Calcium, dissolved	MG/L	MW-13B	12/14/2011	16.0000
Calcium, dissolved	MG/L	MW-13B	03/21/2012	16.0000
Calcium, dissolved	MG/L	MW-13B	06/08/2012	16.0000
Calcium, dissolved	MG/L	MW-13B	09/26/2012	16.0000
Calcium, dissolved	MG/L	MW-13B	12/03/2012	17.0000
Calcium, dissolved	MG/L	MW-13B	03/11/2013	17.0000
Calcium, dissolved	MG/L	MW-13B	06/05/2013	17.0000
Calcium, dissolved	MG/L	MW-13B	12/03/2013	17.0000
Calcium, dissolved	MG/L	MW-13B	03/04/2014	17.0000
Calcium, dissolved	MG/L	MW-13B	06/02/2014	16.0000
Calcium, dissolved	MG/L	MW-13B	09/22/2014	15.0000
Calcium, dissolved	MG/L	MW-13B	11/17/2014	16.0000
Calcium, dissolved	MG/L	MW-13B	02/23/2015	17.0000
Calcium, dissolved	MG/L	MW-13B	05/19/2015	17.0000
Calcium, dissolved	MG/L	MW-13B	08/26/2015	16.0000
Calcium, dissolved	MG/L	MW-13B	11/10/2015	17.0000
Calcium, dissolved	MG/L	MW-13B	02/22/2016	18.0000
Calcium, dissolved	MG/L	MW-13B	05/16/2016	16.0000
Calcium, dissolved	MG/L	MW-13B	08/31/2016	18.0000
Calcium, dissolved	MG/L	MW-13B	11/14/2016	17.0000
Calcium, dissolved	MG/L	MW-16	03/24/2009	12.0000
Calcium, dissolved	MG/L	MW-16	06/16/2009	10.0000
Calcium, dissolved	MG/L	MW-16	09/09/2009	11.0000
Calcium, dissolved	MG/L	MW-16	12/03/2009	14.0000
Calcium, dissolved	MG/L	MW-16	03/25/2010	9.6000
Calcium, dissolved	MG/L	MW-16	06/24/2010	12.0000
Calcium, dissolved	MG/L	MW-16	09/24/2010	13.0000
Calcium, dissolved	MG/L	MW-16	12/09/2010	13.0000
Calcium, dissolved	MG/L	MW-16	03/30/2011	9.8000
Calcium, dissolved	MG/L	MW-16	06/07/2011	9.7000
Calcium, dissolved	MG/L	MW-16	09/27/2011	12.0000
Calcium, dissolved	MG/L	MW-16	12/13/2011	11.0000
Calcium, dissolved	MG/L	MW-16	03/21/2012	8.9000
Calcium, dissolved	MG/L	MW-16	06/08/2012	9.1000
Calcium, dissolved	MG/L	MW-16	09/27/2012	11.0000
Calcium, dissolved	MG/L	MW-16	12/04/2012	11.0000
Calcium, dissolved	MG/L	MW-16	03/12/2013	10.0000
Calcium, dissolved	MG/L	MW-16	06/04/2013	10.0000
Calcium, dissolved	MG/L	MW-16	09/05/2013	11.0000
Calcium, dissolved	MG/L	MW-16	12/16/2013	11.0000

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date	Result
Calcium, dissolved	MG/L	MW-16	03/05/2014	9.8000
Calcium, dissolved	MG/L	MW-16	06/02/2014	8.8000
Calcium, dissolved	MG/L	MW-16	09/22/2014	9.9000
Calcium, dissolved	MG/L	MW-16	11/18/2014	11.0000
Calcium, dissolved	MG/L	MW-16	02/23/2015	9.5000
Calcium, dissolved	MG/L	MW-16	05/20/2015	10.0000
Calcium, dissolved	MG/L	MW-16	08/26/2015	9.8000
Calcium, dissolved	MG/L	MW-16	11/11/2015	12.0000
Calcium, dissolved	MG/L	MW-16	02/24/2016	7.7000
Calcium, dissolved	MG/L	MW-16	05/16/2016	8.4000
Calcium, dissolved	MG/L	MW-16	08/31/2016	12.0000
Calcium, dissolved	MG/L	MW-16	11/14/2016	9.6000
Calcium, dissolved	MG/L	MW-35	03/22/2005	13.9000
Calcium, dissolved	MG/L	MW-35	06/14/2005	12.9000
Calcium, dissolved	MG/L	MW-35	09/27/2005	14.8000
Calcium, dissolved	MG/L	MW-35	12/15/2005	13.2000
Calcium, dissolved	MG/L	MW-35	03/28/2006	14.0000
Calcium, dissolved	MG/L	MW-35	06/21/2006	14.0000
Calcium, dissolved	MG/L	MW-35	09/26/2006	13.0000
Calcium, dissolved	MG/L	MW-35	12/12/2006	14.0000
Calcium, dissolved	MG/L	MW-35	03/27/2007	13.0000
Calcium, dissolved	MG/L	MW-35	06/20/2007	14.0000
Calcium, dissolved	MG/L	MW-35	09/18/2007	14.0000
Calcium, dissolved	MG/L	MW-35	12/20/2007	13.0000
Calcium, dissolved	MG/L	MW-35	03/25/2008	13.0000
Calcium, dissolved	MG/L	MW-35	06/18/2008	13.0000
Calcium, dissolved	MG/L	MW-35	09/18/2008	13.0000
Calcium, dissolved	MG/L	MW-35	12/19/2008	12.0000
Calcium, dissolved	MG/L	MW-35	03/24/2009	13.0000
Calcium, dissolved	MG/L	MW-35	06/16/2009	13.0000
Calcium, dissolved	MG/L	MW-35	09/10/2009	12.0000
Calcium, dissolved	MG/L	MW-35	12/03/2009	13.0000
Calcium, dissolved	MG/L	MW-35	03/25/2010	13.0000
Calcium, dissolved	MG/L	MW-35	06/23/2010	13.0000
Calcium, dissolved	MG/L	MW-35	09/23/2010	13.0000
Calcium, dissolved	MG/L	MW-35	12/09/2010	14.0000
Calcium, dissolved	MG/L	MW-35	03/30/2011	14.0000
Calcium, dissolved	MG/L	MW-35	06/06/2011	13.0000
Calcium, dissolved	MG/L	MW-35	09/26/2011	14.0000
Calcium, dissolved	MG/L	MW-35	12/13/2011	14.0000
Calcium, dissolved	MG/L	MW-35	03/21/2012	14.0000
Calcium, dissolved	MG/L	MW-35	06/06/2012	13.0000
Calcium, dissolved	MG/L	MW-35	09/26/2012	13.0000
Calcium, dissolved	MG/L	MW-35	12/04/2012	14.0000
Calcium, dissolved	MG/L	MW-35	03/13/2013	14.0000
Calcium, dissolved	MG/L	MW-35	06/06/2013	13.0000
Calcium, dissolved	MG/L	MW-35	09/05/2013	13.0000
Calcium, dissolved	MG/L	MW-35	12/16/2013	14.0000
Calcium, dissolved	MG/L	MW-35	03/04/2014	14.0000
Calcium, dissolved	MG/L	MW-35	06/02/2014	14.0000
Calcium, dissolved	MG/L	MW-35	09/22/2014	13.0000
Calcium, dissolved	MG/L	MW-35	11/17/2014	14.0000
Calcium, dissolved	MG/L	MW-35	02/25/2015	15.0000
Calcium, dissolved	MG/L	MW-35	05/19/2015	13.0000
Calcium, dissolved	MG/L	MW-35	08/26/2015	13.0000
Calcium, dissolved	MG/L	MW-35	11/10/2015	15.0000
Calcium, dissolved	MG/L	MW-35	02/22/2016	15.0000
Calcium, dissolved	MG/L	MW-35	05/16/2016	14.0000
Calcium, dissolved	MG/L	MW-35	08/31/2016	15.0000
Calcium, dissolved	MG/L	MW-35	11/15/2016	14.0000
Chloride	MG/L	MW-13A	03/22/2005	2.6000
Chloride	MG/L	MW-13A	06/15/2005	1.9000
Chloride	MG/L	MW-13A	09/27/2005	2.4000
Chloride	MG/L	MW-13A	12/15/2005	2.1000
Chloride	MG/L	MW-13A	03/28/2006	3.0000

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date	Result
Chloride	MG/L	MW-13A	06/21/2006	2.4000
Chloride	MG/L	MW-13A	09/26/2006	2.6000
Chloride	MG/L	MW-13A	12/13/2006	3.0000
Chloride	MG/L	MW-13A	03/27/2007	2.8000
Chloride	MG/L	MW-13A	06/19/2007	2.6000
Chloride	MG/L	MW-13A	09/19/2007	2.6000
Chloride	MG/L	MW-13A	12/19/2007	2.6000
Chloride	MG/L	MW-13A	03/25/2008	2.5000
Chloride	MG/L	MW-13A	06/18/2008	2.6000
Chloride	MG/L	MW-13A	09/17/2008	2.5000
Chloride	MG/L	MW-13A	12/17/2008	3.1000
Chloride	MG/L	MW-13A	03/24/2009	2.7000
Chloride	MG/L	MW-13A	06/17/2009	2.4000
Chloride	MG/L	MW-13A	09/10/2009	2.1000
Chloride	MG/L	MW-13A	12/03/2009	3.4000
Chloride	MG/L	MW-13A	03/25/2010	2.2000
Chloride	MG/L	MW-13A	06/23/2010	2.6000
Chloride	MG/L	MW-13A	09/23/2010	2.8000
Chloride	MG/L	MW-13A	12/08/2010	2.9000
Chloride	MG/L	MW-13A	03/30/2011	2.9000
Chloride	MG/L	MW-13A	06/06/2011	3.0000
Chloride	MG/L	MW-13A	09/27/2011	3.8000
Chloride	MG/L	MW-13A	12/14/2011	4.4000
Chloride	MG/L	MW-13A	03/21/2012	2.7000
Chloride	MG/L	MW-13A	06/08/2012	3.0000
Chloride	MG/L	MW-13A	09/26/2012	2.6000
Chloride	MG/L	MW-13A	12/03/2012	1.8000
Chloride	MG/L	MW-13A	03/11/2013	3.0000
Chloride	MG/L	MW-13A	06/05/2013	1.7000
Chloride	MG/L	MW-13A	12/03/2013	1.7000
Chloride	MG/L	MW-13A	03/04/2014	1.7000
Chloride	MG/L	MW-13A	06/02/2014	2.0000
Chloride	MG/L	MW-13A	09/22/2014	1.7000
Chloride	MG/L	MW-13A	11/17/2014	1.9000
Chloride	MG/L	MW-13A	02/23/2015	1.8000
Chloride	MG/L	MW-13A	05/19/2015	1.9000
Chloride	MG/L	MW-13A	08/26/2015	2.1000
Chloride	MG/L	MW-13A	11/10/2015	1.9000
Chloride	MG/L	MW-13A	02/22/2016	1.9000
Chloride	MG/L	MW-13A	05/16/2016	1.9000
Chloride	MG/L	MW-13A	08/31/2016	1.9000
Chloride	MG/L	MW-13A	11/14/2016	1.8000
Chloride	MG/L	MW-13B	03/22/2005	3.0000
Chloride	MG/L	MW-13B	06/15/2005	2.3000
Chloride	MG/L	MW-13B	09/27/2005	2.8000
Chloride	MG/L	MW-13B	12/15/2005	2.4000
Chloride	MG/L	MW-13B	03/29/2006	3.2000
Chloride	MG/L	MW-13B	06/21/2006	2.9000
Chloride	MG/L	MW-13B	09/26/2006	2.7000
Chloride	MG/L	MW-13B	12/13/2006	3.3000
Chloride	MG/L	MW-13B	03/27/2007	3.0000
Chloride	MG/L	MW-13B	06/19/2007	2.8000
Chloride	MG/L	MW-13B	09/18/2007	2.8000
Chloride	MG/L	MW-13B	12/19/2007	2.8000
Chloride	MG/L	MW-13B	03/25/2008	2.7000
Chloride	MG/L	MW-13B	06/18/2008	2.8000
Chloride	MG/L	MW-13B	09/17/2008	2.7000
Chloride	MG/L	MW-13B	12/16/2008	3.2000
Chloride	MG/L	MW-13B	03/24/2009	2.6000
Chloride	MG/L	MW-13B	06/17/2009	3.0000
Chloride	MG/L	MW-13B	09/10/2009	2.3000
Chloride	MG/L	MW-13B	12/03/2009	2.9000
Chloride	MG/L	MW-13B	03/25/2010	2.5000
Chloride	MG/L	MW-13B	06/23/2010	2.8000
Chloride	MG/L	MW-13B	09/23/2010	3.0000

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date		Result
Chloride	MG/L	MW-13B	12/08/2010		2.5000
Chloride	MG/L	MW-13B	03/30/2011		3.1000
Chloride	MG/L	MW-13B	06/06/2011		3.2000
Chloride	MG/L	MW-13B	09/27/2011		3.7000
Chloride	MG/L	MW-13B	12/14/2011		3.4000
Chloride	MG/L	MW-13B	03/21/2012		2.8000
Chloride	MG/L	MW-13B	06/08/2012		3.4000
Chloride	MG/L	MW-13B	09/26/2012		2.9000
Chloride	MG/L	MW-13B	12/03/2012		2.1000
Chloride	MG/L	MW-13B	03/11/2013		2.1000
Chloride	MG/L	MW-13B	06/05/2013		2.0000
Chloride	MG/L	MW-13B	12/03/2013		1.9000
Chloride	MG/L	MW-13B	03/04/2014		1.9000
Chloride	MG/L	MW-13B	06/02/2014		2.1000
Chloride	MG/L	MW-13B	09/22/2014		1.9000
Chloride	MG/L	MW-13B	11/17/2014		2.1000
Chloride	MG/L	MW-13B	02/23/2015		2.0000
Chloride	MG/L	MW-13B	05/19/2015		2.0000
Chloride	MG/L	MW-13B	08/26/2015		2.1000
Chloride	MG/L	MW-13B	11/10/2015		2.0000
Chloride	MG/L	MW-13B	02/22/2016		2.0000
Chloride	MG/L	MW-13B	05/16/2016		2.0000
Chloride	MG/L	MW-13B	08/31/2016		2.0000
Chloride	MG/L	MW-13B	11/14/2016		1.9000
Chloride	MG/L	MW-16	03/24/2009		2.1000
Chloride	MG/L	MW-16	06/16/2009		2.2000
Chloride	MG/L	MW-16	09/09/2009		1.3000
Chloride	MG/L	MW-16	12/03/2009		1.9000
Chloride	MG/L	MW-16	03/25/2010		1.7000
Chloride	MG/L	MW-16	06/24/2010		1.6000
Chloride	MG/L	MW-16	09/24/2010		1.7000
Chloride	MG/L	MW-16	12/09/2010		2.3000
Chloride	MG/L	MW-16	03/30/2011		3.6000
Chloride	MG/L	MW-16	06/07/2011		2.4000
Chloride	MG/L	MW-16	09/27/2011		3.9000
Chloride	MG/L	MW-16	12/13/2011		2.1000
Chloride	MG/L	MW-16	03/21/2012		2.2000
Chloride	MG/L	MW-16	06/08/2012		2.8000
Chloride	MG/L	MW-16	09/27/2012		1.0000
Chloride	MG/L	MW-16	12/04/2012		1.3000
Chloride	MG/L	MW-16	03/12/2013		1.3000
Chloride	MG/L	MW-16	06/04/2013		1.3000
Chloride	MG/L	MW-16	09/05/2013		1.3000
Chloride	MG/L	MW-16	12/16/2013	ND	1.0000
Chloride	MG/L	MW-16	03/05/2014		1.0000
Chloride	MG/L	MW-16	06/02/2014		1.4000
Chloride	MG/L	MW-16	09/22/2014		1.1000
Chloride	MG/L	MW-16	11/18/2014		1.5000
Chloride	MG/L	MW-16	02/23/2015		1.2000
Chloride	MG/L	MW-16	05/20/2015		1.4000
Chloride	MG/L	MW-16	08/26/2015		1.1000
Chloride	MG/L	MW-16	11/11/2015	ND	1.0000
Chloride	MG/L	MW-16	02/24/2016		1.2000
Chloride	MG/L	MW-16	05/16/2016		1.2000
Chloride	MG/L	MW-16	08/31/2016		1.1000
Chloride	MG/L	MW-16	11/14/2016		1.0000
Chloride	MG/L	MW-35	03/22/2005		2.2000
Chloride	MG/L	MW-35	06/14/2005		2.2000
Chloride	MG/L	MW-35	09/27/2005		2.6000
Chloride	MG/L	MW-35	12/15/2005		1.9000
Chloride	MG/L	MW-35	03/28/2006		2.9000
Chloride	MG/L	MW-35	06/21/2006		2.8000
Chloride	MG/L	MW-35	09/26/2006		2.5000
Chloride	MG/L	MW-35	12/12/2006		3.0000
Chloride	MG/L	MW-35	03/27/2007		2.8000

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date		Result
Chloride	MG/L	MW-35	06/20/2007		2.6000
Chloride	MG/L	MW-35	09/18/2007		2.4000
Chloride	MG/L	MW-35	12/20/2007		2.3000
Chloride	MG/L	MW-35	03/25/2008		2.4000
Chloride	MG/L	MW-35	06/18/2008		2.6000
Chloride	MG/L	MW-35	09/18/2008		2.4000
Chloride	MG/L	MW-35	12/19/2008		2.9000
Chloride	MG/L	MW-35	03/24/2009		2.3000
Chloride	MG/L	MW-35	06/16/2009		2.4000
Chloride	MG/L	MW-35	09/10/2009		2.5000
Chloride	MG/L	MW-35	12/03/2009		2.8000
Chloride	MG/L	MW-35	03/25/2010		2.0000
Chloride	MG/L	MW-35	06/23/2010		2.1000
Chloride	MG/L	MW-35	09/23/2010		2.6000
Chloride	MG/L	MW-35	12/09/2010		2.7000
Chloride	MG/L	MW-35	03/30/2011		3.2000
Chloride	MG/L	MW-35	06/06/2011		2.3000
Chloride	MG/L	MW-35	09/26/2011		3.0000
Chloride	MG/L	MW-35	12/13/2011		3.2000
Chloride	MG/L	MW-35	03/21/2012		2.9000
Chloride	MG/L	MW-35	06/06/2012		1.3000
Chloride	MG/L	MW-35	09/26/2012		2.4000
Chloride	MG/L	MW-35	12/04/2012		1.9000
Chloride	MG/L	MW-35	03/13/2013		1.8000
Chloride	MG/L	MW-35	06/06/2013		1.7000
Chloride	MG/L	MW-35	09/05/2013		1.8000
Chloride	MG/L	MW-35	12/16/2013		1.7000
Chloride	MG/L	MW-35	03/04/2014		1.8000
Chloride	MG/L	MW-35	06/02/2014		2.0000
Chloride	MG/L	MW-35	09/22/2014		1.7000
Chloride	MG/L	MW-35	11/17/2014		1.8000
Chloride	MG/L	MW-35	02/25/2015		1.8000
Chloride	MG/L	MW-35	05/19/2015		1.9000
Chloride	MG/L	MW-35	08/26/2015		1.9000
Chloride	MG/L	MW-35	11/10/2015		1.8000
Chloride	MG/L	MW-35	02/22/2016		2.1000
Chloride	MG/L	MW-35	05/16/2016		1.9000
Chloride	MG/L	MW-35	08/31/2016		1.9000
Chloride	MG/L	MW-35	11/15/2016		1.8000
Chromium, total	MG/L	MW-13A	12/03/2013	ND	0.0030
Chromium, total	MG/L	MW-13A	03/04/2014	ND	0.0030
Chromium, total	MG/L	MW-13A	06/02/2014	ND	0.0030
Chromium, total	MG/L	MW-13A	09/22/2014	ND	0.0030
Chromium, total	MG/L	MW-13A	11/17/2014	ND	0.0030
Chromium, total	MG/L	MW-13A	02/23/2015	ND	0.0030
Chromium, total	MG/L	MW-13A	05/19/2015	ND	0.0030
Chromium, total	MG/L	MW-13A	08/26/2015	ND	0.0030
Chromium, total	MG/L	MW-13A	11/10/2015	ND	0.0030
Chromium, total	MG/L	MW-13A	02/22/2016	ND	0.0030
Chromium, total	MG/L	MW-13A	05/16/2016	ND	0.0030
Chromium, total	MG/L	MW-13A	08/31/2016	ND	0.0030
Chromium, total	MG/L	MW-13A	11/14/2016	ND	0.0030
Chromium, total	MG/L	MW-13B	12/03/2013		0.0030
Chromium, total	MG/L	MW-13B	03/04/2014		0.0032
Chromium, total	MG/L	MW-13B	06/02/2014		0.0033
Chromium, total	MG/L	MW-13B	09/22/2014	ND	0.0030
Chromium, total	MG/L	MW-13B	11/17/2014		0.0032
Chromium, total	MG/L	MW-13B	02/23/2015	ND	0.0030
Chromium, total	MG/L	MW-13B	05/19/2015		0.0030
Chromium, total	MG/L	MW-13B	08/26/2015	ND	0.0030
Chromium, total	MG/L	MW-13B	11/10/2015		0.0033
Chromium, total	MG/L	MW-13B	02/22/2016		0.0033
Chromium, total	MG/L	MW-13B	05/16/2016		0.0032
Chromium, total	MG/L	MW-13B	08/31/2016		0.0031
Chromium, total	MG/L	MW-13B	11/14/2016		0.0036

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date		Result
Chromium, total	MG/L	MW-16	09/05/2013		0.0063
Chromium, total	MG/L	MW-16	12/16/2013		0.0080
Chromium, total	MG/L	MW-16	03/05/2014		0.0085
Chromium, total	MG/L	MW-16	06/02/2014		0.0087
Chromium, total	MG/L	MW-16	09/22/2014		0.0073
Chromium, total	MG/L	MW-16	11/18/2014		0.0077
Chromium, total	MG/L	MW-16	02/23/2015		0.0090
Chromium, total	MG/L	MW-16	05/20/2015		0.0070
Chromium, total	MG/L	MW-16	08/26/2015		0.0064
Chromium, total	MG/L	MW-16	11/11/2015		0.0071
Chromium, total	MG/L	MW-16	02/24/2016		0.0077
Chromium, total	MG/L	MW-16	05/16/2016		0.0066
Chromium, total	MG/L	MW-16	08/31/2016		0.0092
Chromium, total	MG/L	MW-16	11/14/2016		0.0085
Chromium, total	MG/L	MW-35	09/05/2013	ND	0.0030
Chromium, total	MG/L	MW-35	12/16/2013	ND	0.0030
Chromium, total	MG/L	MW-35	03/04/2014	ND	0.0030
Chromium, total	MG/L	MW-35	06/02/2014	ND	0.0030
Chromium, total	MG/L	MW-35	09/22/2014	ND	0.0030
Chromium, total	MG/L	MW-35	11/17/2014	ND	0.0030
Chromium, total	MG/L	MW-35	02/25/2015	ND	0.0030
Chromium, total	MG/L	MW-35	05/19/2015	ND	0.0030
Chromium, total	MG/L	MW-35	08/26/2015	ND	0.0030
Chromium, total	MG/L	MW-35	11/10/2015	ND	0.0030
Chromium, total	MG/L	MW-35	02/22/2016	ND	0.0030
Chromium, total	MG/L	MW-35	05/16/2016	ND	0.0030
Chromium, total	MG/L	MW-35	08/31/2016	ND	0.0030
Chromium, total	MG/L	MW-35	11/15/2016	ND	0.0030
Cobalt, total	MG/L	MW-13A	12/03/2013	ND	0.0030
Cobalt, total	MG/L	MW-13A	03/04/2014	ND	0.0030
Cobalt, total	MG/L	MW-13A	06/02/2014	ND	0.0030
Cobalt, total	MG/L	MW-13A	09/22/2014	ND	0.0030
Cobalt, total	MG/L	MW-13A	11/17/2014	ND	0.0030
Cobalt, total	MG/L	MW-13A	02/23/2015	ND	0.0030
Cobalt, total	MG/L	MW-13A	05/19/2015	ND	0.0030
Cobalt, total	MG/L	MW-13A	08/26/2015	ND	0.0030
Cobalt, total	MG/L	MW-13A	11/10/2015	ND	0.0030
Cobalt, total	MG/L	MW-13A	02/22/2016	ND	0.0030
Cobalt, total	MG/L	MW-13A	05/16/2016	ND	0.0030
Cobalt, total	MG/L	MW-13A	08/31/2016	ND	0.0030
Cobalt, total	MG/L	MW-13A	11/14/2016	ND	0.0030
Cobalt, total	MG/L	MW-13B	12/03/2013	ND	0.0030
Cobalt, total	MG/L	MW-13B	03/04/2014	ND	0.0030
Cobalt, total	MG/L	MW-13B	06/02/2014	ND	0.0030
Cobalt, total	MG/L	MW-13B	09/22/2014	ND	0.0030
Cobalt, total	MG/L	MW-13B	11/17/2014	ND	0.0030
Cobalt, total	MG/L	MW-13B	02/23/2015	ND	0.0030
Cobalt, total	MG/L	MW-13B	05/19/2015	ND	0.0030
Cobalt, total	MG/L	MW-13B	08/26/2015	ND	0.0030
Cobalt, total	MG/L	MW-13B	11/10/2015	ND	0.0030
Cobalt, total	MG/L	MW-13B	02/22/2016	ND	0.0030
Cobalt, total	MG/L	MW-13B	05/16/2016	ND	0.0030
Cobalt, total	MG/L	MW-13B	08/31/2016	ND	0.0030
Cobalt, total	MG/L	MW-13B	11/14/2016	ND	0.0030
Cobalt, total	MG/L	MW-16	09/05/2013	ND	0.0030
Cobalt, total	MG/L	MW-16	12/16/2013	ND	0.0030
Cobalt, total	MG/L	MW-16	03/05/2014	ND	0.0030
Cobalt, total	MG/L	MW-16	06/02/2014	ND	0.0030
Cobalt, total	MG/L	MW-16	09/22/2014	ND	0.0030
Cobalt, total	MG/L	MW-16	11/18/2014	ND	0.0030
Cobalt, total	MG/L	MW-16	02/23/2015	ND	0.0030
Cobalt, total	MG/L	MW-16	05/20/2015	ND	0.0030
Cobalt, total	MG/L	MW-16	08/26/2015	ND	0.0030
Cobalt, total	MG/L	MW-16	11/11/2015	ND	0.0030
Cobalt, total	MG/L	MW-16	02/24/2016	ND	0.0030

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date		Result
Cobalt, total	MG/L	MW-16	05/16/2016	ND	0.0030
Cobalt, total	MG/L	MW-16	08/31/2016	ND	0.0030
Cobalt, total	MG/L	MW-16	11/14/2016	ND	0.0030
Cobalt, total	MG/L	MW-35	09/05/2013	ND	0.0030
Cobalt, total	MG/L	MW-35	12/16/2013	ND	0.0030
Cobalt, total	MG/L	MW-35	03/04/2014	ND	0.0030
Cobalt, total	MG/L	MW-35	06/02/2014	ND	0.0030
Cobalt, total	MG/L	MW-35	09/22/2014	ND	0.0030
Cobalt, total	MG/L	MW-35	11/17/2014	ND	0.0030
Cobalt, total	MG/L	MW-35	02/25/2015	ND	0.0030
Cobalt, total	MG/L	MW-35	05/19/2015	ND	0.0030
Cobalt, total	MG/L	MW-35	08/26/2015	ND	0.0030
Cobalt, total	MG/L	MW-35	11/10/2015	ND	0.0030
Cobalt, total	MG/L	MW-35	02/22/2016	ND	0.0030
Cobalt, total	MG/L	MW-35	05/16/2016	ND	0.0030
Cobalt, total	MG/L	MW-35	08/31/2016	ND	0.0030
Cobalt, total	MG/L	MW-35	11/15/2016	ND	0.0030
Copper, total	MG/L	MW-13A	12/03/2013	ND	0.0020
Copper, total	MG/L	MW-13A	03/04/2014	ND	0.0020
Copper, total	MG/L	MW-13A	06/02/2014	ND	0.0020
Copper, total	MG/L	MW-13A	09/22/2014	ND	0.0020
Copper, total	MG/L	MW-13A	11/17/2014	ND	0.0020
Copper, total	MG/L	MW-13A	02/23/2015	ND	0.0020
Copper, total	MG/L	MW-13A	05/19/2015	ND	0.0020
Copper, total	MG/L	MW-13A	08/26/2015	ND	0.0020
Copper, total	MG/L	MW-13A	11/10/2015	ND	0.0020
Copper, total	MG/L	MW-13A	02/22/2016	ND	0.0020
Copper, total	MG/L	MW-13A	05/16/2016	ND	0.0020
Copper, total	MG/L	MW-13A	08/31/2016	ND	0.0020
Copper, total	MG/L	MW-13A	11/14/2016	ND	0.0021
Copper, total	MG/L	MW-13B	12/03/2013	ND	0.0020
Copper, total	MG/L	MW-13B	03/04/2014	ND	0.0020
Copper, total	MG/L	MW-13B	06/02/2014	ND	0.0020
Copper, total	MG/L	MW-13B	09/22/2014	ND	0.0020
Copper, total	MG/L	MW-13B	11/17/2014	ND	0.0020
Copper, total	MG/L	MW-13B	02/23/2015	ND	0.0020
Copper, total	MG/L	MW-13B	05/19/2015	ND	0.0020
Copper, total	MG/L	MW-13B	08/26/2015	ND	0.0020
Copper, total	MG/L	MW-13B	11/10/2015	ND	0.0020
Copper, total	MG/L	MW-13B	02/22/2016	ND	0.0020
Copper, total	MG/L	MW-13B	05/16/2016	ND	0.0020
Copper, total	MG/L	MW-13B	08/31/2016	ND	0.0020
Copper, total	MG/L	MW-13B	11/14/2016	ND	0.0020
Copper, total	MG/L	MW-16	09/05/2013	ND	0.0020
Copper, total	MG/L	MW-16	12/16/2013	ND	0.0020
Copper, total	MG/L	MW-16	03/05/2014	ND	0.0020
Copper, total	MG/L	MW-16	06/02/2014	ND	0.0020
Copper, total	MG/L	MW-16	09/22/2014	ND	0.0020
Copper, total	MG/L	MW-16	11/18/2014	ND	0.0020
Copper, total	MG/L	MW-16	02/23/2015	ND	0.0020
Copper, total	MG/L	MW-16	05/20/2015	ND	0.0020
Copper, total	MG/L	MW-16	08/26/2015	ND	0.0020
Copper, total	MG/L	MW-16	11/11/2015	ND	0.0020
Copper, total	MG/L	MW-16	02/24/2016	ND	0.0020
Copper, total	MG/L	MW-16	05/16/2016	ND	0.0020
Copper, total	MG/L	MW-16	08/31/2016	ND	0.0020
Copper, total	MG/L	MW-16	11/14/2016	ND	0.0020
Copper, total	MG/L	MW-35	09/05/2013	ND	0.0020
Copper, total	MG/L	MW-35	12/16/2013	ND	0.0020
Copper, total	MG/L	MW-35	03/04/2014	ND	0.0020
Copper, total	MG/L	MW-35	06/02/2014	ND	0.0020
Copper, total	MG/L	MW-35	09/22/2014	ND	0.0020
Copper, total	MG/L	MW-35	11/17/2014	ND	0.0020
Copper, total	MG/L	MW-35	02/25/2015	ND	0.0020
Copper, total	MG/L	MW-35	05/19/2015	ND	0.0020

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date		Result
Copper, total	MG/L	MW-35	08/26/2015	ND	0.0020
Copper, total	MG/L	MW-35	11/10/2015	ND	0.0020
Copper, total	MG/L	MW-35	02/22/2016	ND	0.0020
Copper, total	MG/L	MW-35	05/16/2016	ND	0.0020
Copper, total	MG/L	MW-35	08/31/2016	ND	0.0020
Copper, total	MG/L	MW-35	11/15/2016	ND	0.0020
Iron, total	MG/L	MW-13A	12/03/2013	ND	0.0600
Iron, total	MG/L	MW-13A	03/04/2014	ND	0.0600
Iron, total	MG/L	MW-13A	06/02/2014	ND	0.0600
Iron, total	MG/L	MW-13A	09/22/2014	ND	0.0600
Iron, total	MG/L	MW-13A	11/17/2014	ND	0.0600
Iron, total	MG/L	MW-13A	02/23/2015	ND	0.0600
Iron, total	MG/L	MW-13A	05/19/2015	ND	0.0600
Iron, total	MG/L	MW-13A	08/26/2015	ND	0.0600
Iron, total	MG/L	MW-13A	11/10/2015	ND	0.0600
Iron, total	MG/L	MW-13A	02/22/2016	ND	0.0600
Iron, total	MG/L	MW-13A	05/16/2016	ND	0.0600
Iron, total	MG/L	MW-13A	08/31/2016	ND	0.0600
Iron, total	MG/L	MW-13A	11/14/2016		0.0730
Iron, total	MG/L	MW-13B	12/03/2013	ND	0.0600
Iron, total	MG/L	MW-13B	03/04/2014	ND	0.0600
Iron, total	MG/L	MW-13B	06/02/2014	ND	0.0600
Iron, total	MG/L	MW-13B	09/22/2014	ND	0.0600
Iron, total	MG/L	MW-13B	11/17/2014	ND	0.0600
Iron, total	MG/L	MW-13B	02/23/2015	ND	0.0600
Iron, total	MG/L	MW-13B	05/19/2015	ND	0.0600
Iron, total	MG/L	MW-13B	08/26/2015	ND	0.0600
Iron, total	MG/L	MW-13B	11/10/2015	ND	0.0600
Iron, total	MG/L	MW-13B	02/22/2016	ND	0.0600
Iron, total	MG/L	MW-13B	05/16/2016	ND	0.0600
Iron, total	MG/L	MW-13B	08/31/2016	ND	0.0600
Iron, total	MG/L	MW-13B	11/14/2016	ND	0.0600
Iron, total	MG/L	MW-16	09/05/2013		0.1200
Iron, total	MG/L	MW-16	12/16/2013		0.0680
Iron, total	MG/L	MW-16	03/05/2014		0.2000
Iron, total	MG/L	MW-16	06/02/2014	ND	0.0600
Iron, total	MG/L	MW-16	09/22/2014	ND	0.0600
Iron, total	MG/L	MW-16	11/18/2014		0.1800
Iron, total	MG/L	MW-16	02/23/2015		0.3100
Iron, total	MG/L	MW-16	05/20/2015	ND	0.0600
Iron, total	MG/L	MW-16	08/26/2015	ND	0.0600
Iron, total	MG/L	MW-16	11/11/2015	ND	0.0600
Iron, total	MG/L	MW-16	02/24/2016	ND	0.0600
Iron, total	MG/L	MW-16	05/16/2016	ND	0.0600
Iron, total	MG/L	MW-16	08/31/2016	ND	0.0600
Iron, total	MG/L	MW-16	11/14/2016		0.1200
Iron, total	MG/L	MW-35	09/05/2013	ND	0.0600
Iron, total	MG/L	MW-35	12/16/2013	ND	0.0600
Iron, total	MG/L	MW-35	03/04/2014	ND	0.0600
Iron, total	MG/L	MW-35	06/02/2014	ND	0.0600
Iron, total	MG/L	MW-35	09/22/2014	ND	0.0600
Iron, total	MG/L	MW-35	11/17/2014	ND	0.0600
Iron, total	MG/L	MW-35	02/25/2015	ND	0.0600
Iron, total	MG/L	MW-35	05/19/2015	ND	0.0600
Iron, total	MG/L	MW-35	08/26/2015	ND	0.0600
Iron, total	MG/L	MW-35	11/10/2015	ND	0.0600
Iron, total	MG/L	MW-35	02/22/2016	ND	0.0600
Iron, total	MG/L	MW-35	05/16/2016	ND	0.0600
Iron, total	MG/L	MW-35	08/31/2016	ND	0.0600
Iron, total	MG/L	MW-35	11/15/2016	ND	0.0600
Lead, total	MG/L	MW-13A	12/03/2013	ND	0.0010
Lead, total	MG/L	MW-13A	03/04/2014	ND	0.0010
Lead, total	MG/L	MW-13A	06/02/2014	ND	0.0010
Lead, total	MG/L	MW-13A	09/22/2014	ND	0.0010
Lead, total	MG/L	MW-13A	11/17/2014	ND	0.0010

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date		Result
Lead, total	MG/L	MW-13A	02/23/2015	ND	0.0010
Lead, total	MG/L	MW-13A	05/19/2015	ND	0.0010
Lead, total	MG/L	MW-13A	08/26/2015	ND	0.0010
Lead, total	MG/L	MW-13A	11/10/2015	ND	0.0010
Lead, total	MG/L	MW-13A	02/22/2016	ND	0.0010
Lead, total	MG/L	MW-13A	05/16/2016	ND	0.0010
Lead, total	MG/L	MW-13A	08/31/2016	ND	0.0010
Lead, total	MG/L	MW-13A	11/14/2016	ND	0.0010
Lead, total	MG/L	MW-13B	12/03/2013	ND	0.0010
Lead, total	MG/L	MW-13B	03/04/2014	ND	0.0010
Lead, total	MG/L	MW-13B	06/02/2014	ND	0.0010
Lead, total	MG/L	MW-13B	09/22/2014	ND	0.0010
Lead, total	MG/L	MW-13B	11/17/2014	ND	0.0010
Lead, total	MG/L	MW-13B	02/23/2015	ND	0.0010
Lead, total	MG/L	MW-13B	05/19/2015	ND	0.0010
Lead, total	MG/L	MW-13B	08/26/2015	ND	0.0010
Lead, total	MG/L	MW-13B	11/10/2015	ND	0.0010
Lead, total	MG/L	MW-13B	02/22/2016	ND	0.0010
Lead, total	MG/L	MW-13B	05/16/2016	ND	0.0010
Lead, total	MG/L	MW-13B	08/31/2016	ND	0.0010
Lead, total	MG/L	MW-13B	11/14/2016	ND	0.0010
Lead, total	MG/L	MW-16	09/05/2013	ND	0.0010
Lead, total	MG/L	MW-16	12/16/2013	ND	0.0010
Lead, total	MG/L	MW-16	03/05/2014	ND	0.0010
Lead, total	MG/L	MW-16	06/02/2014	ND	0.0010
Lead, total	MG/L	MW-16	09/22/2014		0.0014
Lead, total	MG/L	MW-16	11/18/2014	ND	0.0010
Lead, total	MG/L	MW-16	02/23/2015	ND	0.0010
Lead, total	MG/L	MW-16	05/20/2015	ND	0.0010
Lead, total	MG/L	MW-16	08/26/2015	ND	0.0010
Lead, total	MG/L	MW-16	11/11/2015	ND	0.0010
Lead, total	MG/L	MW-16	02/24/2016	ND	0.0010
Lead, total	MG/L	MW-16	05/16/2016	ND	0.0010
Lead, total	MG/L	MW-16	08/31/2016	ND	0.0010
Lead, total	MG/L	MW-16	11/14/2016	ND	0.0010
Lead, total	MG/L	MW-35	09/05/2013	ND	0.0010
Lead, total	MG/L	MW-35	12/16/2013	ND	0.0010
Lead, total	MG/L	MW-35	03/04/2014	ND	0.0010
Lead, total	MG/L	MW-35	06/02/2014	ND	0.0010
Lead, total	MG/L	MW-35	09/22/2014	ND	0.0010
Lead, total	MG/L	MW-35	11/17/2014	ND	0.0010
Lead, total	MG/L	MW-35	02/25/2015	ND	0.0010
Lead, total	MG/L	MW-35	05/19/2015	ND	0.0010
Lead, total	MG/L	MW-35	08/26/2015	ND	0.0010
Lead, total	MG/L	MW-35	11/10/2015	ND	0.0010
Lead, total	MG/L	MW-35	02/22/2016	ND	0.0010
Lead, total	MG/L	MW-35	05/16/2016	ND	0.0010
Lead, total	MG/L	MW-35	08/31/2016	ND	0.0010
Lead, total	MG/L	MW-35	11/15/2016	ND	0.0010
Magnesium, dissolved	MG/L	MW-13A	03/22/2005		9.2000
Magnesium, dissolved	MG/L	MW-13A	06/15/2005		8.2000
Magnesium, dissolved	MG/L	MW-13A	09/27/2005		8.4000
Magnesium, dissolved	MG/L	MW-13A	12/15/2005		8.6000
Magnesium, dissolved	MG/L	MW-13A	03/28/2006		9.2000
Magnesium, dissolved	MG/L	MW-13A	06/21/2006		9.1000
Magnesium, dissolved	MG/L	MW-13A	09/26/2006		9.2000
Magnesium, dissolved	MG/L	MW-13A	12/13/2006		9.3000
Magnesium, dissolved	MG/L	MW-13A	03/27/2007		9.3000
Magnesium, dissolved	MG/L	MW-13A	06/19/2007		9.0000
Magnesium, dissolved	MG/L	MW-13A	09/19/2007		9.4000
Magnesium, dissolved	MG/L	MW-13A	12/19/2007		8.6000
Magnesium, dissolved	MG/L	MW-13A	03/25/2008		9.1000
Magnesium, dissolved	MG/L	MW-13A	06/18/2008		9.3000
Magnesium, dissolved	MG/L	MW-13A	09/17/2008		9.2000
Magnesium, dissolved	MG/L	MW-13A	12/17/2008		9.3000

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date	Result
Magnesium, dissolved	MG/L	MW-13A	03/24/2009	9.6000
Magnesium, dissolved	MG/L	MW-13A	06/17/2009	9.6000
Magnesium, dissolved	MG/L	MW-13A	09/10/2009	9.3000
Magnesium, dissolved	MG/L	MW-13A	12/03/2009	9.1000
Magnesium, dissolved	MG/L	MW-13A	03/25/2010	8.7000
Magnesium, dissolved	MG/L	MW-13A	06/23/2010	9.7000
Magnesium, dissolved	MG/L	MW-13A	09/23/2010	9.4000
Magnesium, dissolved	MG/L	MW-13A	12/08/2010	8.1000
Magnesium, dissolved	MG/L	MW-13A	03/30/2011	9.6000
Magnesium, dissolved	MG/L	MW-13A	06/06/2011	10.0000
Magnesium, dissolved	MG/L	MW-13A	09/27/2011	9.7000
Magnesium, dissolved	MG/L	MW-13A	12/14/2011	9.3000
Magnesium, dissolved	MG/L	MW-13A	03/21/2012	9.9000
Magnesium, dissolved	MG/L	MW-13A	06/08/2012	8.9000
Magnesium, dissolved	MG/L	MW-13A	09/26/2012	9.6000
Magnesium, dissolved	MG/L	MW-13A	12/03/2012	9.2000
Magnesium, dissolved	MG/L	MW-13A	03/11/2013	9.4000
Magnesium, dissolved	MG/L	MW-13A	06/05/2013	9.8000
Magnesium, dissolved	MG/L	MW-13A	12/03/2013	9.4000
Magnesium, dissolved	MG/L	MW-13A	03/04/2014	9.8000
Magnesium, dissolved	MG/L	MW-13A	06/02/2014	9.2000
Magnesium, dissolved	MG/L	MW-13A	09/22/2014	8.7000
Magnesium, dissolved	MG/L	MW-13A	11/17/2014	9.3000
Magnesium, dissolved	MG/L	MW-13A	02/23/2015	9.2000
Magnesium, dissolved	MG/L	MW-13A	05/19/2015	9.5000
Magnesium, dissolved	MG/L	MW-13A	08/26/2015	9.3000
Magnesium, dissolved	MG/L	MW-13A	11/10/2015	9.1000
Magnesium, dissolved	MG/L	MW-13A	02/22/2016	9.7000
Magnesium, dissolved	MG/L	MW-13A	05/16/2016	9.5000
Magnesium, dissolved	MG/L	MW-13A	08/31/2016	8.6000
Magnesium, dissolved	MG/L	MW-13A	11/14/2016	10.0000
Magnesium, dissolved	MG/L	MW-13B	03/22/2005	8.6000
Magnesium, dissolved	MG/L	MW-13B	06/15/2005	8.0000
Magnesium, dissolved	MG/L	MW-13B	09/27/2005	8.7000
Magnesium, dissolved	MG/L	MW-13B	12/15/2005	8.0000
Magnesium, dissolved	MG/L	MW-13B	03/29/2006	8.1000
Magnesium, dissolved	MG/L	MW-13B	06/21/2006	8.3000
Magnesium, dissolved	MG/L	MW-13B	09/26/2006	8.5000
Magnesium, dissolved	MG/L	MW-13B	12/13/2006	8.7000
Magnesium, dissolved	MG/L	MW-13B	03/27/2007	8.4000
Magnesium, dissolved	MG/L	MW-13B	06/19/2007	7.9000
Magnesium, dissolved	MG/L	MW-13B	09/18/2007	8.7000
Magnesium, dissolved	MG/L	MW-13B	12/19/2007	7.6000
Magnesium, dissolved	MG/L	MW-13B	03/25/2008	8.0000
Magnesium, dissolved	MG/L	MW-13B	06/18/2008	8.2000
Magnesium, dissolved	MG/L	MW-13B	09/17/2008	8.3000
Magnesium, dissolved	MG/L	MW-13B	12/16/2008	8.3000
Magnesium, dissolved	MG/L	MW-13B	03/24/2009	8.5000
Magnesium, dissolved	MG/L	MW-13B	06/17/2009	8.5000
Magnesium, dissolved	MG/L	MW-13B	09/10/2009	8.3000
Magnesium, dissolved	MG/L	MW-13B	12/03/2009	8.0000
Magnesium, dissolved	MG/L	MW-13B	03/25/2010	8.1000
Magnesium, dissolved	MG/L	MW-13B	06/23/2010	8.7000
Magnesium, dissolved	MG/L	MW-13B	09/23/2010	8.3000
Magnesium, dissolved	MG/L	MW-13B	12/08/2010	9.3000
Magnesium, dissolved	MG/L	MW-13B	03/30/2011	8.2000
Magnesium, dissolved	MG/L	MW-13B	06/06/2011	9.0000
Magnesium, dissolved	MG/L	MW-13B	09/27/2011	8.4000
Magnesium, dissolved	MG/L	MW-13B	12/14/2011	8.1000
Magnesium, dissolved	MG/L	MW-13B	03/21/2012	8.5000
Magnesium, dissolved	MG/L	MW-13B	06/08/2012	8.1000
Magnesium, dissolved	MG/L	MW-13B	09/26/2012	8.6000
Magnesium, dissolved	MG/L	MW-13B	12/03/2012	8.2000
Magnesium, dissolved	MG/L	MW-13B	03/11/2013	8.6000
Magnesium, dissolved	MG/L	MW-13B	06/05/2013	8.9000

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date	Result
Magnesium, dissolved	MG/L	MW-13B	12/03/2013	8.9000
Magnesium, dissolved	MG/L	MW-13B	03/04/2014	8.7000
Magnesium, dissolved	MG/L	MW-13B	06/02/2014	8.3000
Magnesium, dissolved	MG/L	MW-13B	09/22/2014	7.7000
Magnesium, dissolved	MG/L	MW-13B	11/17/2014	8.7000
Magnesium, dissolved	MG/L	MW-13B	02/23/2015	8.6000
Magnesium, dissolved	MG/L	MW-13B	05/19/2015	8.9000
Magnesium, dissolved	MG/L	MW-13B	08/26/2015	8.8000
Magnesium, dissolved	MG/L	MW-13B	11/10/2015	8.6000
Magnesium, dissolved	MG/L	MW-13B	02/22/2016	9.1000
Magnesium, dissolved	MG/L	MW-13B	05/16/2016	8.6000
Magnesium, dissolved	MG/L	MW-13B	08/31/2016	8.1000
Magnesium, dissolved	MG/L	MW-13B	11/14/2016	9.3000
Magnesium, dissolved	MG/L	MW-16	03/24/2009	7.2000
Magnesium, dissolved	MG/L	MW-16	06/16/2009	5.9000
Magnesium, dissolved	MG/L	MW-16	09/09/2009	6.9000
Magnesium, dissolved	MG/L	MW-16	12/03/2009	8.0000
Magnesium, dissolved	MG/L	MW-16	03/25/2010	5.1000
Magnesium, dissolved	MG/L	MW-16	06/24/2010	6.9000
Magnesium, dissolved	MG/L	MW-16	09/24/2010	7.4000
Magnesium, dissolved	MG/L	MW-16	12/09/2010	8.3000
Magnesium, dissolved	MG/L	MW-16	03/30/2011	5.8000
Magnesium, dissolved	MG/L	MW-16	06/07/2011	5.6000
Magnesium, dissolved	MG/L	MW-16	09/27/2011	6.6000
Magnesium, dissolved	MG/L	MW-16	12/13/2011	6.2000
Magnesium, dissolved	MG/L	MW-16	03/21/2012	5.5000
Magnesium, dissolved	MG/L	MW-16	06/08/2012	5.0000
Magnesium, dissolved	MG/L	MW-16	09/27/2012	6.4000
Magnesium, dissolved	MG/L	MW-16	12/04/2012	6.6000
Magnesium, dissolved	MG/L	MW-16	03/12/2013	5.6000
Magnesium, dissolved	MG/L	MW-16	06/04/2013	5.8000
Magnesium, dissolved	MG/L	MW-16	09/05/2013	6.0000
Magnesium, dissolved	MG/L	MW-16	12/16/2013	5.9000
Magnesium, dissolved	MG/L	MW-16	03/05/2014	6.6000
Magnesium, dissolved	MG/L	MW-16	06/02/2014	5.0000
Magnesium, dissolved	MG/L	MW-16	09/22/2014	5.5000
Magnesium, dissolved	MG/L	MW-16	11/18/2014	6.4000
Magnesium, dissolved	MG/L	MW-16	02/23/2015	5.7000
Magnesium, dissolved	MG/L	MW-16	05/20/2015	5.7000
Magnesium, dissolved	MG/L	MW-16	08/26/2015	5.9000
Magnesium, dissolved	MG/L	MW-16	11/11/2015	6.7000
Magnesium, dissolved	MG/L	MW-16	02/24/2016	4.5000
Magnesium, dissolved	MG/L	MW-16	05/16/2016	5.0000
Magnesium, dissolved	MG/L	MW-16	08/31/2016	5.4000
Magnesium, dissolved	MG/L	MW-16	11/14/2016	5.9000
Magnesium, dissolved	MG/L	MW-35	03/22/2005	8.6000
Magnesium, dissolved	MG/L	MW-35	06/14/2005	8.1000
Magnesium, dissolved	MG/L	MW-35	09/27/2005	9.2000
Magnesium, dissolved	MG/L	MW-35	12/15/2005	8.0000
Magnesium, dissolved	MG/L	MW-35	03/28/2006	8.3000
Magnesium, dissolved	MG/L	MW-35	06/21/2006	8.4000
Magnesium, dissolved	MG/L	MW-35	09/26/2006	8.2000
Magnesium, dissolved	MG/L	MW-35	12/12/2006	8.8000
Magnesium, dissolved	MG/L	MW-35	03/27/2007	8.6000
Magnesium, dissolved	MG/L	MW-35	06/20/2007	8.4000
Magnesium, dissolved	MG/L	MW-35	09/18/2007	9.1000
Magnesium, dissolved	MG/L	MW-35	12/20/2007	8.1000
Magnesium, dissolved	MG/L	MW-35	03/25/2008	8.2000
Magnesium, dissolved	MG/L	MW-35	06/18/2008	8.1000
Magnesium, dissolved	MG/L	MW-35	09/18/2008	8.1000
Magnesium, dissolved	MG/L	MW-35	12/19/2008	8.1000
Magnesium, dissolved	MG/L	MW-35	03/24/2009	8.7000
Magnesium, dissolved	MG/L	MW-35	06/16/2009	8.1000
Magnesium, dissolved	MG/L	MW-35	09/10/2009	8.1000
Magnesium, dissolved	MG/L	MW-35	12/03/2009	8.3000

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date		Result
Magnesium, dissolved	MG/L	MW-35	03/25/2010		7.9000
Magnesium, dissolved	MG/L	MW-35	06/23/2010		8.8000
Magnesium, dissolved	MG/L	MW-35	09/23/2010		8.7000
Magnesium, dissolved	MG/L	MW-35	12/09/2010		9.3000
Magnesium, dissolved	MG/L	MW-35	03/30/2011		8.8000
Magnesium, dissolved	MG/L	MW-35	06/06/2011		9.0000
Magnesium, dissolved	MG/L	MW-35	09/26/2011		8.7000
Magnesium, dissolved	MG/L	MW-35	12/13/2011		8.8000
Magnesium, dissolved	MG/L	MW-35	03/21/2012		9.0000
Magnesium, dissolved	MG/L	MW-35	06/06/2012		8.3000
Magnesium, dissolved	MG/L	MW-35	09/26/2012		8.9000
Magnesium, dissolved	MG/L	MW-35	12/04/2012		8.6000
Magnesium, dissolved	MG/L	MW-35	03/13/2013		9.2000
Magnesium, dissolved	MG/L	MW-35	06/06/2013		8.5000
Magnesium, dissolved	MG/L	MW-35	09/05/2013		8.1000
Magnesium, dissolved	MG/L	MW-35	12/16/2013		8.4000
Magnesium, dissolved	MG/L	MW-35	03/04/2014		9.2000
Magnesium, dissolved	MG/L	MW-35	06/02/2014		8.6000
Magnesium, dissolved	MG/L	MW-35	09/22/2014		8.2000
Magnesium, dissolved	MG/L	MW-35	11/17/2014		8.7000
Magnesium, dissolved	MG/L	MW-35	02/25/2015		9.3000
Magnesium, dissolved	MG/L	MW-35	05/19/2015		8.5000
Magnesium, dissolved	MG/L	MW-35	08/26/2015		9.0000
Magnesium, dissolved	MG/L	MW-35	11/10/2015		9.3000
Magnesium, dissolved	MG/L	MW-35	02/22/2016		9.3000
Magnesium, dissolved	MG/L	MW-35	05/16/2016		9.0000
Magnesium, dissolved	MG/L	MW-35	08/31/2016		8.1000
Magnesium, dissolved	MG/L	MW-35	11/15/2016		10.0000
Manganese, total	MG/L	MW-13A	12/03/2013	ND	0.0010
Manganese, total	MG/L	MW-13A	03/04/2014	ND	0.0010
Manganese, total	MG/L	MW-13A	06/02/2014	ND	0.0010
Manganese, total	MG/L	MW-13A	09/22/2014	ND	0.0010
Manganese, total	MG/L	MW-13A	11/17/2014	ND	0.0010
Manganese, total	MG/L	MW-13A	02/23/2015	ND	0.0010
Manganese, total	MG/L	MW-13A	05/19/2015	ND	0.0010
Manganese, total	MG/L	MW-13A	08/26/2015	ND	0.0010
Manganese, total	MG/L	MW-13A	11/10/2015	ND	0.0010
Manganese, total	MG/L	MW-13A	02/22/2016	ND	0.0010
Manganese, total	MG/L	MW-13A	05/16/2016	ND	0.0010
Manganese, total	MG/L	MW-13A	08/31/2016	ND	0.0010
Manganese, total	MG/L	MW-13A	11/14/2016	ND	0.0010
Manganese, total	MG/L	MW-13B	12/03/2013	ND	0.0010
Manganese, total	MG/L	MW-13B	03/04/2014	ND	0.0010
Manganese, total	MG/L	MW-13B	06/02/2014		0.0020
Manganese, total	MG/L	MW-13B	09/22/2014	ND	0.0010
Manganese, total	MG/L	MW-13B	11/17/2014	ND	0.0010
Manganese, total	MG/L	MW-13B	02/23/2015	ND	0.0010
Manganese, total	MG/L	MW-13B	05/19/2015	ND	0.0010
Manganese, total	MG/L	MW-13B	08/26/2015	ND	0.0010
Manganese, total	MG/L	MW-13B	11/10/2015	ND	0.0010
Manganese, total	MG/L	MW-13B	02/22/2016	ND	0.0010
Manganese, total	MG/L	MW-13B	05/16/2016	ND	0.0010
Manganese, total	MG/L	MW-13B	08/31/2016	ND	0.0010
Manganese, total	MG/L	MW-13B	11/14/2016	ND	0.0010
Manganese, total	MG/L	MW-16	09/05/2013		0.0160
Manganese, total	MG/L	MW-16	12/16/2013		0.0130
Manganese, total	MG/L	MW-16	03/05/2014		0.0200
Manganese, total	MG/L	MW-16	06/02/2014		0.0049
Manganese, total	MG/L	MW-16	09/22/2014		0.0140
Manganese, total	MG/L	MW-16	11/18/2014		0.0320
Manganese, total	MG/L	MW-16	02/23/2015		0.0620
Manganese, total	MG/L	MW-16	05/20/2015		0.0035
Manganese, total	MG/L	MW-16	08/26/2015		0.0012
Manganese, total	MG/L	MW-16	11/11/2015		0.0014
Manganese, total	MG/L	MW-16	02/24/2016		0.0019

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date		Result
Manganese, total	MG/L	MW-16	05/16/2016	ND	0.0010
Manganese, total	MG/L	MW-16	08/31/2016		0.0024
Manganese, total	MG/L	MW-16	11/14/2016		0.0170
Manganese, total	MG/L	MW-35	09/05/2013	ND	0.0010
Manganese, total	MG/L	MW-35	12/16/2013	ND	0.0010
Manganese, total	MG/L	MW-35	03/04/2014	ND	0.0010
Manganese, total	MG/L	MW-35	06/02/2014	ND	0.0010
Manganese, total	MG/L	MW-35	09/22/2014	ND	0.0010
Manganese, total	MG/L	MW-35	11/17/2014	ND	0.0010
Manganese, total	MG/L	MW-35	02/25/2015	ND	0.0010
Manganese, total	MG/L	MW-35	05/19/2015		0.0014
Manganese, total	MG/L	MW-35	08/26/2015	ND	0.0010
Manganese, total	MG/L	MW-35	11/10/2015	ND	0.0010
Manganese, total	MG/L	MW-35	02/22/2016	ND	0.0010
Manganese, total	MG/L	MW-35	05/16/2016	ND	0.0010
Manganese, total	MG/L	MW-35	08/31/2016	ND	0.0010
Manganese, total	MG/L	MW-35	11/15/2016	ND	0.0010
Nickel, total	MG/L	MW-13A	12/03/2013	ND	0.0040
Nickel, total	MG/L	MW-13A	03/04/2014	ND	0.0040
Nickel, total	MG/L	MW-13A	06/02/2014	ND	0.0040
Nickel, total	MG/L	MW-13A	09/22/2014	ND	0.0040
Nickel, total	MG/L	MW-13A	11/17/2014	ND	0.0040
Nickel, total	MG/L	MW-13A	02/23/2015	ND	0.0040
Nickel, total	MG/L	MW-13A	05/19/2015	ND	0.0040
Nickel, total	MG/L	MW-13A	08/26/2015	ND	0.0040
Nickel, total	MG/L	MW-13A	11/10/2015	ND	0.0040
Nickel, total	MG/L	MW-13A	02/22/2016	ND	0.0040
Nickel, total	MG/L	MW-13A	05/16/2016	ND	0.0040
Nickel, total	MG/L	MW-13A	08/31/2016	ND	0.0040
Nickel, total	MG/L	MW-13A	11/14/2016	ND	0.0040
Nickel, total	MG/L	MW-13B	12/03/2013	ND	0.0040
Nickel, total	MG/L	MW-13B	03/04/2014	ND	0.0040
Nickel, total	MG/L	MW-13B	06/02/2014	ND	0.0040
Nickel, total	MG/L	MW-13B	09/22/2014	ND	0.0040
Nickel, total	MG/L	MW-13B	11/17/2014	ND	0.0040
Nickel, total	MG/L	MW-13B	02/23/2015	ND	0.0040
Nickel, total	MG/L	MW-13B	05/19/2015	ND	0.0040
Nickel, total	MG/L	MW-13B	08/26/2015	ND	0.0040
Nickel, total	MG/L	MW-13B	11/10/2015	ND	0.0040
Nickel, total	MG/L	MW-13B	02/22/2016	ND	0.0040
Nickel, total	MG/L	MW-13B	05/16/2016	ND	0.0040
Nickel, total	MG/L	MW-13B	08/31/2016	ND	0.0040
Nickel, total	MG/L	MW-13B	11/14/2016	ND	0.0040
Nickel, total	MG/L	MW-16	09/05/2013	ND	0.0040
Nickel, total	MG/L	MW-16	12/16/2013	ND	0.0040
Nickel, total	MG/L	MW-16	03/05/2014	ND	0.0040
Nickel, total	MG/L	MW-16	06/02/2014	ND	0.0040
Nickel, total	MG/L	MW-16	09/22/2014	ND	0.0040
Nickel, total	MG/L	MW-16	11/18/2014	ND	0.0040
Nickel, total	MG/L	MW-16	02/23/2015		0.0041
Nickel, total	MG/L	MW-16	05/20/2015	ND	0.0040
Nickel, total	MG/L	MW-16	08/26/2015	ND	0.0040
Nickel, total	MG/L	MW-16	11/11/2015	ND	0.0040
Nickel, total	MG/L	MW-16	02/24/2016	ND	0.0040
Nickel, total	MG/L	MW-16	05/16/2016	ND	0.0040
Nickel, total	MG/L	MW-16	08/31/2016	ND	0.0040
Nickel, total	MG/L	MW-16	11/14/2016	ND	0.0040
Nickel, total	MG/L	MW-35	09/05/2013	ND	0.0040
Nickel, total	MG/L	MW-35	12/16/2013	ND	0.0040
Nickel, total	MG/L	MW-35	03/04/2014	ND	0.0040
Nickel, total	MG/L	MW-35	06/02/2014	ND	0.0040
Nickel, total	MG/L	MW-35	09/22/2014	ND	0.0040
Nickel, total	MG/L	MW-35	11/17/2014	ND	0.0040
Nickel, total	MG/L	MW-35	02/25/2015	ND	0.0040
Nickel, total	MG/L	MW-35	05/19/2015	ND	0.0040

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date		Result
Nickel, total	MG/L	MW-35	08/26/2015	ND	0.0040
Nickel, total	MG/L	MW-35	11/10/2015	ND	0.0040
Nickel, total	MG/L	MW-35	02/22/2016	ND	0.0040
Nickel, total	MG/L	MW-35	05/16/2016	ND	0.0040
Nickel, total	MG/L	MW-35	08/31/2016	ND	0.0040
Nickel, total	MG/L	MW-35	11/15/2016	ND	0.0040
Nitrate (as n)	MG/L	MW-13A	03/22/2005		0.5100
Nitrate (as n)	MG/L	MW-13A	06/15/2005		0.4400
Nitrate (as n)	MG/L	MW-13A	09/27/2005		1.8000
Nitrate (as n)	MG/L	MW-13A	12/15/2005		0.4700
Nitrate (as n)	MG/L	MW-13A	03/28/2006		0.4400
Nitrate (as n)	MG/L	MW-13A	06/21/2006		0.5400
Nitrate (as n)	MG/L	MW-13A	09/26/2006		0.4400
Nitrate (as n)	MG/L	MW-13A	12/13/2006		0.4600
Nitrate (as n)	MG/L	MW-13A	03/27/2007		0.4200
Nitrate (as n)	MG/L	MW-13A	06/19/2007		0.4600
Nitrate (as n)	MG/L	MW-13A	09/19/2007		0.4600
Nitrate (as n)	MG/L	MW-13A	12/19/2007		0.4100
Nitrate (as n)	MG/L	MW-13A	03/25/2008		0.4900
Nitrate (as n)	MG/L	MW-13A	06/18/2008		0.5100
Nitrate (as n)	MG/L	MW-13A	09/17/2008		0.4400
Nitrate (as n)	MG/L	MW-13A	12/17/2008		0.4800
Nitrate (as n)	MG/L	MW-13A	03/24/2009		0.4700
Nitrate (as n)	MG/L	MW-13A	06/17/2009		0.4900
Nitrate (as n)	MG/L	MW-13A	09/10/2009		0.4500
Nitrate (as n)	MG/L	MW-13A	12/03/2009		0.4100
Nitrate (as n)	MG/L	MW-13A	03/25/2010		0.4800
Nitrate (as n)	MG/L	MW-13A	06/23/2010		0.4700
Nitrate (as n)	MG/L	MW-13A	09/23/2010		0.5100
Nitrate (as n)	MG/L	MW-13A	12/08/2010		0.4900
Nitrate (as n)	MG/L	MW-13A	03/30/2011		0.5300
Nitrate (as n)	MG/L	MW-13A	06/06/2011		0.4600
Nitrate (as n)	MG/L	MW-13A	09/27/2011		0.4800
Nitrate (as n)	MG/L	MW-13A	12/14/2011		0.4800
Nitrate (as n)	MG/L	MW-13A	03/21/2012		9.4000 *
Nitrate (as n)	MG/L	MW-13A	06/08/2012		0.4500
Nitrate (as n)	MG/L	MW-13A	09/26/2012		0.4200
Nitrate (as n)	MG/L	MW-13A	12/03/2012		0.5400
Nitrate (as n)	MG/L	MW-13A	03/11/2013		0.4600
Nitrate (as n)	MG/L	MW-13A	06/05/2013		0.4900
Nitrate (as n)	MG/L	MW-13A	12/03/2013		0.4700
Nitrate (as n)	MG/L	MW-13A	03/04/2014		0.4800
Nitrate (as n)	MG/L	MW-13A	06/02/2014		0.4800
Nitrate (as n)	MG/L	MW-13A	09/22/2014		0.4400
Nitrate (as n)	MG/L	MW-13A	11/17/2014		0.4600
Nitrate (as n)	MG/L	MW-13A	02/23/2015		0.4700
Nitrate (as n)	MG/L	MW-13A	05/19/2015		0.4500
Nitrate (as n)	MG/L	MW-13A	08/26/2015		0.4100
Nitrate (as n)	MG/L	MW-13A	11/10/2015		0.4400
Nitrate (as n)	MG/L	MW-13A	02/22/2016		0.4200
Nitrate (as n)	MG/L	MW-13A	05/16/2016		0.4500
Nitrate (as n)	MG/L	MW-13A	08/31/2016		0.4500
Nitrate (as n)	MG/L	MW-13A	11/14/2016		0.4800
Nitrate (as n)	MG/L	MW-13B	03/22/2005		0.5000
Nitrate (as n)	MG/L	MW-13B	06/15/2005		0.7400
Nitrate (as n)	MG/L	MW-13B	09/27/2005		0.4600
Nitrate (as n)	MG/L	MW-13B	12/15/2005		0.4900
Nitrate (as n)	MG/L	MW-13B	03/29/2006		0.4400
Nitrate (as n)	MG/L	MW-13B	06/21/2006		0.5600
Nitrate (as n)	MG/L	MW-13B	09/26/2006		0.4400
Nitrate (as n)	MG/L	MW-13B	12/13/2006		0.4000
Nitrate (as n)	MG/L	MW-13B	03/27/2007		0.4300
Nitrate (as n)	MG/L	MW-13B	06/19/2007		0.4800
Nitrate (as n)	MG/L	MW-13B	09/18/2007		0.4800
Nitrate (as n)	MG/L	MW-13B	12/19/2007		0.8900

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date	Result
Nitrate (as n)	MG/L	MW-13B	03/25/2008	0.4800
Nitrate (as n)	MG/L	MW-13B	06/18/2008	0.9500
Nitrate (as n)	MG/L	MW-13B	09/17/2008	0.4600
Nitrate (as n)	MG/L	MW-13B	12/16/2008	0.5300
Nitrate (as n)	MG/L	MW-13B	03/24/2009	0.4600
Nitrate (as n)	MG/L	MW-13B	06/17/2009	0.4900
Nitrate (as n)	MG/L	MW-13B	09/10/2009	0.4600
Nitrate (as n)	MG/L	MW-13B	12/03/2009	0.4000
Nitrate (as n)	MG/L	MW-13B	03/25/2010	0.4600
Nitrate (as n)	MG/L	MW-13B	06/23/2010	0.4500
Nitrate (as n)	MG/L	MW-13B	09/23/2010	0.4800
Nitrate (as n)	MG/L	MW-13B	12/08/2010	0.5000
Nitrate (as n)	MG/L	MW-13B	03/30/2011	0.5100
Nitrate (as n)	MG/L	MW-13B	06/06/2011	0.4300
Nitrate (as n)	MG/L	MW-13B	09/27/2011	0.4600
Nitrate (as n)	MG/L	MW-13B	12/14/2011	0.4700
Nitrate (as n)	MG/L	MW-13B	03/21/2012	9.7000 *
Nitrate (as n)	MG/L	MW-13B	06/08/2012	0.4500
Nitrate (as n)	MG/L	MW-13B	09/26/2012	0.4000
Nitrate (as n)	MG/L	MW-13B	12/03/2012	0.4200
Nitrate (as n)	MG/L	MW-13B	03/11/2013	0.4300
Nitrate (as n)	MG/L	MW-13B	06/05/2013	0.4900
Nitrate (as n)	MG/L	MW-13B	12/03/2013	0.5100
Nitrate (as n)	MG/L	MW-13B	03/04/2014	0.4500
Nitrate (as n)	MG/L	MW-13B	06/02/2014	0.5300
Nitrate (as n)	MG/L	MW-13B	09/22/2014	0.4500
Nitrate (as n)	MG/L	MW-13B	11/17/2014	0.4700
Nitrate (as n)	MG/L	MW-13B	02/23/2015	0.4500
Nitrate (as n)	MG/L	MW-13B	05/19/2015	0.4500
Nitrate (as n)	MG/L	MW-13B	08/26/2015	0.4400
Nitrate (as n)	MG/L	MW-13B	11/10/2015	0.4500
Nitrate (as n)	MG/L	MW-13B	02/22/2016	0.4300
Nitrate (as n)	MG/L	MW-13B	05/16/2016	0.4600
Nitrate (as n)	MG/L	MW-13B	08/31/2016	0.4500
Nitrate (as n)	MG/L	MW-13B	11/14/2016	0.6400
Nitrate (as n)	MG/L	MW-16	03/24/2009	0.2800
Nitrate (as n)	MG/L	MW-16	06/16/2009	0.3300
Nitrate (as n)	MG/L	MW-16	09/09/2009	0.3100
Nitrate (as n)	MG/L	MW-16	12/03/2009	0.4000
Nitrate (as n)	MG/L	MW-16	03/25/2010	0.2900
Nitrate (as n)	MG/L	MW-16	06/24/2010	0.1600
Nitrate (as n)	MG/L	MW-16	09/24/2010	0.5100
Nitrate (as n)	MG/L	MW-16	12/09/2010	0.9000
Nitrate (as n)	MG/L	MW-16	03/30/2011	0.5200
Nitrate (as n)	MG/L	MW-16	06/07/2011	0.4600
Nitrate (as n)	MG/L	MW-16	09/27/2011	0.7300
Nitrate (as n)	MG/L	MW-16	12/13/2011	1.1000
Nitrate (as n)	MG/L	MW-16	03/21/2012	0.8900 *
Nitrate (as n)	MG/L	MW-16	06/08/2012	1.4000
Nitrate (as n)	MG/L	MW-16	09/27/2012	0.9600
Nitrate (as n)	MG/L	MW-16	12/04/2012	0.8600
Nitrate (as n)	MG/L	MW-16	03/12/2013	1.6000
Nitrate (as n)	MG/L	MW-16	06/04/2013	1.5000
Nitrate (as n)	MG/L	MW-16	09/05/2013	0.7200
Nitrate (as n)	MG/L	MW-16	12/16/2013	0.7500
Nitrate (as n)	MG/L	MW-16	03/05/2014	0.5500
Nitrate (as n)	MG/L	MW-16	06/02/2014	1.2000
Nitrate (as n)	MG/L	MW-16	09/22/2014	0.3600
Nitrate (as n)	MG/L	MW-16	11/18/2014	0.2800
Nitrate (as n)	MG/L	MW-16	02/23/2015	0.2600
Nitrate (as n)	MG/L	MW-16	05/20/2015	0.5500
Nitrate (as n)	MG/L	MW-16	08/26/2015	0.3800
Nitrate (as n)	MG/L	MW-16	11/11/2015	0.1900
Nitrate (as n)	MG/L	MW-16	02/24/2016	0.5000
Nitrate (as n)	MG/L	MW-16	05/16/2016	0.6900

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date	Result
Nitrate (as n)	MG/L	MW-16	08/31/2016	0.2700
Nitrate (as n)	MG/L	MW-16	11/14/2016	0.2400
Nitrate (as n)	MG/L	MW-35	03/22/2005	0.3700
Nitrate (as n)	MG/L	MW-35	06/14/2005	0.3300
Nitrate (as n)	MG/L	MW-35	09/27/2005	0.9600
Nitrate (as n)	MG/L	MW-35	12/15/2005	0.2900
Nitrate (as n)	MG/L	MW-35	03/28/2006	0.3400
Nitrate (as n)	MG/L	MW-35	06/21/2006	0.4000
Nitrate (as n)	MG/L	MW-35	09/26/2006	0.3100
Nitrate (as n)	MG/L	MW-35	12/12/2006	0.3500
Nitrate (as n)	MG/L	MW-35	03/27/2007	0.3000
Nitrate (as n)	MG/L	MW-35	06/20/2007	0.3400
Nitrate (as n)	MG/L	MW-35	09/18/2007	0.3200
Nitrate (as n)	MG/L	MW-35	12/20/2007	0.3200
Nitrate (as n)	MG/L	MW-35	03/25/2008	0.3000
Nitrate (as n)	MG/L	MW-35	06/18/2008	1.0000
Nitrate (as n)	MG/L	MW-35	09/18/2008	0.3500
Nitrate (as n)	MG/L	MW-35	12/19/2008	0.3700
Nitrate (as n)	MG/L	MW-35	03/24/2009	0.3500
Nitrate (as n)	MG/L	MW-35	06/16/2009	0.3700
Nitrate (as n)	MG/L	MW-35	09/10/2009	0.3500
Nitrate (as n)	MG/L	MW-35	12/03/2009	0.5200
Nitrate (as n)	MG/L	MW-35	03/25/2010	0.3600
Nitrate (as n)	MG/L	MW-35	06/23/2010	0.3200
Nitrate (as n)	MG/L	MW-35	09/23/2010	0.4000
Nitrate (as n)	MG/L	MW-35	12/09/2010	0.3900
Nitrate (as n)	MG/L	MW-35	03/30/2011	0.3900
Nitrate (as n)	MG/L	MW-35	06/06/2011	0.3900
Nitrate (as n)	MG/L	MW-35	09/26/2011	0.4000
Nitrate (as n)	MG/L	MW-35	12/13/2011	0.3900
Nitrate (as n)	MG/L	MW-35	03/21/2012	0.4500 *
Nitrate (as n)	MG/L	MW-35	06/06/2012	0.4300
Nitrate (as n)	MG/L	MW-35	09/26/2012	0.3700
Nitrate (as n)	MG/L	MW-35	12/04/2012	0.4200
Nitrate (as n)	MG/L	MW-35	03/13/2013	0.4700
Nitrate (as n)	MG/L	MW-35	06/06/2013	0.4500
Nitrate (as n)	MG/L	MW-35	09/05/2013	0.4200
Nitrate (as n)	MG/L	MW-35	12/16/2013	0.4000
Nitrate (as n)	MG/L	MW-35	03/04/2014	0.4200
Nitrate (as n)	MG/L	MW-35	06/02/2014	0.4200
Nitrate (as n)	MG/L	MW-35	09/22/2014	0.4200
Nitrate (as n)	MG/L	MW-35	11/17/2014	0.4200
Nitrate (as n)	MG/L	MW-35	02/25/2015	0.4100
Nitrate (as n)	MG/L	MW-35	05/19/2015	0.4000
Nitrate (as n)	MG/L	MW-35	08/26/2015	0.4000
Nitrate (as n)	MG/L	MW-35	11/10/2015	0.4100
Nitrate (as n)	MG/L	MW-35	02/22/2016	0.4100
Nitrate (as n)	MG/L	MW-35	05/16/2016	0.4400
Nitrate (as n)	MG/L	MW-35	08/31/2016	0.4300
Nitrate (as n)	MG/L	MW-35	11/15/2016	0.4700
pH	pH Units	MW-13A	03/22/2005	7.0100
pH	pH Units	MW-13A	06/15/2005	7.2100
pH	pH Units	MW-13A	09/27/2005	7.1000
pH	pH Units	MW-13A	12/15/2005	6.3400
pH	pH Units	MW-13A	03/28/2006	6.9000
pH	pH Units	MW-13A	06/21/2006	7.2500
pH	pH Units	MW-13A	09/26/2006	7.2500
pH	pH Units	MW-13A	12/13/2006	6.8700
pH	pH Units	MW-13A	03/27/2007	7.3200
pH	pH Units	MW-13A	09/19/2007	6.6800
pH	pH Units	MW-13A	12/19/2007	7.2900
pH	pH Units	MW-13A	03/25/2008	7.1200
pH	pH Units	MW-13A	06/18/2008	7.1900
pH	pH Units	MW-13A	09/17/2008	7.0000
pH	pH Units	MW-13A	12/17/2008	6.5100

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date	Result
pH	pH Units	MW-13A	03/24/2009	6.8500
pH	pH Units	MW-13A	06/17/2009	7.0700
pH	pH Units	MW-13A	12/03/2009	7.0300
pH	pH Units	MW-13A	03/25/2010	6.9600
pH	pH Units	MW-13A	06/23/2010	6.9900
pH	pH Units	MW-13A	09/23/2010	6.7800
pH	pH Units	MW-13A	12/08/2010	7.4800
pH	pH Units	MW-13A	03/30/2011	6.9500
pH	pH Units	MW-13A	06/06/2011	7.4500
pH	pH Units	MW-13A	09/27/2011	6.9100
pH	pH Units	MW-13A	12/14/2011	7.1300
pH	pH Units	MW-13A	03/21/2012	6.7800
pH	pH Units	MW-13A	06/08/2012	6.7200
pH	pH Units	MW-13A	09/26/2012	7.3500
pH	pH Units	MW-13A	12/03/2012	6.9500
pH	pH Units	MW-13A	03/11/2013	7.1800
pH	pH Units	MW-13A	06/05/2013	7.3300
pH	pH Units	MW-13A	12/03/2013	7.1600
pH	pH Units	MW-13A	03/04/2014	7.4800
pH	pH Units	MW-13A	06/02/2014	7.2600
pH	pH Units	MW-13A	09/22/2014	7.2600
pH	pH Units	MW-13A	11/17/2014	6.9900
pH	pH Units	MW-13A	05/19/2015	7.0300
pH	pH Units	MW-13A	08/26/2015	7.0700
pH	pH Units	MW-13A	11/10/2015	6.6800
pH	pH Units	MW-13A	02/22/2016	6.6900
pH	pH Units	MW-13A	05/16/2016	6.8700
pH	pH Units	MW-13A	08/31/2016	6.6500
pH	pH Units	MW-13A	11/14/2016	6.5000
pH	pH Units	MW-13B	03/22/2005	7.4900
pH	pH Units	MW-13B	06/15/2005	7.8100
pH	pH Units	MW-13B	09/27/2005	7.7300
pH	pH Units	MW-13B	12/15/2005	6.9300
pH	pH Units	MW-13B	03/29/2006	7.4500
pH	pH Units	MW-13B	06/21/2006	7.7600
pH	pH Units	MW-13B	09/26/2006	7.7800
pH	pH Units	MW-13B	12/13/2006	7.3200
pH	pH Units	MW-13B	03/27/2007	7.7600
pH	pH Units	MW-13B	09/18/2007	7.4800
pH	pH Units	MW-13B	12/19/2007	7.8500
pH	pH Units	MW-13B	03/25/2008	7.7800
pH	pH Units	MW-13B	06/18/2008	7.7400
pH	pH Units	MW-13B	09/17/2008	7.5700
pH	pH Units	MW-13B	12/16/2008	7.2300
pH	pH Units	MW-13B	03/24/2009	7.3700
pH	pH Units	MW-13B	06/17/2009	7.5600
pH	pH Units	MW-13B	12/03/2009	6.9300
pH	pH Units	MW-13B	03/25/2010	7.4900
pH	pH Units	MW-13B	06/23/2010	7.2700
pH	pH Units	MW-13B	09/23/2010	7.1100
pH	pH Units	MW-13B	12/08/2010	7.0500
pH	pH Units	MW-13B	03/30/2011	7.5100
pH	pH Units	MW-13B	06/06/2011	7.5800
pH	pH Units	MW-13B	09/27/2011	7.0800
pH	pH Units	MW-13B	12/14/2011	7.5300
pH	pH Units	MW-13B	03/21/2012	7.0900
pH	pH Units	MW-13B	06/08/2012	7.1500
pH	pH Units	MW-13B	09/26/2012	7.3200
pH	pH Units	MW-13B	12/03/2012	7.3200
pH	pH Units	MW-13B	03/11/2013	7.4200
pH	pH Units	MW-13B	06/05/2013	7.2700
pH	pH Units	MW-13B	12/03/2013	7.3400
pH	pH Units	MW-13B	03/04/2014	7.4000
pH	pH Units	MW-13B	06/02/2014	7.3500
pH	pH Units	MW-13B	09/22/2014	7.6800

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date	Result
pH	pH Units	MW-13B	11/17/2014	7.0800
pH	pH Units	MW-13B	05/19/2015	7.6500
pH	pH Units	MW-13B	08/26/2015	7.5900
pH	pH Units	MW-13B	11/10/2015	7.2800
pH	pH Units	MW-13B	02/22/2016	7.0100
pH	pH Units	MW-13B	05/16/2016	7.3100
pH	pH Units	MW-13B	08/31/2016	7.2300
pH	pH Units	MW-13B	11/14/2016	7.1700
pH	pH Units	MW-16	03/24/2009	6.2700
pH	pH Units	MW-16	06/16/2009	6.3300
pH	pH Units	MW-16	12/03/2009	6.2700
pH	pH Units	MW-16	03/25/2010	6.2600
pH	pH Units	MW-16	06/24/2010	6.0400
pH	pH Units	MW-16	09/24/2010	5.9000
pH	pH Units	MW-16	12/09/2010	6.1700
pH	pH Units	MW-16	03/30/2011	6.3100
pH	pH Units	MW-16	06/07/2011	6.1500
pH	pH Units	MW-16	09/27/2011	6.4400
pH	pH Units	MW-16	12/13/2011	6.3000
pH	pH Units	MW-16	03/21/2012	6.3200
pH	pH Units	MW-16	06/08/2012	6.2500
pH	pH Units	MW-16	09/27/2012	6.2600
pH	pH Units	MW-16	12/04/2012	6.2200
pH	pH Units	MW-16	03/12/2013	6.3500
pH	pH Units	MW-16	06/04/2013	6.4500
pH	pH Units	MW-16	09/05/2013	6.6200
pH	pH Units	MW-16	12/16/2013	6.3200
pH	pH Units	MW-16	03/05/2014	6.5000
pH	pH Units	MW-16	06/02/2014	6.6100
pH	pH Units	MW-16	09/22/2014	6.4000
pH	pH Units	MW-16	11/18/2014	6.3800
pH	pH Units	MW-16	02/23/2015	6.4800
pH	pH Units	MW-16	05/20/2015	6.5100
pH	pH Units	MW-16	08/26/2015	6.3500
pH	pH Units	MW-16	11/11/2015	6.1300
pH	pH Units	MW-16	02/24/2016	6.4900
pH	pH Units	MW-16	05/16/2016	6.1100
pH	pH Units	MW-16	08/31/2016	5.9300
pH	pH Units	MW-16	11/14/2016	5.8900
pH	pH Units	MW-35	03/22/2005	7.0600
pH	pH Units	MW-35	06/14/2005	7.4300
pH	pH Units	MW-35	09/27/2005	7.3900
pH	pH Units	MW-35	12/15/2005	6.4100
pH	pH Units	MW-35	03/28/2006	7.1000
pH	pH Units	MW-35	06/21/2006	7.4600
pH	pH Units	MW-35	09/26/2006	7.5000
pH	pH Units	MW-35	12/12/2006	6.9900
pH	pH Units	MW-35	03/27/2007	7.5100
pH	pH Units	MW-35	09/18/2007	6.9700
pH	pH Units	MW-35	12/20/2007	7.2500
pH	pH Units	MW-35	03/25/2008	7.4000
pH	pH Units	MW-35	06/18/2008	7.4400
pH	pH Units	MW-35	09/18/2008	7.4200
pH	pH Units	MW-35	12/19/2008	7.1900
pH	pH Units	MW-35	03/24/2009	7.2100
pH	pH Units	MW-35	06/16/2009	7.1500
pH	pH Units	MW-35	12/03/2009	7.2200
pH	pH Units	MW-35	03/25/2010	7.2400
pH	pH Units	MW-35	06/23/2010	7.3700
pH	pH Units	MW-35	09/23/2010	6.8500
pH	pH Units	MW-35	12/09/2010	7.3900
pH	pH Units	MW-35	03/30/2011	7.3700
pH	pH Units	MW-35	06/06/2011	7.2300
pH	pH Units	MW-35	09/26/2011	6.8600
pH	pH Units	MW-35	12/13/2011	7.0000

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date		Result
pH	pH Units	MW-35	03/21/2012		7.0200
pH	pH Units	MW-35	06/06/2012		6.9800
pH	pH Units	MW-35	09/26/2012		7.1100
pH	pH Units	MW-35	12/04/2012		7.1600
pH	pH Units	MW-35	03/13/2013		7.0600
pH	pH Units	MW-35	06/06/2013		7.3700
pH	pH Units	MW-35	09/05/2013		7.1000
pH	pH Units	MW-35	12/16/2013		7.1500
pH	pH Units	MW-35	03/04/2014		7.5300
pH	pH Units	MW-35	06/02/2014		7.1700
pH	pH Units	MW-35	09/22/2014		6.6200
pH	pH Units	MW-35	11/17/2014		7.4800
pH	pH Units	MW-35	02/25/2015		7.7700
pH	pH Units	MW-35	05/19/2015		6.7200
pH	pH Units	MW-35	08/26/2015		7.2500
pH	pH Units	MW-35	11/10/2015		6.9200
pH	pH Units	MW-35	02/22/2016		6.5800
pH	pH Units	MW-35	05/16/2016		6.9500
pH	pH Units	MW-35	08/31/2016		7.0900
pH	pH Units	MW-35	11/15/2016		6.6100
Potassium, dissolved	MG/L	MW-13A	03/22/2005		0.5700
Potassium, dissolved	MG/L	MW-13A	06/15/2005		0.5200
Potassium, dissolved	MG/L	MW-13A	09/27/2005		0.4800
Potassium, dissolved	MG/L	MW-13A	12/15/2005		0.5000
Potassium, dissolved	MG/L	MW-13A	03/28/2006	ND	1.0000
Potassium, dissolved	MG/L	MW-13A	06/21/2006	ND	1.0000
Potassium, dissolved	MG/L	MW-13A	09/26/2006	ND	1.0000
Potassium, dissolved	MG/L	MW-13A	12/13/2006	ND	1.0000
Potassium, dissolved	MG/L	MW-13A	03/27/2007	ND	1.0000
Potassium, dissolved	MG/L	MW-13A	06/19/2007	ND	1.0000
Potassium, dissolved	MG/L	MW-13A	09/19/2007	ND	1.0000
Potassium, dissolved	MG/L	MW-13A	12/19/2007	ND	1.0000
Potassium, dissolved	MG/L	MW-13A	03/25/2008	ND	1.0000
Potassium, dissolved	MG/L	MW-13A	06/18/2008	ND	1.0000
Potassium, dissolved	MG/L	MW-13A	09/17/2008	ND	1.0000
Potassium, dissolved	MG/L	MW-13A	12/17/2008	ND	1.0000
Potassium, dissolved	MG/L	MW-13A	03/24/2009	ND	1.0000
Potassium, dissolved	MG/L	MW-13A	06/17/2009	ND	1.0000
Potassium, dissolved	MG/L	MW-13A	09/10/2009	ND	1.0000
Potassium, dissolved	MG/L	MW-13A	12/03/2009	ND	1.0000
Potassium, dissolved	MG/L	MW-13A	03/25/2010	ND	1.0000
Potassium, dissolved	MG/L	MW-13A	06/23/2010	ND	1.0000
Potassium, dissolved	MG/L	MW-13A	09/23/2010	ND	1.0000
Potassium, dissolved	MG/L	MW-13A	12/08/2010	ND	1.0000
Potassium, dissolved	MG/L	MW-13A	03/30/2011	ND	1.0000
Potassium, dissolved	MG/L	MW-13A	06/06/2011	ND	1.0000
Potassium, dissolved	MG/L	MW-13A	09/27/2011	ND	1.0000
Potassium, dissolved	MG/L	MW-13A	12/14/2011	ND	1.0000
Potassium, dissolved	MG/L	MW-13A	03/21/2012	ND	1.0000
Potassium, dissolved	MG/L	MW-13A	06/08/2012	ND	1.0000
Potassium, dissolved	MG/L	MW-13A	09/26/2012	ND	1.0000
Potassium, dissolved	MG/L	MW-13A	12/03/2012	ND	1.0000
Potassium, dissolved	MG/L	MW-13A	03/11/2013	ND	1.0000
Potassium, dissolved	MG/L	MW-13A	06/05/2013	ND	1.0000
Potassium, dissolved	MG/L	MW-13A	12/03/2013	ND	1.0000
Potassium, dissolved	MG/L	MW-13A	03/04/2014	ND	1.0000
Potassium, dissolved	MG/L	MW-13A	06/02/2014	ND	1.0000
Potassium, dissolved	MG/L	MW-13A	09/22/2014	ND	1.0000
Potassium, dissolved	MG/L	MW-13A	11/17/2014	ND	1.0000
Potassium, dissolved	MG/L	MW-13A	02/23/2015	ND	1.0000
Potassium, dissolved	MG/L	MW-13A	05/19/2015	ND	1.0000
Potassium, dissolved	MG/L	MW-13A	08/26/2015	ND	1.0000
Potassium, dissolved	MG/L	MW-13A	11/10/2015	ND	1.0000
Potassium, dissolved	MG/L	MW-13A	02/22/2016	ND	1.0000
Potassium, dissolved	MG/L	MW-13A	05/16/2016	ND	1.0000

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date		Result
Potassium, dissolved	MG/L	MW-13A	08/31/2016	ND	1.0000
Potassium, dissolved	MG/L	MW-13A	11/14/2016	ND	1.0000
Potassium, dissolved	MG/L	MW-13B	03/22/2005		0.6000
Potassium, dissolved	MG/L	MW-13B	06/15/2005		0.5500
Potassium, dissolved	MG/L	MW-13B	09/27/2005		0.5500
Potassium, dissolved	MG/L	MW-13B	12/15/2005		0.5200
Potassium, dissolved	MG/L	MW-13B	03/29/2006	ND	1.0000
Potassium, dissolved	MG/L	MW-13B	06/21/2006	ND	1.0000
Potassium, dissolved	MG/L	MW-13B	09/26/2006	ND	1.0000
Potassium, dissolved	MG/L	MW-13B	12/13/2006	ND	1.0000
Potassium, dissolved	MG/L	MW-13B	03/27/2007	ND	1.0000
Potassium, dissolved	MG/L	MW-13B	06/19/2007	ND	1.0000
Potassium, dissolved	MG/L	MW-13B	09/18/2007	ND	1.0000
Potassium, dissolved	MG/L	MW-13B	12/19/2007	ND	1.0000
Potassium, dissolved	MG/L	MW-13B	03/25/2008	ND	1.0000
Potassium, dissolved	MG/L	MW-13B	06/18/2008	ND	1.0000
Potassium, dissolved	MG/L	MW-13B	09/17/2008	ND	1.0000
Potassium, dissolved	MG/L	MW-13B	12/16/2008	ND	1.0000
Potassium, dissolved	MG/L	MW-13B	03/24/2009	ND	1.0000
Potassium, dissolved	MG/L	MW-13B	06/17/2009	ND	1.0000
Potassium, dissolved	MG/L	MW-13B	09/10/2009	ND	1.0000
Potassium, dissolved	MG/L	MW-13B	12/03/2009	ND	1.0000
Potassium, dissolved	MG/L	MW-13B	03/25/2010	ND	1.0000
Potassium, dissolved	MG/L	MW-13B	06/23/2010	ND	1.0000
Potassium, dissolved	MG/L	MW-13B	09/23/2010	ND	1.0000
Potassium, dissolved	MG/L	MW-13B	12/08/2010	ND	1.0000
Potassium, dissolved	MG/L	MW-13B	03/30/2011	ND	1.0000
Potassium, dissolved	MG/L	MW-13B	06/06/2011	ND	1.0000
Potassium, dissolved	MG/L	MW-13B	09/27/2011	ND	1.0000
Potassium, dissolved	MG/L	MW-13B	12/14/2011	ND	1.0000
Potassium, dissolved	MG/L	MW-13B	03/21/2012	ND	1.0000
Potassium, dissolved	MG/L	MW-13B	06/08/2012	ND	1.0000
Potassium, dissolved	MG/L	MW-13B	09/26/2012	ND	1.0000
Potassium, dissolved	MG/L	MW-13B	12/03/2012	ND	1.0000
Potassium, dissolved	MG/L	MW-13B	03/11/2013	ND	1.0000
Potassium, dissolved	MG/L	MW-13B	06/05/2013	ND	1.0000
Potassium, dissolved	MG/L	MW-13B	12/03/2013	ND	1.0000
Potassium, dissolved	MG/L	MW-13B	03/04/2014	ND	1.0000
Potassium, dissolved	MG/L	MW-13B	06/02/2014	ND	1.0000
Potassium, dissolved	MG/L	MW-13B	09/22/2014	ND	1.0000
Potassium, dissolved	MG/L	MW-13B	11/17/2014	ND	1.0000
Potassium, dissolved	MG/L	MW-13B	02/23/2015	ND	1.0000
Potassium, dissolved	MG/L	MW-13B	05/19/2015	ND	1.0000
Potassium, dissolved	MG/L	MW-13B	08/26/2015	ND	1.0000
Potassium, dissolved	MG/L	MW-13B	11/10/2015	ND	1.0000
Potassium, dissolved	MG/L	MW-13B	02/22/2016	ND	1.0000
Potassium, dissolved	MG/L	MW-13B	05/16/2016	ND	1.0000
Potassium, dissolved	MG/L	MW-13B	08/31/2016	ND	1.0000
Potassium, dissolved	MG/L	MW-13B	11/14/2016	ND	1.0000
Potassium, dissolved	MG/L	MW-16	03/24/2009	ND	1.0000
Potassium, dissolved	MG/L	MW-16	06/16/2009	ND	1.0000
Potassium, dissolved	MG/L	MW-16	09/09/2009	ND	1.0000
Potassium, dissolved	MG/L	MW-16	12/03/2009	ND	1.0000
Potassium, dissolved	MG/L	MW-16	03/25/2010	ND	1.0000
Potassium, dissolved	MG/L	MW-16	06/24/2010	ND	1.0000
Potassium, dissolved	MG/L	MW-16	09/24/2010	ND	1.0000
Potassium, dissolved	MG/L	MW-16	12/09/2010	ND	1.0000
Potassium, dissolved	MG/L	MW-16	03/30/2011	ND	1.0000
Potassium, dissolved	MG/L	MW-16	06/07/2011	ND	1.0000
Potassium, dissolved	MG/L	MW-16	09/27/2011	ND	1.0000
Potassium, dissolved	MG/L	MW-16	12/13/2011	ND	1.0000
Potassium, dissolved	MG/L	MW-16	03/21/2012	ND	1.0000
Potassium, dissolved	MG/L	MW-16	06/08/2012	ND	1.0000
Potassium, dissolved	MG/L	MW-16	09/27/2012	ND	1.0000
Potassium, dissolved	MG/L	MW-16	12/04/2012	ND	1.0000

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date		Result
Potassium, dissolved	MG/L	MW-16	03/12/2013	ND	1.0000
Potassium, dissolved	MG/L	MW-16	06/04/2013	ND	1.0000
Potassium, dissolved	MG/L	MW-16	09/05/2013	ND	1.0000
Potassium, dissolved	MG/L	MW-16	12/16/2013	ND	1.0000
Potassium, dissolved	MG/L	MW-16	03/05/2014	ND	1.0000
Potassium, dissolved	MG/L	MW-16	06/02/2014		1.2000
Potassium, dissolved	MG/L	MW-16	09/22/2014	ND	1.0000
Potassium, dissolved	MG/L	MW-16	11/18/2014	ND	1.0000
Potassium, dissolved	MG/L	MW-16	02/23/2015	ND	1.0000
Potassium, dissolved	MG/L	MW-16	05/20/2015	ND	1.0000
Potassium, dissolved	MG/L	MW-16	08/26/2015	ND	1.0000
Potassium, dissolved	MG/L	MW-16	11/11/2015	ND	1.0000
Potassium, dissolved	MG/L	MW-16	02/24/2016	ND	1.0000
Potassium, dissolved	MG/L	MW-16	05/16/2016	ND	1.0000
Potassium, dissolved	MG/L	MW-16	08/31/2016	ND	1.0000
Potassium, dissolved	MG/L	MW-16	11/14/2016	ND	1.0000
Potassium, dissolved	MG/L	MW-35	03/22/2005		0.5200
Potassium, dissolved	MG/L	MW-35	06/14/2005		0.4800
Potassium, dissolved	MG/L	MW-35	09/27/2005		0.5200
Potassium, dissolved	MG/L	MW-35	12/15/2005		0.4600
Potassium, dissolved	MG/L	MW-35	03/28/2006	ND	1.0000
Potassium, dissolved	MG/L	MW-35	06/21/2006	ND	1.0000
Potassium, dissolved	MG/L	MW-35	09/26/2006	ND	1.0000
Potassium, dissolved	MG/L	MW-35	12/12/2006	ND	1.0000
Potassium, dissolved	MG/L	MW-35	03/27/2007	ND	1.0000
Potassium, dissolved	MG/L	MW-35	06/20/2007	ND	1.0000
Potassium, dissolved	MG/L	MW-35	09/18/2007	ND	1.0000
Potassium, dissolved	MG/L	MW-35	12/20/2007	ND	1.0000
Potassium, dissolved	MG/L	MW-35	03/25/2008	ND	1.0000
Potassium, dissolved	MG/L	MW-35	06/18/2008	ND	1.0000
Potassium, dissolved	MG/L	MW-35	09/18/2008	ND	1.0000
Potassium, dissolved	MG/L	MW-35	12/19/2008	ND	1.0000
Potassium, dissolved	MG/L	MW-35	03/24/2009	ND	1.0000
Potassium, dissolved	MG/L	MW-35	06/16/2009	ND	1.0000
Potassium, dissolved	MG/L	MW-35	09/10/2009	ND	1.0000
Potassium, dissolved	MG/L	MW-35	12/03/2009	ND	1.0000
Potassium, dissolved	MG/L	MW-35	03/25/2010	ND	1.0000
Potassium, dissolved	MG/L	MW-35	06/23/2010	ND	1.0000
Potassium, dissolved	MG/L	MW-35	09/23/2010	ND	1.0000
Potassium, dissolved	MG/L	MW-35	12/09/2010	ND	1.0000
Potassium, dissolved	MG/L	MW-35	03/30/2011	ND	1.0000
Potassium, dissolved	MG/L	MW-35	06/06/2011	ND	1.0000
Potassium, dissolved	MG/L	MW-35	09/26/2011	ND	1.0000
Potassium, dissolved	MG/L	MW-35	12/13/2011	ND	1.0000
Potassium, dissolved	MG/L	MW-35	03/21/2012	ND	1.0000
Potassium, dissolved	MG/L	MW-35	06/06/2012	ND	1.0000
Potassium, dissolved	MG/L	MW-35	09/26/2012	ND	1.0000
Potassium, dissolved	MG/L	MW-35	12/04/2012	ND	1.0000
Potassium, dissolved	MG/L	MW-35	03/13/2013	ND	1.0000
Potassium, dissolved	MG/L	MW-35	06/06/2013	ND	1.0000
Potassium, dissolved	MG/L	MW-35	09/05/2013	ND	1.0000
Potassium, dissolved	MG/L	MW-35	12/16/2013	ND	1.0000
Potassium, dissolved	MG/L	MW-35	03/04/2014	ND	1.0000
Potassium, dissolved	MG/L	MW-35	06/02/2014	ND	1.0000
Potassium, dissolved	MG/L	MW-35	09/22/2014	ND	1.0000
Potassium, dissolved	MG/L	MW-35	11/17/2014	ND	1.0000
Potassium, dissolved	MG/L	MW-35	02/25/2015	ND	1.0000
Potassium, dissolved	MG/L	MW-35	05/19/2015	ND	1.0000
Potassium, dissolved	MG/L	MW-35	08/26/2015	ND	1.0000
Potassium, dissolved	MG/L	MW-35	11/10/2015	ND	1.0000
Potassium, dissolved	MG/L	MW-35	02/22/2016	ND	1.0000
Potassium, dissolved	MG/L	MW-35	05/16/2016	ND	1.0000
Potassium, dissolved	MG/L	MW-35	08/31/2016	ND	1.0000
Potassium, dissolved	MG/L	MW-35	11/15/2016	ND	1.0000
Selenium, total	MG/L	MW-13A	12/03/2013	ND	0.0010

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date		Result
Selenium, total	MG/L	MW-13A	03/04/2014	ND	0.0010
Selenium, total	MG/L	MW-13A	06/02/2014	ND	0.0010
Selenium, total	MG/L	MW-13A	09/22/2014	ND	0.0010
Selenium, total	MG/L	MW-13A	11/17/2014	ND	0.0010
Selenium, total	MG/L	MW-13A	02/23/2015	ND	0.0010
Selenium, total	MG/L	MW-13A	05/19/2015	ND	0.0010
Selenium, total	MG/L	MW-13A	08/26/2015	ND	0.0010
Selenium, total	MG/L	MW-13A	11/10/2015	ND	0.0010
Selenium, total	MG/L	MW-13A	02/22/2016	ND	0.0010
Selenium, total	MG/L	MW-13A	05/16/2016	ND	0.0010
Selenium, total	MG/L	MW-13A	08/31/2016	ND	0.0010
Selenium, total	MG/L	MW-13A	11/14/2016	ND	0.0010
Selenium, total	MG/L	MW-13B	12/03/2013	ND	0.0010
Selenium, total	MG/L	MW-13B	03/04/2014	ND	0.0010
Selenium, total	MG/L	MW-13B	06/02/2014	ND	0.0010
Selenium, total	MG/L	MW-13B	09/22/2014	ND	0.0010
Selenium, total	MG/L	MW-13B	11/17/2014	ND	0.0010
Selenium, total	MG/L	MW-13B	02/23/2015	ND	0.0010
Selenium, total	MG/L	MW-13B	05/19/2015	ND	0.0010
Selenium, total	MG/L	MW-13B	08/26/2015	ND	0.0010
Selenium, total	MG/L	MW-13B	11/10/2015	ND	0.0010
Selenium, total	MG/L	MW-13B	02/22/2016	ND	0.0010
Selenium, total	MG/L	MW-13B	05/16/2016	ND	0.0010
Selenium, total	MG/L	MW-13B	08/31/2016	ND	0.0010
Selenium, total	MG/L	MW-13B	11/14/2016	ND	0.0010
Selenium, total	MG/L	MW-16	09/05/2013	ND	0.0010
Selenium, total	MG/L	MW-16	12/16/2013	ND	0.0010
Selenium, total	MG/L	MW-16	03/05/2014	ND	0.0010
Selenium, total	MG/L	MW-16	06/02/2014	ND	0.0010
Selenium, total	MG/L	MW-16	09/22/2014	ND	0.0010
Selenium, total	MG/L	MW-16	11/18/2014	ND	0.0010
Selenium, total	MG/L	MW-16	02/23/2015	ND	0.0010
Selenium, total	MG/L	MW-16	05/20/2015	ND	0.0010
Selenium, total	MG/L	MW-16	08/26/2015	ND	0.0010
Selenium, total	MG/L	MW-16	11/11/2015	ND	0.0010
Selenium, total	MG/L	MW-16	02/24/2016	ND	0.0010
Selenium, total	MG/L	MW-16	05/16/2016	ND	0.0010
Selenium, total	MG/L	MW-16	08/31/2016	ND	0.0010
Selenium, total	MG/L	MW-16	11/14/2016	ND	0.0010
Selenium, total	MG/L	MW-35	09/05/2013	ND	0.0010
Selenium, total	MG/L	MW-35	12/16/2013	ND	0.0010
Selenium, total	MG/L	MW-35	03/04/2014	ND	0.0010
Selenium, total	MG/L	MW-35	06/02/2014	ND	0.0010
Selenium, total	MG/L	MW-35	09/22/2014	ND	0.0010
Selenium, total	MG/L	MW-35	11/17/2014	ND	0.0010
Selenium, total	MG/L	MW-35	02/25/2015	ND	0.0010
Selenium, total	MG/L	MW-35	05/19/2015	ND	0.0010
Selenium, total	MG/L	MW-35	08/26/2015	ND	0.0010
Selenium, total	MG/L	MW-35	11/10/2015	ND	0.0010
Selenium, total	MG/L	MW-35	02/22/2016	ND	0.0010
Selenium, total	MG/L	MW-35	05/16/2016	ND	0.0010
Selenium, total	MG/L	MW-35	08/31/2016	ND	0.0010
Selenium, total	MG/L	MW-35	11/15/2016	ND	0.0010
Silver, total	MG/L	MW-13A	12/03/2013	ND	0.0020
Silver, total	MG/L	MW-13A	03/04/2014	ND	0.0020
Silver, total	MG/L	MW-13A	06/02/2014	ND	0.0020
Silver, total	MG/L	MW-13A	09/22/2014	ND	0.0020
Silver, total	MG/L	MW-13A	11/17/2014	ND	0.0020
Silver, total	MG/L	MW-13A	02/23/2015	ND	0.0020
Silver, total	MG/L	MW-13A	05/19/2015	ND	0.0020
Silver, total	MG/L	MW-13A	08/26/2015	ND	0.0020
Silver, total	MG/L	MW-13A	11/10/2015	ND	0.0020
Silver, total	MG/L	MW-13A	02/22/2016	ND	0.0020
Silver, total	MG/L	MW-13A	05/16/2016	ND	0.0020
Silver, total	MG/L	MW-13A	08/31/2016	ND	0.0020

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date		Result
Silver, total	MG/L	MW-13A	11/14/2016	ND	0.0020
Silver, total	MG/L	MW-13B	12/03/2013	ND	0.0020
Silver, total	MG/L	MW-13B	03/04/2014	ND	0.0020
Silver, total	MG/L	MW-13B	06/02/2014	ND	0.0020
Silver, total	MG/L	MW-13B	09/22/2014	ND	0.0020
Silver, total	MG/L	MW-13B	11/17/2014	ND	0.0020
Silver, total	MG/L	MW-13B	02/23/2015	ND	0.0020
Silver, total	MG/L	MW-13B	05/19/2015	ND	0.0020
Silver, total	MG/L	MW-13B	08/26/2015	ND	0.0020
Silver, total	MG/L	MW-13B	11/10/2015	ND	0.0020
Silver, total	MG/L	MW-13B	02/22/2016	ND	0.0020
Silver, total	MG/L	MW-13B	05/16/2016	ND	0.0020
Silver, total	MG/L	MW-13B	08/31/2016	ND	0.0020
Silver, total	MG/L	MW-13B	11/14/2016	ND	0.0020
Silver, total	MG/L	MW-16	09/05/2013	ND	0.0020
Silver, total	MG/L	MW-16	12/16/2013	ND	0.0020
Silver, total	MG/L	MW-16	03/05/2014	ND	0.0020
Silver, total	MG/L	MW-16	06/02/2014	ND	0.0020
Silver, total	MG/L	MW-16	09/22/2014	ND	0.0020
Silver, total	MG/L	MW-16	11/18/2014	ND	0.0020
Silver, total	MG/L	MW-16	02/23/2015	ND	0.0020
Silver, total	MG/L	MW-16	05/20/2015	ND	0.0020
Silver, total	MG/L	MW-16	08/26/2015	ND	0.0020
Silver, total	MG/L	MW-16	11/11/2015	ND	0.0020
Silver, total	MG/L	MW-16	02/24/2016	ND	0.0020
Silver, total	MG/L	MW-16	05/16/2016	ND	0.0020
Silver, total	MG/L	MW-16	08/31/2016	ND	0.0020
Silver, total	MG/L	MW-16	11/14/2016	ND	0.0020
Silver, total	MG/L	MW-35	09/05/2013	ND	0.0020
Silver, total	MG/L	MW-35	12/16/2013	ND	0.0020
Silver, total	MG/L	MW-35	03/04/2014	ND	0.0020
Silver, total	MG/L	MW-35	06/02/2014	ND	0.0020
Silver, total	MG/L	MW-35	09/22/2014	ND	0.0020
Silver, total	MG/L	MW-35	11/17/2014	ND	0.0020
Silver, total	MG/L	MW-35	02/25/2015	ND	0.0020
Silver, total	MG/L	MW-35	05/19/2015	ND	0.0020
Silver, total	MG/L	MW-35	08/26/2015	ND	0.0020
Silver, total	MG/L	MW-35	11/10/2015	ND	0.0020
Silver, total	MG/L	MW-35	02/22/2016	ND	0.0020
Silver, total	MG/L	MW-35	05/16/2016	ND	0.0020
Silver, total	MG/L	MW-35	08/31/2016	ND	0.0020
Silver, total	MG/L	MW-35	11/15/2016	ND	0.0020
Sodium, dissolved	MG/L	MW-13A	03/22/2005		5.4000
Sodium, dissolved	MG/L	MW-13A	06/15/2005		4.4000
Sodium, dissolved	MG/L	MW-13A	09/27/2005		4.5000
Sodium, dissolved	MG/L	MW-13A	12/15/2005		4.8000
Sodium, dissolved	MG/L	MW-13A	03/28/2006		5.4000
Sodium, dissolved	MG/L	MW-13A	06/21/2006		5.2000
Sodium, dissolved	MG/L	MW-13A	09/26/2006		5.5000
Sodium, dissolved	MG/L	MW-13A	12/13/2006		4.8000
Sodium, dissolved	MG/L	MW-13A	03/27/2007		5.4000
Sodium, dissolved	MG/L	MW-13A	06/19/2007		5.5000
Sodium, dissolved	MG/L	MW-13A	09/19/2007		5.4000
Sodium, dissolved	MG/L	MW-13A	12/19/2007		4.9000
Sodium, dissolved	MG/L	MW-13A	03/25/2008		5.5000
Sodium, dissolved	MG/L	MW-13A	06/18/2008		5.5000
Sodium, dissolved	MG/L	MW-13A	09/17/2008		5.2000
Sodium, dissolved	MG/L	MW-13A	12/17/2008		5.5000
Sodium, dissolved	MG/L	MW-13A	03/24/2009		5.3000
Sodium, dissolved	MG/L	MW-13A	06/17/2009		5.4000
Sodium, dissolved	MG/L	MW-13A	09/10/2009		5.2000
Sodium, dissolved	MG/L	MW-13A	12/03/2009		5.6000
Sodium, dissolved	MG/L	MW-13A	03/25/2010		6.1000
Sodium, dissolved	MG/L	MW-13A	06/23/2010		5.7000
Sodium, dissolved	MG/L	MW-13A	09/23/2010		5.0000

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date	Result
Sodium, dissolved	MG/L	MW-13A	12/08/2010	5.2000
Sodium, dissolved	MG/L	MW-13A	03/30/2011	5.4000
Sodium, dissolved	MG/L	MW-13A	06/06/2011	5.4000
Sodium, dissolved	MG/L	MW-13A	09/27/2011	5.6000
Sodium, dissolved	MG/L	MW-13A	12/14/2011	5.5000
Sodium, dissolved	MG/L	MW-13A	03/21/2012	5.3000
Sodium, dissolved	MG/L	MW-13A	06/08/2012	5.2000
Sodium, dissolved	MG/L	MW-13A	09/26/2012	5.2000
Sodium, dissolved	MG/L	MW-13A	12/03/2012	5.5000
Sodium, dissolved	MG/L	MW-13A	03/11/2013	5.7000
Sodium, dissolved	MG/L	MW-13A	06/05/2013	5.6000
Sodium, dissolved	MG/L	MW-13A	12/03/2013	5.5000
Sodium, dissolved	MG/L	MW-13A	03/04/2014	5.4000
Sodium, dissolved	MG/L	MW-13A	06/02/2014	5.2000
Sodium, dissolved	MG/L	MW-13A	09/22/2014	5.2000
Sodium, dissolved	MG/L	MW-13A	11/17/2014	5.4000
Sodium, dissolved	MG/L	MW-13A	02/23/2015	5.2000
Sodium, dissolved	MG/L	MW-13A	05/19/2015	5.5000
Sodium, dissolved	MG/L	MW-13A	08/26/2015	5.3000
Sodium, dissolved	MG/L	MW-13A	11/10/2015	5.4000
Sodium, dissolved	MG/L	MW-13A	02/22/2016	5.9000
Sodium, dissolved	MG/L	MW-13A	05/16/2016	5.5000
Sodium, dissolved	MG/L	MW-13A	08/31/2016	5.4000
Sodium, dissolved	MG/L	MW-13A	11/14/2016	5.4000
Sodium, dissolved	MG/L	MW-13B	03/22/2005	5.3000
Sodium, dissolved	MG/L	MW-13B	06/15/2005	4.8000
Sodium, dissolved	MG/L	MW-13B	09/27/2005	5.0000
Sodium, dissolved	MG/L	MW-13B	12/15/2005	4.8000
Sodium, dissolved	MG/L	MW-13B	03/29/2006	4.9000
Sodium, dissolved	MG/L	MW-13B	06/21/2006	5.0000
Sodium, dissolved	MG/L	MW-13B	09/26/2006	5.5000
Sodium, dissolved	MG/L	MW-13B	12/13/2006	4.8000
Sodium, dissolved	MG/L	MW-13B	03/27/2007	5.2000
Sodium, dissolved	MG/L	MW-13B	06/19/2007	5.2000
Sodium, dissolved	MG/L	MW-13B	09/18/2007	5.2000
Sodium, dissolved	MG/L	MW-13B	12/19/2007	4.9000
Sodium, dissolved	MG/L	MW-13B	03/25/2008	5.3000
Sodium, dissolved	MG/L	MW-13B	06/18/2008	5.3000
Sodium, dissolved	MG/L	MW-13B	09/17/2008	5.0000
Sodium, dissolved	MG/L	MW-13B	12/16/2008	5.1000
Sodium, dissolved	MG/L	MW-13B	03/24/2009	5.1000
Sodium, dissolved	MG/L	MW-13B	06/17/2009	5.3000
Sodium, dissolved	MG/L	MW-13B	09/10/2009	5.1000
Sodium, dissolved	MG/L	MW-13B	12/03/2009	5.3000
Sodium, dissolved	MG/L	MW-13B	03/25/2010	5.3000
Sodium, dissolved	MG/L	MW-13B	06/23/2010	5.3000
Sodium, dissolved	MG/L	MW-13B	09/23/2010	4.8000
Sodium, dissolved	MG/L	MW-13B	12/08/2010	5.6000
Sodium, dissolved	MG/L	MW-13B	03/30/2011	5.1000
Sodium, dissolved	MG/L	MW-13B	06/06/2011	5.2000
Sodium, dissolved	MG/L	MW-13B	09/27/2011	5.2000
Sodium, dissolved	MG/L	MW-13B	12/14/2011	5.1000
Sodium, dissolved	MG/L	MW-13B	03/21/2012	4.9000
Sodium, dissolved	MG/L	MW-13B	06/08/2012	5.1000
Sodium, dissolved	MG/L	MW-13B	09/26/2012	5.0000
Sodium, dissolved	MG/L	MW-13B	12/03/2012	5.7000
Sodium, dissolved	MG/L	MW-13B	03/11/2013	5.3000
Sodium, dissolved	MG/L	MW-13B	06/05/2013	5.4000
Sodium, dissolved	MG/L	MW-13B	12/03/2013	5.4000
Sodium, dissolved	MG/L	MW-13B	03/04/2014	5.1000
Sodium, dissolved	MG/L	MW-13B	06/02/2014	4.9000
Sodium, dissolved	MG/L	MW-13B	09/22/2014	5.0000
Sodium, dissolved	MG/L	MW-13B	11/17/2014	5.3000
Sodium, dissolved	MG/L	MW-13B	02/23/2015	5.0000
Sodium, dissolved	MG/L	MW-13B	05/19/2015	5.5000

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date	Result
Sodium, dissolved	MG/L	MW-13B	08/26/2015	5.2000
Sodium, dissolved	MG/L	MW-13B	11/10/2015	5.2000
Sodium, dissolved	MG/L	MW-13B	02/22/2016	5.8000
Sodium, dissolved	MG/L	MW-13B	05/16/2016	5.2000
Sodium, dissolved	MG/L	MW-13B	08/31/2016	5.8000
Sodium, dissolved	MG/L	MW-13B	11/14/2016	5.1000
Sodium, dissolved	MG/L	MW-16	03/24/2009	5.4000
Sodium, dissolved	MG/L	MW-16	06/16/2009	5.3000
Sodium, dissolved	MG/L	MW-16	09/09/2009	5.4000
Sodium, dissolved	MG/L	MW-16	12/03/2009	6.2000
Sodium, dissolved	MG/L	MW-16	03/25/2010	4.9000
Sodium, dissolved	MG/L	MW-16	06/24/2010	5.7000
Sodium, dissolved	MG/L	MW-16	09/24/2010	5.7000
Sodium, dissolved	MG/L	MW-16	12/09/2010	5.2000
Sodium, dissolved	MG/L	MW-16	03/30/2011	4.7000
Sodium, dissolved	MG/L	MW-16	06/07/2011	5.0000
Sodium, dissolved	MG/L	MW-16	09/27/2011	5.8000
Sodium, dissolved	MG/L	MW-16	12/13/2011	5.3000
Sodium, dissolved	MG/L	MW-16	03/21/2012	4.7000
Sodium, dissolved	MG/L	MW-16	06/08/2012	4.8000
Sodium, dissolved	MG/L	MW-16	09/27/2012	5.4000
Sodium, dissolved	MG/L	MW-16	12/04/2012	4.7000
Sodium, dissolved	MG/L	MW-16	03/12/2013	5.1000
Sodium, dissolved	MG/L	MW-16	06/04/2013	5.3000
Sodium, dissolved	MG/L	MW-16	09/05/2013	6.2000
Sodium, dissolved	MG/L	MW-16	12/16/2013	5.7000
Sodium, dissolved	MG/L	MW-16	03/05/2014	4.9000
Sodium, dissolved	MG/L	MW-16	06/02/2014	4.5000
Sodium, dissolved	MG/L	MW-16	09/22/2014	4.9000
Sodium, dissolved	MG/L	MW-16	11/18/2014	4.8000
Sodium, dissolved	MG/L	MW-16	02/23/2015	4.7000
Sodium, dissolved	MG/L	MW-16	05/20/2015	4.6000
Sodium, dissolved	MG/L	MW-16	08/26/2015	4.9000
Sodium, dissolved	MG/L	MW-16	11/11/2015	5.7000
Sodium, dissolved	MG/L	MW-16	02/24/2016	4.4000
Sodium, dissolved	MG/L	MW-16	05/16/2016	4.8000
Sodium, dissolved	MG/L	MW-16	08/31/2016	5.4000
Sodium, dissolved	MG/L	MW-16	11/14/2016	5.0000
Sodium, dissolved	MG/L	MW-35	03/22/2005	5.1000
Sodium, dissolved	MG/L	MW-35	06/14/2005	4.5000
Sodium, dissolved	MG/L	MW-35	09/27/2005	5.1000
Sodium, dissolved	MG/L	MW-35	12/15/2005	4.6000
Sodium, dissolved	MG/L	MW-35	03/28/2006	5.0000
Sodium, dissolved	MG/L	MW-35	06/21/2006	4.9000
Sodium, dissolved	MG/L	MW-35	09/26/2006	5.1000
Sodium, dissolved	MG/L	MW-35	12/12/2006	4.7000
Sodium, dissolved	MG/L	MW-35	03/27/2007	5.1000
Sodium, dissolved	MG/L	MW-35	06/20/2007	5.2000
Sodium, dissolved	MG/L	MW-35	09/18/2007	5.2000
Sodium, dissolved	MG/L	MW-35	12/20/2007	4.8000
Sodium, dissolved	MG/L	MW-35	03/25/2008	5.1000
Sodium, dissolved	MG/L	MW-35	06/18/2008	4.9000
Sodium, dissolved	MG/L	MW-35	09/18/2008	4.8000
Sodium, dissolved	MG/L	MW-35	12/19/2008	4.7000
Sodium, dissolved	MG/L	MW-35	03/24/2009	5.0000
Sodium, dissolved	MG/L	MW-35	06/16/2009	5.1000
Sodium, dissolved	MG/L	MW-35	09/10/2009	4.9000
Sodium, dissolved	MG/L	MW-35	12/03/2009	5.3000
Sodium, dissolved	MG/L	MW-35	03/25/2010	5.0000
Sodium, dissolved	MG/L	MW-35	06/23/2010	5.1000
Sodium, dissolved	MG/L	MW-35	09/23/2010	4.7000
Sodium, dissolved	MG/L	MW-35	12/09/2010	4.8000
Sodium, dissolved	MG/L	MW-35	03/30/2011	4.9000
Sodium, dissolved	MG/L	MW-35	06/06/2011	5.1000
Sodium, dissolved	MG/L	MW-35	09/26/2011	5.2000

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date	Result
Sodium, dissolved	MG/L	MW-35	12/13/2011	5.1000
Sodium, dissolved	MG/L	MW-35	03/21/2012	5.0000
Sodium, dissolved	MG/L	MW-35	06/06/2012	4.8000
Sodium, dissolved	MG/L	MW-35	09/26/2012	4.9000
Sodium, dissolved	MG/L	MW-35	12/04/2012	4.5000
Sodium, dissolved	MG/L	MW-35	03/13/2013	4.9000
Sodium, dissolved	MG/L	MW-35	06/06/2013	4.9000
Sodium, dissolved	MG/L	MW-35	09/05/2013	4.9000
Sodium, dissolved	MG/L	MW-35	12/16/2013	5.9000
Sodium, dissolved	MG/L	MW-35	03/04/2014	5.1000
Sodium, dissolved	MG/L	MW-35	06/02/2014	4.9000
Sodium, dissolved	MG/L	MW-35	09/22/2014	5.1000
Sodium, dissolved	MG/L	MW-35	11/17/2014	5.2000
Sodium, dissolved	MG/L	MW-35	02/25/2015	5.2000
Sodium, dissolved	MG/L	MW-35	05/19/2015	4.8000
Sodium, dissolved	MG/L	MW-35	08/26/2015	5.1000
Sodium, dissolved	MG/L	MW-35	11/10/2015	5.5000
Sodium, dissolved	MG/L	MW-35	02/22/2016	5.6000
Sodium, dissolved	MG/L	MW-35	05/16/2016	5.2000
Sodium, dissolved	MG/L	MW-35	08/31/2016	5.1000
Sodium, dissolved	MG/L	MW-35	11/15/2016	6.3000
Specific conductivity	mS/cm	MW-13A	03/22/2005	0.1580
Specific conductivity	mS/cm	MW-13A	06/15/2005	0.1670
Specific conductivity	mS/cm	MW-13A	09/27/2005	0.1610
Specific conductivity	mS/cm	MW-13A	12/15/2005	0.1590
Specific conductivity	mS/cm	MW-13A	03/28/2006	0.1520
Specific conductivity	mS/cm	MW-13A	06/21/2006	0.1690
Specific conductivity	mS/cm	MW-13A	09/26/2006	0.1710
Specific conductivity	mS/cm	MW-13A	12/13/2006	0.1700
Specific conductivity	mS/cm	MW-13A	03/27/2007	0.1670
Specific conductivity	mS/cm	MW-13A	09/19/2007	0.1670
Specific conductivity	mS/cm	MW-13A	12/19/2007	0.1690
Specific conductivity	mS/cm	MW-13A	03/25/2008	0.1660
Specific conductivity	mS/cm	MW-13A	06/18/2008	0.1700
Specific conductivity	mS/cm	MW-13A	09/17/2008	0.1680
Specific conductivity	mS/cm	MW-13A	12/17/2008	0.1390
Specific conductivity	mS/cm	MW-13A	03/24/2009	0.1680
Specific conductivity	mS/cm	MW-13A	06/17/2009	0.1740
Specific conductivity	mS/cm	MW-13A	12/03/2009	0.1730
Specific conductivity	mS/cm	MW-13A	03/25/2010	0.0930
Specific conductivity	mS/cm	MW-13A	06/23/2010	0.1450
Specific conductivity	mS/cm	MW-13A	09/23/2010	0.1700
Specific conductivity	mS/cm	MW-13A	12/08/2010	0.0700
Specific conductivity	mS/cm	MW-13A	03/30/2011	0.1510
Specific conductivity	mS/cm	MW-13A	06/06/2011	0.1580
Specific conductivity	mS/cm	MW-13A	09/27/2011	0.1580
Specific conductivity	mS/cm	MW-13A	12/14/2011	0.1760
Specific conductivity	mS/cm	MW-13A	03/21/2012	0.1710
Specific conductivity	mS/cm	MW-13A	06/08/2012	0.1800
Specific conductivity	mS/cm	MW-13A	09/26/2012	0.1500
Specific conductivity	mS/cm	MW-13A	12/03/2012	0.1070
Specific conductivity	mS/cm	MW-13A	03/11/2013	0.1450
Specific conductivity	mS/cm	MW-13A	06/05/2013	0.1470
Specific conductivity	mS/cm	MW-13A	12/03/2013	0.1560
Specific conductivity	mS/cm	MW-13A	03/04/2014	0.1410
Specific conductivity	mS/cm	MW-13A	06/02/2014	0.1540
Specific conductivity	mS/cm	MW-13A	09/22/2014	0.1660
Specific conductivity	mS/cm	MW-13A	11/17/2014	0.1720
Specific conductivity	mS/cm	MW-13A	02/23/2015	0.1650
Specific conductivity	mS/cm	MW-13A	05/19/2015	0.1640
Specific conductivity	mS/cm	MW-13A	08/26/2015	0.1660
Specific conductivity	mS/cm	MW-13A	11/10/2015	0.1690
Specific conductivity	mS/cm	MW-13A	02/22/2016	0.1770
Specific conductivity	mS/cm	MW-13A	05/16/2016	0.1690
Specific conductivity	mS/cm	MW-13A	08/31/2016	0.1710

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date	Result
Specific conductivity	mS/cm	MW-13A	11/14/2016	0.1690
Specific conductivity	mS/cm	MW-13B	03/22/2005	0.1550
Specific conductivity	mS/cm	MW-13B	06/15/2005	0.1650
Specific conductivity	mS/cm	MW-13B	09/27/2005	0.1590
Specific conductivity	mS/cm	MW-13B	12/15/2005	0.1570
Specific conductivity	mS/cm	MW-13B	03/29/2006	0.1510
Specific conductivity	mS/cm	MW-13B	06/21/2006	0.1650
Specific conductivity	mS/cm	MW-13B	09/26/2006	0.1680
Specific conductivity	mS/cm	MW-13B	12/13/2006	0.1650
Specific conductivity	mS/cm	MW-13B	03/27/2007	0.1610
Specific conductivity	mS/cm	MW-13B	09/18/2007	0.1680
Specific conductivity	mS/cm	MW-13B	12/19/2007	0.1640
Specific conductivity	mS/cm	MW-13B	03/25/2008	0.1620
Specific conductivity	mS/cm	MW-13B	06/18/2008	0.1650
Specific conductivity	mS/cm	MW-13B	09/17/2008	0.1640
Specific conductivity	mS/cm	MW-13B	12/16/2008	0.1630
Specific conductivity	mS/cm	MW-13B	03/24/2009	0.1670
Specific conductivity	mS/cm	MW-13B	06/17/2009	0.1690
Specific conductivity	mS/cm	MW-13B	12/03/2009	0.1670
Specific conductivity	mS/cm	MW-13B	03/25/2010	0.0900
Specific conductivity	mS/cm	MW-13B	06/23/2010	0.1410
Specific conductivity	mS/cm	MW-13B	09/23/2010	0.1620
Specific conductivity	mS/cm	MW-13B	12/08/2010	0.0730
Specific conductivity	mS/cm	MW-13B	03/30/2011	0.1440
Specific conductivity	mS/cm	MW-13B	06/06/2011	0.1350
Specific conductivity	mS/cm	MW-13B	09/27/2011	0.1510
Specific conductivity	mS/cm	MW-13B	12/14/2011	0.1690
Specific conductivity	mS/cm	MW-13B	03/21/2012	0.1650
Specific conductivity	mS/cm	MW-13B	06/08/2012	0.1750
Specific conductivity	mS/cm	MW-13B	09/26/2012	0.1480
Specific conductivity	mS/cm	MW-13B	12/03/2012	0.1400
Specific conductivity	mS/cm	MW-13B	03/11/2013	0.1440
Specific conductivity	mS/cm	MW-13B	06/05/2013	0.1440
Specific conductivity	mS/cm	MW-13B	12/03/2013	0.1540
Specific conductivity	mS/cm	MW-13B	03/04/2014	0.1390
Specific conductivity	mS/cm	MW-13B	06/02/2014	0.1540
Specific conductivity	mS/cm	MW-13B	09/22/2014	0.1670
Specific conductivity	mS/cm	MW-13B	11/17/2014	0.1720
Specific conductivity	mS/cm	MW-13B	02/23/2015	0.1640
Specific conductivity	mS/cm	MW-13B	05/19/2015	0.1650
Specific conductivity	mS/cm	MW-13B	08/26/2015	0.1640
Specific conductivity	mS/cm	MW-13B	11/10/2015	0.1690
Specific conductivity	mS/cm	MW-13B	02/22/2016	0.1760
Specific conductivity	mS/cm	MW-13B	05/16/2016	0.1680
Specific conductivity	mS/cm	MW-13B	08/31/2016	0.1710
Specific conductivity	mS/cm	MW-13B	11/14/2016	0.1710
Specific conductivity	mS/cm	MW-16	03/24/2009	0.1350
Specific conductivity	mS/cm	MW-16	06/16/2009	0.1230
Specific conductivity	mS/cm	MW-16	12/03/2009	0.1600
Specific conductivity	mS/cm	MW-16	03/25/2010	0.1180
Specific conductivity	mS/cm	MW-16	06/24/2010	0.1550
Specific conductivity	mS/cm	MW-16	09/24/2010	0.1480
Specific conductivity	mS/cm	MW-16	12/09/2010	0.1500
Specific conductivity	mS/cm	MW-16	03/30/2011	0.1020
Specific conductivity	mS/cm	MW-16	06/07/2011	0.0960
Specific conductivity	mS/cm	MW-16	09/27/2011	0.0680
Specific conductivity	mS/cm	MW-16	12/13/2011	0.1200
Specific conductivity	mS/cm	MW-16	03/21/2012	0.0790
Specific conductivity	mS/cm	MW-16	06/08/2012	0.1180
Specific conductivity	mS/cm	MW-16	09/27/2012	0.1060
Specific conductivity	mS/cm	MW-16	12/04/2012	0.0850
Specific conductivity	mS/cm	MW-16	03/12/2013	0.1180
Specific conductivity	mS/cm	MW-16	06/04/2013	0.1030
Specific conductivity	mS/cm	MW-16	09/05/2013	0.1100
Specific conductivity	mS/cm	MW-16	12/16/2013	0.0960

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date	Result
Specific conductivity	mS/cm	MW-16	03/05/2014	0.0990
Specific conductivity	mS/cm	MW-16	06/02/2014	0.0940
Specific conductivity	mS/cm	MW-16	09/22/2014	0.1220
Specific conductivity	mS/cm	MW-16	11/18/2014	0.1260
Specific conductivity	mS/cm	MW-16	02/23/2015	0.0800
Specific conductivity	mS/cm	MW-16	05/20/2015	0.1010
Specific conductivity	mS/cm	MW-16	08/26/2015	0.0970
Specific conductivity	mS/cm	MW-16	11/11/2015	0.1360
Specific conductivity	mS/cm	MW-16	02/24/2016	0.0910
Specific conductivity	mS/cm	MW-16	05/16/2016	0.1020
Specific conductivity	mS/cm	MW-16	08/31/2016	0.1230
Specific conductivity	mS/cm	MW-16	11/14/2016	0.1100
Specific conductivity	mS/cm	MW-35	03/22/2005	0.1430
Specific conductivity	mS/cm	MW-35	06/14/2005	0.1530
Specific conductivity	mS/cm	MW-35	09/27/2005	0.1480
Specific conductivity	mS/cm	MW-35	12/15/2005	0.1450
Specific conductivity	mS/cm	MW-35	03/28/2006	0.1360
Specific conductivity	mS/cm	MW-35	06/21/2006	0.1520
Specific conductivity	mS/cm	MW-35	09/26/2006	0.1550
Specific conductivity	mS/cm	MW-35	12/12/2006	0.1510
Specific conductivity	mS/cm	MW-35	03/27/2007	0.1480
Specific conductivity	mS/cm	MW-35	09/18/2007	0.1520
Specific conductivity	mS/cm	MW-35	12/20/2007	0.1520
Specific conductivity	mS/cm	MW-35	03/25/2008	0.1470
Specific conductivity	mS/cm	MW-35	06/18/2008	0.1510
Specific conductivity	mS/cm	MW-35	09/18/2008	0.1420
Specific conductivity	mS/cm	MW-35	12/19/2008	0.1440
Specific conductivity	mS/cm	MW-35	03/24/2009	0.1500
Specific conductivity	mS/cm	MW-35	06/16/2009	0.1550
Specific conductivity	mS/cm	MW-35	12/03/2009	0.1520
Specific conductivity	mS/cm	MW-35	03/25/2010	0.0840
Specific conductivity	mS/cm	MW-35	06/23/2010	0.1280
Specific conductivity	mS/cm	MW-35	09/23/2010	0.1510
Specific conductivity	mS/cm	MW-35	12/09/2010	0.1500
Specific conductivity	mS/cm	MW-35	03/30/2011	0.1320
Specific conductivity	mS/cm	MW-35	06/06/2011	0.1230
Specific conductivity	mS/cm	MW-35	09/26/2011	0.1310
Specific conductivity	mS/cm	MW-35	12/13/2011	0.1480
Specific conductivity	mS/cm	MW-35	03/21/2012	0.1520
Specific conductivity	mS/cm	MW-35	06/06/2012	0.1380
Specific conductivity	mS/cm	MW-35	09/26/2012	0.1350
Specific conductivity	mS/cm	MW-35	12/04/2012	0.1480
Specific conductivity	mS/cm	MW-35	03/13/2013	0.1320
Specific conductivity	mS/cm	MW-35	06/06/2013	0.1330
Specific conductivity	mS/cm	MW-35	09/05/2013	0.1320
Specific conductivity	mS/cm	MW-35	12/16/2013	0.1210
Specific conductivity	mS/cm	MW-35	03/04/2014	0.1290
Specific conductivity	mS/cm	MW-35	06/02/2014	0.1400
Specific conductivity	mS/cm	MW-35	09/22/2014	0.1610
Specific conductivity	mS/cm	MW-35	11/17/2014	0.1600
Specific conductivity	mS/cm	MW-35	02/25/2015	0.1520
Specific conductivity	mS/cm	MW-35	05/19/2015	0.1350
Specific conductivity	mS/cm	MW-35	08/26/2015	0.1530
Specific conductivity	mS/cm	MW-35	11/10/2015	0.1560
Specific conductivity	mS/cm	MW-35	02/22/2016	0.1640
Specific conductivity	mS/cm	MW-35	05/16/2016	0.1560
Specific conductivity	mS/cm	MW-35	08/31/2016	0.1590
Specific conductivity	mS/cm	MW-35	11/15/2016	0.1580
Sulfate	MG/L	MW-13A	03/22/2005	2.8000
Sulfate	MG/L	MW-13A	06/15/2005	2.9000
Sulfate	MG/L	MW-13A	09/27/2005	3.2000
Sulfate	MG/L	MW-13A	12/15/2005	2.1000
Sulfate	MG/L	MW-13A	03/28/2006	3.2000
Sulfate	MG/L	MW-13A	06/21/2006	3.1000
Sulfate	MG/L	MW-13A	09/26/2006	2.5000

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date	Result
Sulfate	MG/L	MW-13A	12/13/2006	2.3000
Sulfate	MG/L	MW-13A	03/27/2007	2.5000
Sulfate	MG/L	MW-13A	06/19/2007	2.5000
Sulfate	MG/L	MW-13A	09/19/2007	2.5000
Sulfate	MG/L	MW-13A	12/19/2007	2.5000
Sulfate	MG/L	MW-13A	03/25/2008	2.4000
Sulfate	MG/L	MW-13A	06/18/2008	2.6000
Sulfate	MG/L	MW-13A	09/17/2008	2.4000
Sulfate	MG/L	MW-13A	12/17/2008	2.4000
Sulfate	MG/L	MW-13A	03/24/2009	2.5000
Sulfate	MG/L	MW-13A	06/17/2009	2.1000
Sulfate	MG/L	MW-13A	09/10/2009	2.2000
Sulfate	MG/L	MW-13A	12/03/2009	2.3000
Sulfate	MG/L	MW-13A	03/25/2010	2.3000
Sulfate	MG/L	MW-13A	06/23/2010	2.1000
Sulfate	MG/L	MW-13A	09/23/2010	2.3000
Sulfate	MG/L	MW-13A	12/08/2010	3.7000
Sulfate	MG/L	MW-13A	03/30/2011	2.2000
Sulfate	MG/L	MW-13A	06/06/2011	2.2000
Sulfate	MG/L	MW-13A	09/27/2011	2.3000
Sulfate	MG/L	MW-13A	12/14/2011	2.5000
Sulfate	MG/L	MW-13A	03/21/2012	1.9000
Sulfate	MG/L	MW-13A	06/08/2012	2.1000
Sulfate	MG/L	MW-13A	09/26/2012	2.1000
Sulfate	MG/L	MW-13A	12/03/2012	2.2000
Sulfate	MG/L	MW-13A	03/11/2013	1.9000
Sulfate	MG/L	MW-13A	06/05/2013	1.7000
Sulfate	MG/L	MW-13A	12/03/2013	1.6000
Sulfate	MG/L	MW-13A	03/04/2014	2.1000
Sulfate	MG/L	MW-13A	06/02/2014	2.2000
Sulfate	MG/L	MW-13A	09/22/2014	2.2000
Sulfate	MG/L	MW-13A	11/17/2014	2.1000
Sulfate	MG/L	MW-13A	02/23/2015	2.1000
Sulfate	MG/L	MW-13A	05/19/2015	2.1000
Sulfate	MG/L	MW-13A	08/26/2015	2.3000
Sulfate	MG/L	MW-13A	11/10/2015	2.1000
Sulfate	MG/L	MW-13A	02/22/2016	2.1000
Sulfate	MG/L	MW-13A	05/16/2016	2.2000
Sulfate	MG/L	MW-13A	08/31/2016	2.3000
Sulfate	MG/L	MW-13A	11/14/2016	2.0000
Sulfate	MG/L	MW-13B	03/22/2005	4.6000
Sulfate	MG/L	MW-13B	06/15/2005	4.7000
Sulfate	MG/L	MW-13B	09/27/2005	4.5000
Sulfate	MG/L	MW-13B	12/15/2005	3.6000
Sulfate	MG/L	MW-13B	03/29/2006	4.5000
Sulfate	MG/L	MW-13B	06/21/2006	4.4000
Sulfate	MG/L	MW-13B	09/26/2006	4.1000
Sulfate	MG/L	MW-13B	12/13/2006	3.9000
Sulfate	MG/L	MW-13B	03/27/2007	4.1000
Sulfate	MG/L	MW-13B	06/19/2007	4.1000
Sulfate	MG/L	MW-13B	09/18/2007	4.2000
Sulfate	MG/L	MW-13B	12/19/2007	4.1000
Sulfate	MG/L	MW-13B	03/25/2008	4.0000
Sulfate	MG/L	MW-13B	06/18/2008	4.1000
Sulfate	MG/L	MW-13B	09/17/2008	4.2000
Sulfate	MG/L	MW-13B	12/16/2008	4.2000
Sulfate	MG/L	MW-13B	03/24/2009	4.2000
Sulfate	MG/L	MW-13B	06/17/2009	3.7000
Sulfate	MG/L	MW-13B	09/10/2009	3.7000
Sulfate	MG/L	MW-13B	12/03/2009	4.1000
Sulfate	MG/L	MW-13B	03/25/2010	3.9000
Sulfate	MG/L	MW-13B	06/23/2010	3.6000
Sulfate	MG/L	MW-13B	09/23/2010	3.8000
Sulfate	MG/L	MW-13B	12/08/2010	2.4000
Sulfate	MG/L	MW-13B	03/30/2011	4.4000

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date		Result
Sulfate	MG/L	MW-13B	06/06/2011		3.7000
Sulfate	MG/L	MW-13B	09/27/2011		3.7000
Sulfate	MG/L	MW-13B	12/14/2011		3.5000
Sulfate	MG/L	MW-13B	03/21/2012		3.2000
Sulfate	MG/L	MW-13B	06/08/2012		3.5000
Sulfate	MG/L	MW-13B	09/26/2012		3.6000
Sulfate	MG/L	MW-13B	12/03/2012		3.5000
Sulfate	MG/L	MW-13B	03/11/2013		3.0000
Sulfate	MG/L	MW-13B	06/05/2013		3.5000
Sulfate	MG/L	MW-13B	12/03/2013		3.1000
Sulfate	MG/L	MW-13B	03/04/2014		3.7000
Sulfate	MG/L	MW-13B	06/02/2014		3.6000
Sulfate	MG/L	MW-13B	09/22/2014		4.1000
Sulfate	MG/L	MW-13B	11/17/2014		3.7000
Sulfate	MG/L	MW-13B	02/23/2015		3.4000
Sulfate	MG/L	MW-13B	05/19/2015		3.1000
Sulfate	MG/L	MW-13B	08/26/2015		3.7000
Sulfate	MG/L	MW-13B	11/10/2015		3.2000
Sulfate	MG/L	MW-13B	02/22/2016		3.4000
Sulfate	MG/L	MW-13B	05/16/2016		3.5000
Sulfate	MG/L	MW-13B	08/31/2016		3.7000
Sulfate	MG/L	MW-13B	11/14/2016		3.0000
Sulfate	MG/L	MW-16	03/24/2009		3.0000
Sulfate	MG/L	MW-16	06/16/2009		2.2000
Sulfate	MG/L	MW-16	09/09/2009		4.3000
Sulfate	MG/L	MW-16	12/03/2009		3.6000
Sulfate	MG/L	MW-16	03/25/2010		9.9000
Sulfate	MG/L	MW-16	06/24/2010		2.5000
Sulfate	MG/L	MW-16	09/24/2010		2.3000
Sulfate	MG/L	MW-16	12/09/2010		2.7000
Sulfate	MG/L	MW-16	03/30/2011		7.1000
Sulfate	MG/L	MW-16	06/07/2011		2.4000
Sulfate	MG/L	MW-16	09/27/2011		4.1000
Sulfate	MG/L	MW-16	12/13/2011		2.3000
Sulfate	MG/L	MW-16	03/21/2012		1.6000
Sulfate	MG/L	MW-16	06/08/2012		3.0000
Sulfate	MG/L	MW-16	09/27/2012		3.1000
Sulfate	MG/L	MW-16	12/04/2012		3.0000
Sulfate	MG/L	MW-16	03/12/2013		1.9000
Sulfate	MG/L	MW-16	06/04/2013		2.7000
Sulfate	MG/L	MW-16	09/05/2013		1.7000
Sulfate	MG/L	MW-16	12/16/2013		2.3000
Sulfate	MG/L	MW-16	03/05/2014		2.8000
Sulfate	MG/L	MW-16	06/02/2014		3.8000
Sulfate	MG/L	MW-16	09/22/2014		2.9000
Sulfate	MG/L	MW-16	11/18/2014		3.3000
Sulfate	MG/L	MW-16	02/23/2015		2.9000
Sulfate	MG/L	MW-16	05/20/2015		2.1000
Sulfate	MG/L	MW-16	08/26/2015		3.4000
Sulfate	MG/L	MW-16	11/11/2015		2.8000
Sulfate	MG/L	MW-16	02/24/2016		2.9000
Sulfate	MG/L	MW-16	05/16/2016		2.6000
Sulfate	MG/L	MW-16	08/31/2016		1.7000
Sulfate	MG/L	MW-16	11/14/2016		1.6000
Sulfate	MG/L	MW-35	03/22/2005		2.5000
Sulfate	MG/L	MW-35	06/14/2005		1.6000
Sulfate	MG/L	MW-35	09/27/2005		1.3000
Sulfate	MG/L	MW-35	12/15/2005	ND	1.0000
Sulfate	MG/L	MW-35	03/28/2006		3.0000
Sulfate	MG/L	MW-35	06/21/2006		3.0000
Sulfate	MG/L	MW-35	09/26/2006		2.4000
Sulfate	MG/L	MW-35	12/12/2006		2.2000
Sulfate	MG/L	MW-35	03/27/2007		2.5000
Sulfate	MG/L	MW-35	06/20/2007		2.4000
Sulfate	MG/L	MW-35	09/18/2007		2.6000

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date	Result
Sulfate	MG/L	MW-35	12/20/2007	2.4000
Sulfate	MG/L	MW-35	03/25/2008	2.4000
Sulfate	MG/L	MW-35	06/18/2008	2.6000
Sulfate	MG/L	MW-35	09/18/2008	2.3000
Sulfate	MG/L	MW-35	12/19/2008	2.6000
Sulfate	MG/L	MW-35	03/24/2009	2.7000
Sulfate	MG/L	MW-35	06/16/2009	2.2000
Sulfate	MG/L	MW-35	09/10/2009	2.4000
Sulfate	MG/L	MW-35	12/03/2009	2.5000
Sulfate	MG/L	MW-35	03/25/2010	2.6000
Sulfate	MG/L	MW-35	06/23/2010	2.3000
Sulfate	MG/L	MW-35	09/23/2010	2.5000
Sulfate	MG/L	MW-35	12/09/2010	2.2000
Sulfate	MG/L	MW-35	03/30/2011	2.6000
Sulfate	MG/L	MW-35	06/06/2011	2.5000
Sulfate	MG/L	MW-35	09/26/2011	2.6000
Sulfate	MG/L	MW-35	12/13/2011	2.5000
Sulfate	MG/L	MW-35	03/21/2012	2.1000
Sulfate	MG/L	MW-35	06/06/2012	2.4000
Sulfate	MG/L	MW-35	09/26/2012	2.4000
Sulfate	MG/L	MW-35	12/04/2012	2.5000
Sulfate	MG/L	MW-35	03/13/2013	2.3000
Sulfate	MG/L	MW-35	06/06/2013	2.0000
Sulfate	MG/L	MW-35	09/05/2013	2.1000
Sulfate	MG/L	MW-35	12/16/2013	2.6000
Sulfate	MG/L	MW-35	03/04/2014	2.7000
Sulfate	MG/L	MW-35	06/02/2014	2.5000
Sulfate	MG/L	MW-35	09/22/2014	3.2000
Sulfate	MG/L	MW-35	11/17/2014	2.5000
Sulfate	MG/L	MW-35	02/25/2015	2.4000
Sulfate	MG/L	MW-35	05/19/2015	2.3000
Sulfate	MG/L	MW-35	08/26/2015	2.4000
Sulfate	MG/L	MW-35	11/10/2015	2.5000
Sulfate	MG/L	MW-35	02/22/2016	2.6000
Sulfate	MG/L	MW-35	05/16/2016	2.5000
Sulfate	MG/L	MW-35	08/31/2016	2.8000
Sulfate	MG/L	MW-35	11/15/2016	2.2000
Temperature	deg C	MW-13A	03/22/2005	9.0800
Temperature	deg C	MW-13A	06/15/2005	9.3700
Temperature	deg C	MW-13A	09/27/2005	9.6500
Temperature	deg C	MW-13A	12/15/2005	8.6000
Temperature	deg C	MW-13A	03/28/2006	9.4400
Temperature	deg C	MW-13A	06/21/2006	9.4100
Temperature	deg C	MW-13A	09/26/2006	9.7100
Temperature	deg C	MW-13A	12/13/2006	8.7900
Temperature	deg C	MW-13A	03/27/2007	9.1400
Temperature	deg C	MW-13A	09/19/2007	9.2600
Temperature	deg C	MW-13A	12/19/2007	8.1700
Temperature	deg C	MW-13A	03/25/2008	8.4700
Temperature	deg C	MW-13A	06/18/2008	9.3000
Temperature	deg C	MW-13A	09/17/2008	8.8000
Temperature	deg C	MW-13A	12/17/2008	8.7500
Temperature	deg C	MW-13A	03/24/2009	8.3200
Temperature	deg C	MW-13A	06/17/2009	9.8500
Temperature	deg C	MW-13A	12/03/2009	8.9200
Temperature	deg C	MW-13A	03/25/2010	9.2200
Temperature	deg C	MW-13A	06/23/2010	9.5800
Temperature	deg C	MW-13A	09/23/2010	9.4200
Temperature	deg C	MW-13A	12/08/2010	9.4500
Temperature	deg C	MW-13A	03/30/2011	9.3700
Temperature	deg C	MW-13A	06/06/2011	10.4000
Temperature	deg C	MW-13A	09/27/2011	9.5800
Temperature	deg C	MW-13A	12/14/2011	8.9200
Temperature	deg C	MW-13A	03/21/2012	8.7400
Temperature	deg C	MW-13A	06/08/2012	9.3000

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date	Result
Temperature	deg C	MW-13A	09/26/2012	10.0400
Temperature	deg C	MW-13A	12/03/2012	9.2000
Temperature	deg C	MW-13A	03/11/2013	9.2200
Temperature	deg C	MW-13A	06/05/2013	11.9600
Temperature	deg C	MW-13A	12/03/2013	8.9300
Temperature	deg C	MW-13A	03/04/2014	8.9800
Temperature	deg C	MW-13A	06/02/2014	11.1500
Temperature	deg C	MW-13A	09/22/2014	10.5800
Temperature	deg C	MW-13A	11/17/2014	9.4000
Temperature	deg C	MW-13A	02/23/2015	9.4100
Temperature	deg C	MW-13A	05/19/2015	9.8900
Temperature	deg C	MW-13A	08/26/2015	10.6900
Temperature	deg C	MW-13A	11/10/2015	9.4900
Temperature	deg C	MW-13A	02/22/2016	9.5900
Temperature	deg C	MW-13A	05/16/2016	9.7700
Temperature	deg C	MW-13A	08/31/2016	9.9800
Temperature	deg C	MW-13A	11/14/2016	9.5700
Temperature	deg C	MW-13B	03/22/2005	9.5500
Temperature	deg C	MW-13B	06/15/2005	9.9200
Temperature	deg C	MW-13B	09/27/2005	10.7900
Temperature	deg C	MW-13B	12/15/2005	8.1100
Temperature	deg C	MW-13B	03/29/2006	8.8000
Temperature	deg C	MW-13B	06/21/2006	9.7600
Temperature	deg C	MW-13B	09/26/2006	10.3200
Temperature	deg C	MW-13B	12/13/2006	8.8500
Temperature	deg C	MW-13B	03/27/2007	9.0400
Temperature	deg C	MW-13B	09/18/2007	10.0100
Temperature	deg C	MW-13B	12/19/2007	8.0800
Temperature	deg C	MW-13B	03/25/2008	8.0900
Temperature	deg C	MW-13B	06/18/2008	9.2300
Temperature	deg C	MW-13B	09/17/2008	9.0100
Temperature	deg C	MW-13B	12/16/2008	8.4300
Temperature	deg C	MW-13B	03/24/2009	8.3700
Temperature	deg C	MW-13B	06/17/2009	10.8100
Temperature	deg C	MW-13B	12/03/2009	8.7900
Temperature	deg C	MW-13B	03/25/2010	9.2300
Temperature	deg C	MW-13B	06/23/2010	9.9700
Temperature	deg C	MW-13B	09/23/2010	9.6000
Temperature	deg C	MW-13B	12/08/2010	9.2500
Temperature	deg C	MW-13B	03/30/2011	9.3200
Temperature	deg C	MW-13B	06/06/2011	11.3000
Temperature	deg C	MW-13B	09/27/2011	10.5700
Temperature	deg C	MW-13B	12/14/2011	8.7600
Temperature	deg C	MW-13B	03/21/2012	8.5000
Temperature	deg C	MW-13B	06/08/2012	9.4000
Temperature	deg C	MW-13B	09/26/2012	10.5900
Temperature	deg C	MW-13B	12/03/2012	9.2000
Temperature	deg C	MW-13B	03/11/2013	9.1500
Temperature	deg C	MW-13B	06/05/2013	11.4100
Temperature	deg C	MW-13B	12/03/2013	9.4400
Temperature	deg C	MW-13B	03/04/2014	9.0000
Temperature	deg C	MW-13B	06/02/2014	14.3200
Temperature	deg C	MW-13B	09/22/2014	11.0200
Temperature	deg C	MW-13B	11/17/2014	9.4000
Temperature	deg C	MW-13B	02/23/2015	9.7600
Temperature	deg C	MW-13B	05/19/2015	10.2300
Temperature	deg C	MW-13B	08/26/2015	10.5300
Temperature	deg C	MW-13B	11/10/2015	9.5900
Temperature	deg C	MW-13B	02/22/2016	9.3000
Temperature	deg C	MW-13B	05/16/2016	9.9300
Temperature	deg C	MW-13B	08/31/2016	10.4300
Temperature	deg C	MW-13B	11/14/2016	10.4100
Temperature	deg C	MW-16	03/24/2009	9.0800
Temperature	deg C	MW-16	06/16/2009	9.9800
Temperature	deg C	MW-16	12/03/2009	9.0800

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date	Result
Temperature	deg C	MW-16	03/25/2010	9.1100
Temperature	deg C	MW-16	06/24/2010	9.3900
Temperature	deg C	MW-16	09/24/2010	9.4400
Temperature	deg C	MW-16	12/09/2010	9.1300
Temperature	deg C	MW-16	03/30/2011	9.1400
Temperature	deg C	MW-16	06/07/2011	9.4600
Temperature	deg C	MW-16	09/27/2011	9.4300
Temperature	deg C	MW-16	12/13/2011	8.8400
Temperature	deg C	MW-16	03/21/2012	8.8200
Temperature	deg C	MW-16	06/08/2012	9.2000
Temperature	deg C	MW-16	09/27/2012	9.0600
Temperature	deg C	MW-16	12/04/2012	9.1000
Temperature	deg C	MW-16	03/12/2013	9.0200
Temperature	deg C	MW-16	06/04/2013	9.4700
Temperature	deg C	MW-16	09/05/2013	9.3600
Temperature	deg C	MW-16	12/16/2013	9.0400
Temperature	deg C	MW-16	03/05/2014	9.4000
Temperature	deg C	MW-16	06/02/2014	9.5600
Temperature	deg C	MW-16	09/22/2014	10.7300
Temperature	deg C	MW-16	11/18/2014	8.9000
Temperature	deg C	MW-16	02/23/2015	9.0200
Temperature	deg C	MW-16	05/20/2015	9.3000
Temperature	deg C	MW-16	08/26/2015	9.4800
Temperature	deg C	MW-16	11/11/2015	9.0100
Temperature	deg C	MW-16	02/24/2016	9.0200
Temperature	deg C	MW-16	05/16/2016	9.3800
Temperature	deg C	MW-16	08/31/2016	9.6600
Temperature	deg C	MW-16	11/14/2016	9.8100
Temperature	deg C	MW-35	03/22/2005	9.8000
Temperature	deg C	MW-35	06/14/2005	10.2800
Temperature	deg C	MW-35	09/27/2005	10.4900
Temperature	deg C	MW-35	12/15/2005	8.8600
Temperature	deg C	MW-35	03/28/2006	9.5300
Temperature	deg C	MW-35	06/21/2006	10.3100
Temperature	deg C	MW-35	09/26/2006	10.6200
Temperature	deg C	MW-35	12/12/2006	9.2600
Temperature	deg C	MW-35	03/27/2007	9.4000
Temperature	deg C	MW-35	09/18/2007	10.2400
Temperature	deg C	MW-35	12/20/2007	8.6900
Temperature	deg C	MW-35	03/25/2008	8.7500
Temperature	deg C	MW-35	06/18/2008	9.7300
Temperature	deg C	MW-35	09/18/2008	9.9800
Temperature	deg C	MW-35	12/19/2008	8.5000
Temperature	deg C	MW-35	03/24/2009	9.3200
Temperature	deg C	MW-35	06/16/2009	11.7600
Temperature	deg C	MW-35	12/03/2009	9.5700
Temperature	deg C	MW-35	03/25/2010	9.8200
Temperature	deg C	MW-35	06/23/2010	10.0700
Temperature	deg C	MW-35	09/23/2010	10.0900
Temperature	deg C	MW-35	12/09/2010	9.8500
Temperature	deg C	MW-35	03/30/2011	9.7200
Temperature	deg C	MW-35	06/06/2011	10.2000
Temperature	deg C	MW-35	09/26/2011	10.1400
Temperature	deg C	MW-35	12/13/2011	9.4100
Temperature	deg C	MW-35	03/21/2012	9.7800
Temperature	deg C	MW-35	06/06/2012	10.3000
Temperature	deg C	MW-35	09/26/2012	10.2000
Temperature	deg C	MW-35	12/04/2012	9.8000
Temperature	deg C	MW-35	03/13/2013	9.7500
Temperature	deg C	MW-35	06/06/2013	10.8300
Temperature	deg C	MW-35	09/05/2013	10.0900
Temperature	deg C	MW-35	12/16/2013	9.8400
Temperature	deg C	MW-35	03/04/2014	9.7600
Temperature	deg C	MW-35	06/02/2014	11.7900
Temperature	deg C	MW-35	09/22/2014	13.7000

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date		Result
Temperature	deg C	MW-35	11/17/2014		10.4000
Temperature	deg C	MW-35	02/25/2015		9.9000
Temperature	deg C	MW-35	05/19/2015		10.3000
Temperature	deg C	MW-35	08/26/2015		13.0900
Temperature	deg C	MW-35	11/10/2015		10.3400
Temperature	deg C	MW-35	02/22/2016		10.3100
Temperature	deg C	MW-35	05/16/2016		10.1200
Temperature	deg C	MW-35	08/31/2016		10.7800
Temperature	deg C	MW-35	11/15/2016		10.4100
Thallium, total	MG/L	MW-13A	12/03/2013	ND	0.0010
Thallium, total	MG/L	MW-13A	03/04/2014	ND	0.0010
Thallium, total	MG/L	MW-13A	06/02/2014	ND	0.0010
Thallium, total	MG/L	MW-13A	09/22/2014	ND	0.0010
Thallium, total	MG/L	MW-13A	11/17/2014	ND	0.0010
Thallium, total	MG/L	MW-13A	02/23/2015	ND	0.0010
Thallium, total	MG/L	MW-13A	05/19/2015	ND	0.0010
Thallium, total	MG/L	MW-13A	08/26/2015	ND	0.0010
Thallium, total	MG/L	MW-13A	11/10/2015	ND	0.0010
Thallium, total	MG/L	MW-13A	02/22/2016	ND	0.0010
Thallium, total	MG/L	MW-13A	05/16/2016	ND	0.0010
Thallium, total	MG/L	MW-13A	08/31/2016	ND	0.0010
Thallium, total	MG/L	MW-13A	11/14/2016	ND	0.0010
Thallium, total	MG/L	MW-13B	12/03/2013	ND	0.0010
Thallium, total	MG/L	MW-13B	03/04/2014	ND	0.0010
Thallium, total	MG/L	MW-13B	06/02/2014	ND	0.0010
Thallium, total	MG/L	MW-13B	09/22/2014	ND	0.0010
Thallium, total	MG/L	MW-13B	11/17/2014	ND	0.0010
Thallium, total	MG/L	MW-13B	02/23/2015	ND	0.0010
Thallium, total	MG/L	MW-13B	05/19/2015	ND	0.0010
Thallium, total	MG/L	MW-13B	08/26/2015	ND	0.0010
Thallium, total	MG/L	MW-13B	11/10/2015	ND	0.0010
Thallium, total	MG/L	MW-13B	02/22/2016	ND	0.0010
Thallium, total	MG/L	MW-13B	05/16/2016	ND	0.0010
Thallium, total	MG/L	MW-13B	08/31/2016	ND	0.0010
Thallium, total	MG/L	MW-13B	11/14/2016	ND	0.0010
Thallium, total	MG/L	MW-16	09/05/2013	ND	0.0010
Thallium, total	MG/L	MW-16	12/16/2013	ND	0.0010
Thallium, total	MG/L	MW-16	03/05/2014	ND	0.0010
Thallium, total	MG/L	MW-16	06/02/2014	ND	0.0010
Thallium, total	MG/L	MW-16	09/22/2014	ND	0.0010
Thallium, total	MG/L	MW-16	11/18/2014	ND	0.0010
Thallium, total	MG/L	MW-16	02/23/2015	ND	0.0010
Thallium, total	MG/L	MW-16	05/20/2015	ND	0.0010
Thallium, total	MG/L	MW-16	08/26/2015	ND	0.0010
Thallium, total	MG/L	MW-16	11/11/2015	ND	0.0010
Thallium, total	MG/L	MW-16	02/24/2016	ND	0.0010
Thallium, total	MG/L	MW-16	05/16/2016	ND	0.0010
Thallium, total	MG/L	MW-16	08/31/2016	ND	0.0010
Thallium, total	MG/L	MW-16	11/14/2016	ND	0.0010
Thallium, total	MG/L	MW-35	09/05/2013	ND	0.0010
Thallium, total	MG/L	MW-35	12/16/2013	ND	0.0010
Thallium, total	MG/L	MW-35	03/04/2014	ND	0.0010
Thallium, total	MG/L	MW-35	06/02/2014	ND	0.0010
Thallium, total	MG/L	MW-35	09/22/2014	ND	0.0010
Thallium, total	MG/L	MW-35	11/17/2014	ND	0.0010
Thallium, total	MG/L	MW-35	02/25/2015	ND	0.0010
Thallium, total	MG/L	MW-35	05/19/2015	ND	0.0010
Thallium, total	MG/L	MW-35	08/26/2015	ND	0.0010
Thallium, total	MG/L	MW-35	11/10/2015	ND	0.0010
Thallium, total	MG/L	MW-35	02/22/2016	ND	0.0010
Thallium, total	MG/L	MW-35	05/16/2016	ND	0.0010
Thallium, total	MG/L	MW-35	08/31/2016	ND	0.0010
Thallium, total	MG/L	MW-35	11/15/2016	ND	0.0010
Total dissolved solids (tds)	MG/L	MW-13A	03/22/2005		113.0000
Total dissolved solids (tds)	MG/L	MW-13A	06/15/2005		111.0000

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date	Result
Total dissolved solids (tds)	MG/L	MW-13A	09/27/2005	175.0000
Total dissolved solids (tds)	MG/L	MW-13A	12/15/2005	166.0000
Total dissolved solids (tds)	MG/L	MW-13A	03/28/2006	110.0000
Total dissolved solids (tds)	MG/L	MW-13A	06/21/2006	120.0000
Total dissolved solids (tds)	MG/L	MW-13A	09/26/2006	110.0000
Total dissolved solids (tds)	MG/L	MW-13A	12/13/2006	100.0000
Total dissolved solids (tds)	MG/L	MW-13A	03/27/2007	100.0000
Total dissolved solids (tds)	MG/L	MW-13A	06/19/2007	100.0000
Total dissolved solids (tds)	MG/L	MW-13A	09/19/2007	110.0000
Total dissolved solids (tds)	MG/L	MW-13A	12/19/2007	84.0000
Total dissolved solids (tds)	MG/L	MW-13A	03/25/2008	99.0000
Total dissolved solids (tds)	MG/L	MW-13A	06/18/2008	110.0000
Total dissolved solids (tds)	MG/L	MW-13A	09/17/2008	110.0000
Total dissolved solids (tds)	MG/L	MW-13A	12/17/2008	90.0000
Total dissolved solids (tds)	MG/L	MW-13A	03/24/2009	95.0000
Total dissolved solids (tds)	MG/L	MW-13A	06/17/2009	110.0000
Total dissolved solids (tds)	MG/L	MW-13A	09/10/2009	100.0000
Total dissolved solids (tds)	MG/L	MW-13A	12/03/2009	100.0000
Total dissolved solids (tds)	MG/L	MW-13A	03/25/2010	100.0000
Total dissolved solids (tds)	MG/L	MW-13A	06/23/2010	120.0000
Total dissolved solids (tds)	MG/L	MW-13A	09/23/2010	98.0000
Total dissolved solids (tds)	MG/L	MW-13A	12/08/2010	90.0000
Total dissolved solids (tds)	MG/L	MW-13A	03/30/2011	110.0000
Total dissolved solids (tds)	MG/L	MW-13A	06/06/2011	110.0000
Total dissolved solids (tds)	MG/L	MW-13A	09/27/2011	100.0000
Total dissolved solids (tds)	MG/L	MW-13A	12/14/2011	97.0000
Total dissolved solids (tds)	MG/L	MW-13A	03/21/2012	93.0000
Total dissolved solids (tds)	MG/L	MW-13A	06/08/2012	120.0000
Total dissolved solids (tds)	MG/L	MW-13A	09/26/2012	120.0000
Total dissolved solids (tds)	MG/L	MW-13A	12/03/2012	88.0000
Total dissolved solids (tds)	MG/L	MW-13A	03/11/2013	100.0000
Total dissolved solids (tds)	MG/L	MW-13A	06/05/2013	100.0000
Total dissolved solids (tds)	MG/L	MW-13A	12/03/2013	98.0000
Total dissolved solids (tds)	MG/L	MW-13A	03/04/2014	100.0000
Total dissolved solids (tds)	MG/L	MW-13A	06/02/2014	100.0000
Total dissolved solids (tds)	MG/L	MW-13A	09/22/2014	110.0000
Total dissolved solids (tds)	MG/L	MW-13A	11/17/2014	110.0000
Total dissolved solids (tds)	MG/L	MW-13A	02/23/2015	99.0000
Total dissolved solids (tds)	MG/L	MW-13A	05/19/2015	100.0000
Total dissolved solids (tds)	MG/L	MW-13A	08/26/2015	97.0000
Total dissolved solids (tds)	MG/L	MW-13A	11/10/2015	100.0000
Total dissolved solids (tds)	MG/L	MW-13A	02/22/2016	100.0000
Total dissolved solids (tds)	MG/L	MW-13A	05/16/2016	99.0000
Total dissolved solids (tds)	MG/L	MW-13A	08/31/2016	130.0000
Total dissolved solids (tds)	MG/L	MW-13A	11/14/2016	110.0000
Total dissolved solids (tds)	MG/L	MW-13B	03/22/2005	108.0000
Total dissolved solids (tds)	MG/L	MW-13B	06/15/2005	114.0000
Total dissolved solids (tds)	MG/L	MW-13B	09/27/2005	111.0000
Total dissolved solids (tds)	MG/L	MW-13B	12/15/2005	130.0000
Total dissolved solids (tds)	MG/L	MW-13B	03/29/2006	89.0000
Total dissolved solids (tds)	MG/L	MW-13B	06/21/2006	110.0000
Total dissolved solids (tds)	MG/L	MW-13B	09/26/2006	100.0000
Total dissolved solids (tds)	MG/L	MW-13B	12/13/2006	98.0000
Total dissolved solids (tds)	MG/L	MW-13B	03/27/2007	100.0000
Total dissolved solids (tds)	MG/L	MW-13B	06/19/2007	99.0000
Total dissolved solids (tds)	MG/L	MW-13B	09/18/2007	99.0000
Total dissolved solids (tds)	MG/L	MW-13B	12/19/2007	91.0000
Total dissolved solids (tds)	MG/L	MW-13B	03/25/2008	99.0000
Total dissolved solids (tds)	MG/L	MW-13B	06/18/2008	120.0000
Total dissolved solids (tds)	MG/L	MW-13B	09/17/2008	110.0000
Total dissolved solids (tds)	MG/L	MW-13B	12/16/2008	93.0000
Total dissolved solids (tds)	MG/L	MW-13B	03/24/2009	94.0000
Total dissolved solids (tds)	MG/L	MW-13B	06/17/2009	100.0000
Total dissolved solids (tds)	MG/L	MW-13B	09/10/2009	100.0000
Total dissolved solids (tds)	MG/L	MW-13B	12/03/2009	110.0000

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date	Result
Total dissolved solids (tds)	MG/L	MW-13B	03/25/2010	100.0000
Total dissolved solids (tds)	MG/L	MW-13B	06/23/2010	110.0000
Total dissolved solids (tds)	MG/L	MW-13B	09/23/2010	94.0000
Total dissolved solids (tds)	MG/L	MW-13B	12/08/2010	94.0000
Total dissolved solids (tds)	MG/L	MW-13B	03/30/2011	110.0000
Total dissolved solids (tds)	MG/L	MW-13B	06/06/2011	99.0000
Total dissolved solids (tds)	MG/L	MW-13B	09/27/2011	100.0000
Total dissolved solids (tds)	MG/L	MW-13B	12/14/2011	91.0000
Total dissolved solids (tds)	MG/L	MW-13B	03/21/2012	100.0000
Total dissolved solids (tds)	MG/L	MW-13B	06/08/2012	110.0000
Total dissolved solids (tds)	MG/L	MW-13B	09/26/2012	110.0000
Total dissolved solids (tds)	MG/L	MW-13B	12/03/2012	93.0000
Total dissolved solids (tds)	MG/L	MW-13B	03/11/2013	100.0000
Total dissolved solids (tds)	MG/L	MW-13B	06/05/2013	98.0000
Total dissolved solids (tds)	MG/L	MW-13B	12/03/2013	99.0000
Total dissolved solids (tds)	MG/L	MW-13B	03/04/2014	99.0000
Total dissolved solids (tds)	MG/L	MW-13B	06/02/2014	100.0000
Total dissolved solids (tds)	MG/L	MW-13B	09/22/2014	110.0000
Total dissolved solids (tds)	MG/L	MW-13B	11/17/2014	110.0000
Total dissolved solids (tds)	MG/L	MW-13B	02/23/2015	110.0000
Total dissolved solids (tds)	MG/L	MW-13B	05/19/2015	110.0000
Total dissolved solids (tds)	MG/L	MW-13B	08/26/2015	98.0000
Total dissolved solids (tds)	MG/L	MW-13B	11/10/2015	100.0000
Total dissolved solids (tds)	MG/L	MW-13B	02/22/2016	100.0000
Total dissolved solids (tds)	MG/L	MW-13B	05/16/2016	99.0000
Total dissolved solids (tds)	MG/L	MW-13B	08/31/2016	120.0000
Total dissolved solids (tds)	MG/L	MW-13B	11/14/2016	100.0000
Total dissolved solids (tds)	MG/L	MW-16	03/24/2009	87.0000
Total dissolved solids (tds)	MG/L	MW-16	06/16/2009	85.0000
Total dissolved solids (tds)	MG/L	MW-16	09/09/2009	89.0000
Total dissolved solids (tds)	MG/L	MW-16	12/03/2009	97.0000
Total dissolved solids (tds)	MG/L	MW-16	03/25/2010	83.0000
Total dissolved solids (tds)	MG/L	MW-16	06/24/2010	95.0000
Total dissolved solids (tds)	MG/L	MW-16	09/24/2010	120.0000
Total dissolved solids (tds)	MG/L	MW-16	12/09/2010	100.0000
Total dissolved solids (tds)	MG/L	MW-16	03/30/2011	91.0000
Total dissolved solids (tds)	MG/L	MW-16	06/07/2011	94.0000
Total dissolved solids (tds)	MG/L	MW-16	09/27/2011	100.0000
Total dissolved solids (tds)	MG/L	MW-16	12/13/2011	93.0000
Total dissolved solids (tds)	MG/L	MW-16	03/21/2012	71.0000
Total dissolved solids (tds)	MG/L	MW-16	06/08/2012	95.0000
Total dissolved solids (tds)	MG/L	MW-16	09/27/2012	87.0000
Total dissolved solids (tds)	MG/L	MW-16	12/04/2012	100.0000
Total dissolved solids (tds)	MG/L	MW-16	03/12/2013	100.0000
Total dissolved solids (tds)	MG/L	MW-16	06/04/2013	68.0000
Total dissolved solids (tds)	MG/L	MW-16	09/05/2013	100.0000
Total dissolved solids (tds)	MG/L	MW-16	12/16/2013	92.0000
Total dissolved solids (tds)	MG/L	MW-16	03/05/2014	82.0000
Total dissolved solids (tds)	MG/L	MW-16	06/02/2014	79.0000
Total dissolved solids (tds)	MG/L	MW-16	09/22/2014	93.0000
Total dissolved solids (tds)	MG/L	MW-16	11/18/2014	100.0000
Total dissolved solids (tds)	MG/L	MW-16	02/23/2015	80.0000
Total dissolved solids (tds)	MG/L	MW-16	05/20/2015	99.0000
Total dissolved solids (tds)	MG/L	MW-16	08/26/2015	93.0000
Total dissolved solids (tds)	MG/L	MW-16	11/11/2015	99.0000
Total dissolved solids (tds)	MG/L	MW-16	02/24/2016	79.0000
Total dissolved solids (tds)	MG/L	MW-16	05/16/2016	83.0000
Total dissolved solids (tds)	MG/L	MW-16	08/31/2016	93.0000
Total dissolved solids (tds)	MG/L	MW-16	11/14/2016	86.0000
Total dissolved solids (tds)	MG/L	MW-35	03/22/2005	100.0000
Total dissolved solids (tds)	MG/L	MW-35	06/14/2005	88.0000
Total dissolved solids (tds)	MG/L	MW-35	09/27/2005	123.0000
Total dissolved solids (tds)	MG/L	MW-35	12/15/2005	87.0000
Total dissolved solids (tds)	MG/L	MW-35	03/28/2006	91.0000
Total dissolved solids (tds)	MG/L	MW-35	06/21/2006	110.0000

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date		Result
Total dissolved solids (tds)	MG/L	MW-35	09/26/2006		110.0000
Total dissolved solids (tds)	MG/L	MW-35	12/12/2006		90.0000
Total dissolved solids (tds)	MG/L	MW-35	03/27/2007		93.0000
Total dissolved solids (tds)	MG/L	MW-35	06/20/2007		110.0000
Total dissolved solids (tds)	MG/L	MW-35	09/18/2007		90.0000
Total dissolved solids (tds)	MG/L	MW-35	12/20/2007		120.0000
Total dissolved solids (tds)	MG/L	MW-35	03/25/2008		76.0000
Total dissolved solids (tds)	MG/L	MW-35	06/18/2008		93.0000
Total dissolved solids (tds)	MG/L	MW-35	09/18/2008		92.0000
Total dissolved solids (tds)	MG/L	MW-35	12/19/2008		93.0000
Total dissolved solids (tds)	MG/L	MW-35	03/24/2009		84.0000
Total dissolved solids (tds)	MG/L	MW-35	06/16/2009		95.0000
Total dissolved solids (tds)	MG/L	MW-35	09/10/2009		83.0000
Total dissolved solids (tds)	MG/L	MW-35	12/03/2009		85.0000
Total dissolved solids (tds)	MG/L	MW-35	03/25/2010		96.0000
Total dissolved solids (tds)	MG/L	MW-35	06/23/2010		100.0000
Total dissolved solids (tds)	MG/L	MW-35	09/23/2010		86.0000
Total dissolved solids (tds)	MG/L	MW-35	12/09/2010		97.0000
Total dissolved solids (tds)	MG/L	MW-35	03/30/2011		91.0000
Total dissolved solids (tds)	MG/L	MW-35	06/06/2011		96.0000
Total dissolved solids (tds)	MG/L	MW-35	09/26/2011		100.0000
Total dissolved solids (tds)	MG/L	MW-35	12/13/2011		95.0000
Total dissolved solids (tds)	MG/L	MW-35	03/21/2012		85.0000
Total dissolved solids (tds)	MG/L	MW-35	06/06/2012		120.0000
Total dissolved solids (tds)	MG/L	MW-35	09/26/2012		110.0000
Total dissolved solids (tds)	MG/L	MW-35	12/04/2012		100.0000
Total dissolved solids (tds)	MG/L	MW-35	03/13/2013		96.0000
Total dissolved solids (tds)	MG/L	MW-35	06/06/2013		90.0000
Total dissolved solids (tds)	MG/L	MW-35	09/05/2013		100.0000
Total dissolved solids (tds)	MG/L	MW-35	12/16/2013		95.0000
Total dissolved solids (tds)	MG/L	MW-35	03/04/2014		94.0000
Total dissolved solids (tds)	MG/L	MW-35	06/02/2014		92.0000
Total dissolved solids (tds)	MG/L	MW-35	09/22/2014		99.0000
Total dissolved solids (tds)	MG/L	MW-35	11/17/2014		100.0000
Total dissolved solids (tds)	MG/L	MW-35	02/25/2015		93.0000
Total dissolved solids (tds)	MG/L	MW-35	05/19/2015		110.0000
Total dissolved solids (tds)	MG/L	MW-35	08/26/2015		99.0000
Total dissolved solids (tds)	MG/L	MW-35	11/10/2015		98.0000
Total dissolved solids (tds)	MG/L	MW-35	02/22/2016		93.0000
Total dissolved solids (tds)	MG/L	MW-35	05/16/2016		100.0000
Total dissolved solids (tds)	MG/L	MW-35	08/31/2016		95.0000
Total dissolved solids (tds)	MG/L	MW-35	11/15/2016		120.0000
Total organic carbon (toc)	MG/L	MW-13A	03/22/2005	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13A	06/15/2005	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13A	09/27/2005	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13A	12/15/2005	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13A	03/28/2006	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13A	06/21/2006		2.2000
Total organic carbon (toc)	MG/L	MW-13A	09/26/2006		6.0000
Total organic carbon (toc)	MG/L	MW-13A	12/13/2006	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13A	03/27/2007	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13A	06/19/2007	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13A	09/19/2007	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13A	12/19/2007	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13A	03/25/2008	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13A	06/18/2008	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13A	09/17/2008	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13A	12/17/2008		1.0000
Total organic carbon (toc)	MG/L	MW-13A	03/24/2009	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13A	06/17/2009	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13A	09/10/2009	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13A	12/03/2009	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13A	03/25/2010	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13A	06/23/2010	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13A	09/23/2010	ND	1.0000

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date		Result
Total organic carbon (toc)	MG/L	MW-13A	12/08/2010	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13A	03/30/2011	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13A	06/06/2011	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13A	09/27/2011	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13A	12/14/2011	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13A	03/21/2012	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13A	06/08/2012	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13A	09/26/2012	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13A	12/03/2012	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13A	03/11/2013	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13A	06/05/2013	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13A	12/03/2013	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13A	03/04/2014	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13A	06/02/2014	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13A	09/22/2014	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13A	11/17/2014	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13A	05/19/2015	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13A	02/22/2016	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13A	05/16/2016	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13A	08/31/2016	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13A	11/14/2016	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13B	03/22/2005	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13B	06/15/2005	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13B	09/27/2005	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13B	12/15/2005	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13B	03/29/2006	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13B	06/21/2006	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13B	09/26/2006		4.8000
Total organic carbon (toc)	MG/L	MW-13B	12/13/2006	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13B	03/27/2007	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13B	06/19/2007	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13B	09/18/2007	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13B	12/19/2007	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13B	03/25/2008	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13B	06/18/2008	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13B	09/17/2008	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13B	12/16/2008	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13B	03/24/2009	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13B	06/17/2009	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13B	09/10/2009	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13B	12/03/2009	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13B	03/25/2010	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13B	06/23/2010	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13B	09/23/2010	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13B	12/08/2010	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13B	03/30/2011	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13B	06/06/2011	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13B	09/27/2011	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13B	12/14/2011	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13B	03/21/2012	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13B	06/08/2012	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13B	09/26/2012	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13B	12/03/2012	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13B	03/11/2013	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13B	06/05/2013	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13B	12/03/2013	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13B	03/04/2014	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13B	06/02/2014	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13B	09/22/2014	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13B	11/17/2014	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13B	05/19/2015	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13B	02/22/2016	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13B	05/16/2016	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13B	08/31/2016	ND	1.0000
Total organic carbon (toc)	MG/L	MW-13B	11/14/2016	ND	1.0000

* - Outlier for that well and constituent.
ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date		Result
Total organic carbon (toc)	MG/L	MW-16	03/24/2009	ND	1.0000
Total organic carbon (toc)	MG/L	MW-16	06/16/2009	ND	1.0000
Total organic carbon (toc)	MG/L	MW-16	09/09/2009	ND	1.0000
Total organic carbon (toc)	MG/L	MW-16	12/03/2009	ND	1.0000
Total organic carbon (toc)	MG/L	MW-16	03/25/2010	ND	1.0000
Total organic carbon (toc)	MG/L	MW-16	06/24/2010	ND	1.0000
Total organic carbon (toc)	MG/L	MW-16	09/24/2010	ND	1.0000
Total organic carbon (toc)	MG/L	MW-16	12/09/2010	ND	1.0000
Total organic carbon (toc)	MG/L	MW-16	03/30/2011	ND	1.0000
Total organic carbon (toc)	MG/L	MW-16	06/07/2011	ND	1.0000
Total organic carbon (toc)	MG/L	MW-16	09/27/2011	ND	1.0000
Total organic carbon (toc)	MG/L	MW-16	12/13/2011	ND	1.0000
Total organic carbon (toc)	MG/L	MW-16	03/21/2012	ND	1.0000
Total organic carbon (toc)	MG/L	MW-16	06/08/2012	ND	1.0000
Total organic carbon (toc)	MG/L	MW-16	09/27/2012	ND	1.0000
Total organic carbon (toc)	MG/L	MW-16	12/04/2012	ND	1.0000
Total organic carbon (toc)	MG/L	MW-16	03/12/2013	ND	1.0000
Total organic carbon (toc)	MG/L	MW-16	06/04/2013	ND	1.0000
Total organic carbon (toc)	MG/L	MW-16	09/05/2013	ND	1.0000
Total organic carbon (toc)	MG/L	MW-16	12/16/2013	ND	1.0000
Total organic carbon (toc)	MG/L	MW-16	03/05/2014	ND	1.0000
Total organic carbon (toc)	MG/L	MW-16	06/02/2014	ND	1.0000
Total organic carbon (toc)	MG/L	MW-16	09/22/2014	ND	1.0000
Total organic carbon (toc)	MG/L	MW-16	11/18/2014	ND	1.0000
Total organic carbon (toc)	MG/L	MW-16	05/20/2015	ND	1.0000
Total organic carbon (toc)	MG/L	MW-16	02/24/2016	ND	1.0000
Total organic carbon (toc)	MG/L	MW-16	05/16/2016	ND	1.0000
Total organic carbon (toc)	MG/L	MW-16	08/31/2016	ND	1.0000
Total organic carbon (toc)	MG/L	MW-16	11/14/2016	ND	1.0000
Total organic carbon (toc)	MG/L	MW-35	03/22/2005	ND	1.0000
Total organic carbon (toc)	MG/L	MW-35	06/14/2005	ND	1.0000
Total organic carbon (toc)	MG/L	MW-35	09/27/2005	ND	1.0000
Total organic carbon (toc)	MG/L	MW-35	12/15/2005	ND	1.0000
Total organic carbon (toc)	MG/L	MW-35	03/28/2006	ND	1.0000
Total organic carbon (toc)	MG/L	MW-35	06/21/2006		2.1000
Total organic carbon (toc)	MG/L	MW-35	09/26/2006		4.3000
Total organic carbon (toc)	MG/L	MW-35	12/12/2006	ND	1.0000
Total organic carbon (toc)	MG/L	MW-35	03/27/2007	ND	1.0000
Total organic carbon (toc)	MG/L	MW-35	06/20/2007	ND	1.0000
Total organic carbon (toc)	MG/L	MW-35	09/18/2007	ND	1.0000
Total organic carbon (toc)	MG/L	MW-35	12/20/2007	ND	1.0000
Total organic carbon (toc)	MG/L	MW-35	03/25/2008	ND	1.0000
Total organic carbon (toc)	MG/L	MW-35	06/18/2008	ND	1.0000
Total organic carbon (toc)	MG/L	MW-35	09/18/2008	ND	1.0000
Total organic carbon (toc)	MG/L	MW-35	12/19/2008		1.0000
Total organic carbon (toc)	MG/L	MW-35	03/24/2009	ND	1.0000
Total organic carbon (toc)	MG/L	MW-35	06/16/2009	ND	1.0000
Total organic carbon (toc)	MG/L	MW-35	09/10/2009	ND	1.0000
Total organic carbon (toc)	MG/L	MW-35	12/03/2009	ND	1.0000
Total organic carbon (toc)	MG/L	MW-35	03/25/2010	ND	1.0000
Total organic carbon (toc)	MG/L	MW-35	06/23/2010	ND	1.0000
Total organic carbon (toc)	MG/L	MW-35	09/23/2010	ND	1.0000
Total organic carbon (toc)	MG/L	MW-35	12/09/2010	ND	1.0000
Total organic carbon (toc)	MG/L	MW-35	03/30/2011	ND	1.0000
Total organic carbon (toc)	MG/L	MW-35	06/06/2011	ND	1.0000
Total organic carbon (toc)	MG/L	MW-35	09/26/2011	ND	1.0000
Total organic carbon (toc)	MG/L	MW-35	12/13/2011	ND	1.0000
Total organic carbon (toc)	MG/L	MW-35	03/21/2012	ND	1.0000
Total organic carbon (toc)	MG/L	MW-35	06/06/2012	ND	1.0000
Total organic carbon (toc)	MG/L	MW-35	09/26/2012	ND	1.0000
Total organic carbon (toc)	MG/L	MW-35	12/04/2012	ND	1.0000
Total organic carbon (toc)	MG/L	MW-35	03/13/2013	ND	1.0000
Total organic carbon (toc)	MG/L	MW-35	06/06/2013	ND	1.0000
Total organic carbon (toc)	MG/L	MW-35	09/05/2013	ND	1.0000
Total organic carbon (toc)	MG/L	MW-35	12/16/2013	ND	1.0000

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date		Result
Total organic carbon (toc)	MG/L	MW-35	03/04/2014	ND	1.0000
Total organic carbon (toc)	MG/L	MW-35	06/02/2014	ND	1.0000
Total organic carbon (toc)	MG/L	MW-35	09/22/2014	ND	1.0000
Total organic carbon (toc)	MG/L	MW-35	11/17/2014	ND	1.0000
Total organic carbon (toc)	MG/L	MW-35	05/19/2015	ND	1.0000
Total organic carbon (toc)	MG/L	MW-35	02/22/2016	ND	1.0000
Total organic carbon (toc)	MG/L	MW-35	05/16/2016	ND	1.0000
Total organic carbon (toc)	MG/L	MW-35	08/31/2016	ND	1.0000
Total organic carbon (toc)	MG/L	MW-35	11/15/2016	ND	1.0000
Vanadium, total	MG/L	MW-13A	12/03/2013		0.0042
Vanadium, total	MG/L	MW-13A	03/04/2014		0.0042
Vanadium, total	MG/L	MW-13A	06/02/2014		0.0048
Vanadium, total	MG/L	MW-13A	09/22/2014		0.0039
Vanadium, total	MG/L	MW-13A	11/17/2014		0.0042
Vanadium, total	MG/L	MW-13A	02/23/2015		0.0042
Vanadium, total	MG/L	MW-13A	05/19/2015		0.0034
Vanadium, total	MG/L	MW-13A	08/26/2015		0.0039
Vanadium, total	MG/L	MW-13A	11/10/2015		0.0040
Vanadium, total	MG/L	MW-13A	02/22/2016		0.0040
Vanadium, total	MG/L	MW-13A	05/16/2016		0.0039
Vanadium, total	MG/L	MW-13A	08/31/2016		0.0041
Vanadium, total	MG/L	MW-13A	11/14/2016		0.0039
Vanadium, total	MG/L	MW-13B	12/03/2013		0.0058
Vanadium, total	MG/L	MW-13B	03/04/2014		0.0057
Vanadium, total	MG/L	MW-13B	06/02/2014		0.0057
Vanadium, total	MG/L	MW-13B	09/22/2014		0.0050
Vanadium, total	MG/L	MW-13B	11/17/2014		0.0055
Vanadium, total	MG/L	MW-13B	02/23/2015		0.0054
Vanadium, total	MG/L	MW-13B	05/19/2015		0.0054
Vanadium, total	MG/L	MW-13B	08/26/2015		0.0056
Vanadium, total	MG/L	MW-13B	11/10/2015		0.0058
Vanadium, total	MG/L	MW-13B	02/22/2016		0.0058
Vanadium, total	MG/L	MW-13B	05/16/2016		0.0056
Vanadium, total	MG/L	MW-13B	08/31/2016		0.0054
Vanadium, total	MG/L	MW-13B	11/14/2016		0.0061
Vanadium, total	MG/L	MW-16	09/05/2013		0.0034
Vanadium, total	MG/L	MW-16	12/16/2013		0.0039
Vanadium, total	MG/L	MW-16	03/05/2014		0.0042
Vanadium, total	MG/L	MW-16	06/02/2014		0.0042
Vanadium, total	MG/L	MW-16	09/22/2014		0.0042
Vanadium, total	MG/L	MW-16	11/18/2014		0.0040
Vanadium, total	MG/L	MW-16	02/23/2015		0.0051
Vanadium, total	MG/L	MW-16	05/20/2015		0.0042
Vanadium, total	MG/L	MW-16	08/26/2015		0.0032
Vanadium, total	MG/L	MW-16	11/11/2015		0.0034
Vanadium, total	MG/L	MW-16	02/24/2016		0.0043
Vanadium, total	MG/L	MW-16	05/16/2016		0.0034
Vanadium, total	MG/L	MW-16	08/31/2016		0.0042
Vanadium, total	MG/L	MW-16	11/14/2016		0.0049
Vanadium, total	MG/L	MW-35	09/05/2013		0.0042
Vanadium, total	MG/L	MW-35	12/16/2013		0.0046
Vanadium, total	MG/L	MW-35	03/04/2014		0.0047
Vanadium, total	MG/L	MW-35	06/02/2014		0.0042
Vanadium, total	MG/L	MW-35	09/22/2014		0.0044
Vanadium, total	MG/L	MW-35	11/17/2014		0.0042
Vanadium, total	MG/L	MW-35	02/25/2015		0.0048
Vanadium, total	MG/L	MW-35	05/19/2015		0.0042
Vanadium, total	MG/L	MW-35	08/26/2015		0.0041
Vanadium, total	MG/L	MW-35	11/10/2015		0.0043
Vanadium, total	MG/L	MW-35	02/22/2016		0.0045
Vanadium, total	MG/L	MW-35	05/16/2016		0.0046
Vanadium, total	MG/L	MW-35	08/31/2016		0.0046
Vanadium, total	MG/L	MW-35	11/15/2016		0.0043
Zinc, total	MG/L	MW-13A	12/03/2013	ND	0.0050
Zinc, total	MG/L	MW-13A	03/04/2014	ND	0.0050

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-3

Upgradient Data

Constituent	Units	Well	Date		Result
Zinc, total	MG/L	MW-13A	06/02/2014	ND	0.0050
Zinc, total	MG/L	MW-13A	09/22/2014	ND	0.0050
Zinc, total	MG/L	MW-13A	11/17/2014	ND	0.0050
Zinc, total	MG/L	MW-13A	02/23/2015	ND	0.0050
Zinc, total	MG/L	MW-13A	05/19/2015	ND	0.0050
Zinc, total	MG/L	MW-13A	08/26/2015	ND	0.0050
Zinc, total	MG/L	MW-13A	11/10/2015	ND	0.0050
Zinc, total	MG/L	MW-13A	02/22/2016	ND	0.0050
Zinc, total	MG/L	MW-13A	05/16/2016	ND	0.0050
Zinc, total	MG/L	MW-13A	08/31/2016	ND	0.0050
Zinc, total	MG/L	MW-13A	11/14/2016	ND	0.0050
Zinc, total	MG/L	MW-13B	12/03/2013	ND	0.0050
Zinc, total	MG/L	MW-13B	03/04/2014	ND	0.0050
Zinc, total	MG/L	MW-13B	06/02/2014	ND	0.0050
Zinc, total	MG/L	MW-13B	09/22/2014	ND	0.0050
Zinc, total	MG/L	MW-13B	11/17/2014	ND	0.0050
Zinc, total	MG/L	MW-13B	02/23/2015	ND	0.0050
Zinc, total	MG/L	MW-13B	05/19/2015	ND	0.0050
Zinc, total	MG/L	MW-13B	08/26/2015	ND	0.0050
Zinc, total	MG/L	MW-13B	11/10/2015	ND	0.0050
Zinc, total	MG/L	MW-13B	02/22/2016	ND	0.0050
Zinc, total	MG/L	MW-13B	05/16/2016	ND	0.0050
Zinc, total	MG/L	MW-13B	08/31/2016	ND	0.0050
Zinc, total	MG/L	MW-13B	11/14/2016	ND	0.0050
Zinc, total	MG/L	MW-16	09/05/2013	ND	0.0050
Zinc, total	MG/L	MW-16	12/16/2013	ND	0.0050
Zinc, total	MG/L	MW-16	03/05/2014	ND	0.0050
Zinc, total	MG/L	MW-16	06/02/2014	ND	0.0050
Zinc, total	MG/L	MW-16	09/22/2014	ND	0.0050
Zinc, total	MG/L	MW-16	11/18/2014	ND	0.0050
Zinc, total	MG/L	MW-16	02/23/2015	ND	0.0050
Zinc, total	MG/L	MW-16	05/20/2015	ND	0.0050
Zinc, total	MG/L	MW-16	08/26/2015	ND	0.0050
Zinc, total	MG/L	MW-16	11/11/2015	ND	0.0050
Zinc, total	MG/L	MW-16	02/24/2016	ND	0.0050
Zinc, total	MG/L	MW-16	05/16/2016	ND	0.0050
Zinc, total	MG/L	MW-16	08/31/2016	ND	0.0050
Zinc, total	MG/L	MW-16	11/14/2016	ND	0.0056
Zinc, total	MG/L	MW-35	09/05/2013	ND	0.0050
Zinc, total	MG/L	MW-35	12/16/2013	ND	0.0050
Zinc, total	MG/L	MW-35	03/04/2014	ND	0.0050
Zinc, total	MG/L	MW-35	06/02/2014	ND	0.0050
Zinc, total	MG/L	MW-35	09/22/2014	ND	0.0050
Zinc, total	MG/L	MW-35	11/17/2014	ND	0.0050
Zinc, total	MG/L	MW-35	02/25/2015	ND	0.0050
Zinc, total	MG/L	MW-35	05/19/2015	ND	0.0050
Zinc, total	MG/L	MW-35	08/26/2015	ND	0.0050
Zinc, total	MG/L	MW-35	11/10/2015	ND	0.0050
Zinc, total	MG/L	MW-35	02/22/2016	ND	0.0050
Zinc, total	MG/L	MW-35	05/16/2016	ND	0.0050
Zinc, total	MG/L	MW-35	08/31/2016	ND	0.0050
Zinc, total	MG/L	MW-35	11/15/2016	ND	0.0050

* - Outlier for that well and constituent.
 ND = Not detected, result = detection limit.

TABLE 2-4

Shapiro Wilk Test of Normality for Multiple Groups

Constituent	N (Detects)	Detect Freq	G raw	G log	Critical Value	Limit Type
Alkalinity, bicarbonate (as caco3)	170	1.000	2.736	3.816	2.326	nonpar
Alkalinity, total (as caco3)	174	1.000	2.851	3.706	2.326	nonpar
Ammonia (as n)	72	0.424	8.003	7.564	2.326	nonpar
Antimony, total	3	0.056				nonpar
Arsenic, total	61	1.000	2.896	2.753	2.326	nonpar
Barium, total	54	1.000	0.320	0.320	2.326	normal
Beryllium, total	0	0.000				nonpar
Cadmium, total	0	0.000				nonpar
Calcium, dissolved	174	1.000	7.066	6.748	2.326	nonpar
Chloride	172	0.989	5.341	4.467	2.326	nonpar
Chromium, total	24	0.444	0.567	0.566	2.326	nonpar
Cobalt, total	0	0.000				nonpar
Copper, total	1	0.019				nonpar
Iron, total	7	0.130	0.318	0.575	2.326	nonpar
Lead, total	1	0.019				nonpar
Magnesium, dissolved	174	1.000	1.990	1.405	2.326	normal
Manganese, total	15	0.278	2.889	2.825	2.326	nonpar
Nickel, total	1	0.019				nonpar
Nitrate (as n)	170	1.000	14.320	12.846	2.326	nonpar
pH	165	1.000	0.913	1.338	2.326	normal
Potassium, dissolved	13	0.075	0.153	0.091	2.326	nonpar
Selenium, total	0	0.000				nonpar
Silver, total	0	0.000				nonpar
Sodium, dissolved	174	1.000	5.017	4.634	2.326	nonpar
Specific conductivity	167	1.000	7.943	8.050	2.326	nonpar
Sulfate	173	0.994	6.080	5.446	2.326	nonpar
Temperature	167	1.000	6.656	5.040	2.326	nonpar
Thallium, total	0	0.000				nonpar
Total dissolved solids (tds)	174	1.000	6.214	5.054	2.326	nonpar
Total organic carbon (toc)	7	0.043	0.146	1.287	2.326	nonpar
Vanadium, total	54	1.000	1.586	1.586	2.326	normal
Zinc, total	1	0.019				nonpar

Fit to distribution is confirmed if $G < \text{critical value}$.

If detection frequency is $< 50\%$ nonparametric or Poisson limit is use

Data in this table are based on pooled data shown in Table 2-3, outliers excluded

**TABLE 2-5
COMPARISON OF UPDATED (2017) PREDICTION LIMITS[†]
TO PREVIOUS YEAR (2016) PREDICTION LIMITS
Olympic View Sanitary Landfill**

Constituent	2016 Pred. Limit	unit	Distributional Assumption	Constituent	2017 Pred. Limit	unit	Distributional Assumption
Alkalinity, bicarbonate (as CaCO3)	96	mg/L	nonparametric	Alkalinity, bicarbonate (as CaCO3)	96	mg/L	nonparametric
Alkalinity, total (as CaCO3)	96	mg/L	nonparametric	Alkalinity, total (as CaCO3)	96	mg/L	nonparametric
Ammonia (as N)	0.30	mg/L	nonparametric	Ammonia (as N)	0.30	mg/L	nonparametric
Antimony, total	0.0013	mg/L	nonparametric	Antimony, total	0.0013	mg/L	nonparametric
Arsenic, total	0.479	ug/L	normal	Arsenic, total	0.430	ug/L	normal
Barium, total	0.0045	mg/L	normal	Barium, total	0.0045	mg/L	normal
Beryllium, total	Current RL*	mg/L	nonparametric	Beryllium, total	Current RL*	mg/L	nonparametric
Cadmium, total	Current RL*	mg/L	nonparametric	Cadmium, total	Current RL*	mg/L	nonparametric
Calcium, dissolved	17.1	mg/L	nonparametric	Calcium, dissolved	18.0	mg/L	nonparametric
Chloride	4.4	mg/L	nonparametric	Chloride	4.4	mg/L	nonparametric
Chromium, total	0.0090	mg/L	nonparametric	Chromium, total	0.0092	mg/L	nonparametric
Cobalt, total	Current RL*	mg/L	nonparametric	Cobalt, total	Current RL*	mg/L	nonparametric
Copper, total	Current RL*	mg/L	nonparametric	Copper, total	0.0021	mg/L	nonparametric
Iron, total	0.31	mg/L	nonparametric	Iron, total	0.31	mg/L	nonparametric
Lead, total	0.0014	mg/L	nonparametric	Lead, total	0.0014	mg/L	nonparametric
Magnesium, dissolved	11.0	mg/L	normal	Magnesium, dissolved	11.2	mg/L	normal
Manganese, total	0.062	mg/L	nonparametric	Manganese, total	0.062	mg/L	nonparametric
Nickel, total	0.0041	mg/L	nonparametric	Nickel, total	0.0041	mg/L	nonparametric
Nitrate (as N)	1.8	mg/L	nonparametric	Nitrate (as N)	1.8	mg/L	nonparametric
pH	5.88 - 8.24	units	normal	pH	5.81 - 8.23	units	normal
Potassium, dissolved	1.2	mg/L	nonparametric	Potassium, dissolved	1.2	mg/L	nonparametric
Selenium, total	Current RL*	mg/L	nonparametric	Selenium, total	Current RL*	mg/L	nonparametric
Silver, total	Current RL*	mg/L	nonparametric	Silver, total	Current RL*	mg/L	nonparametric
Sodium, dissolved	6.2	mg/L	nonparametric	Sodium, dissolved	6.3	mg/L	nonparametric
Specific conductivity	0.18	mS/cm	nonparametric	Specific conductivity	0.18	mS/cm	nonparametric
Sulfate	9.9	mg/L	nonparametric	Sulfate	9.9	mg/L	nonparametric
Temperature	14.32	deg C	nonparametric	Temperature	14.32	deg C	nonparametric
Thallium, total	Current RL*	mg/L	nonparametric	Thallium, total	Current RL*	mg/L	nonparametric
Total dissolved solids (tds)	175	mg/L	nonparametric	Total dissolved solids (tds)	175	mg/L	nonparametric
Total organic carbon (toc)	6.0	mg/L	nonparametric	Total organic carbon (toc)	6.0	mg/L	nonparametric
Vanadium, total	0.0063	mg/L	normal	Vanadium, total	0.0063	mg/L	normal
Zinc, dissolved	0.0050	mg/L	nonparametric	Zinc, total	0.0056	mg/L	nonparametric

[†] Note that beginning in 2016, Prediction Limits for Trace Metals became based on "total" analyses vs "dissolved" previously

* for background data sets with all non-detected values, a nonparametric prediction limit is the current constituent-specific laboratory reporting limit (RL)

mg/L = milligrams per liter

ug/L = micrograms per liter

mS/cm = milliSiemens per centimeter

deg C = degrees Celsius

3. Annual UCL Calculations using Preliminary Groundwater Cleanup Goals

- 2016 Annual Preliminary Groundwater Cleanup Goals Statistical Evaluation Summary (Table 3-1)

TABLE 3-1: 2016 Annual Groundwater Cleanup Level Statistical Evaluation Summary**Olympic View Sanitary Landfill****Statistical Methodology:** calculation of 95% UCL of mean per MTCASat**Data Input (general):** 3-year "moving window", updated annually**Data Input (specific):** January 1, 2014 through December 31, 2016**Wells Evaluated:** (1) Compliance -- MW-15R, MW-34A, MW-34C, MW-39, MW-42, MW-43; (2) Downgradient -- MW-9*, MW-29A, MW-32, MW-33A, MW-33C, MW-36A

Monitoring Well	Monitoring Well Type	Corrective Action Monitoring Parameter	N ^[1]	% Detect	Max ^[2]	95% UCL of Mean ^[3]	Units ^[4]	Note	Groundwater Cleanup Level ^[5]	Units ^[4]	Does 95% UCL Exceed Cleanup Level?	Significant Trend? ^[6]
MW-15R	Compliance	1,1-Dichloroethane	12	0%	0.38 (ND)	0.38	ug/L	B	50	ug/L	No	No
MW-15R	Compliance	1,4-Dichlorobenzene	12	0%	0.84 (ND)	0.84	ug/L	B	2.0	ug/L	No	No
MW-15R	Compliance	Arsenic, total	12	100%	0.238	0.22	ug/L	LN	0.462	ug/L	No	No
MW-15R	Compliance	Iron, total	11 ^[7]	18%	0.11	0.11	mg/L	A	0.30	mg/L	No	No
MW-15R	Compliance	Manganese, total	12	100%	0.021	0.01	mg/L	LN	0.05	mg/L	No	No
MW-15R	Compliance	cis-1,2-dichloroethene	12	0%	0.81 (ND)	0.81	ug/L	B	35	ug/L	No	No
MW-15R	Compliance	Ethyl ether	12	0%	0.72 (ND)	0.72	ug/L	B	50	ug/L	No	No
MW-15R	Compliance	Trichloroethene	12	0%	0.46 (ND)	0.46	ug/L	B	1.0	ug/L	No	No
MW-15R	Compliance	Vinyl Chloride	12	0.0%	0.02 (ND)	0.02	ug/L	B	0.20	ug/L	No	No
MW-15R	Compliance	Ammonia as N	12	8.3%	0.036	0.036	mg/L	A	0.19	mg/L	No	No
MW-34A	Compliance	1,1-Dichloroethane	12	0%	0.38 (ND)	0.38	ug/L	B	50	ug/L	No	No
MW-34A	Compliance	1,4-Dichlorobenzene	12	0%	0.84 (ND)	0.84	ug/L	B	2.0	ug/L	No	No
MW-34A	Compliance	Arsenic, total	12	100%	0.50	0.45	ug/L	LN	0.462	ug/L	No	No
MW-34A	Compliance	Iron, total	12	8.3%	0.06	0.06	mg/L	A	0.30	mg/L	No	No
MW-34A	Compliance	Manganese, total	12	67%	0.0044	0.003	mg/L	LN	0.05	mg/L	No	No
MW-34A	Compliance	cis-1,2-dichloroethene	12	0%	0.81 (ND)	0.81	ug/L	B	35	ug/L	No	No
MW-34A	Compliance	Ethyl ether	12	0%	0.72 (ND)	0.72	ug/L	B	50	ug/L	No	No
MW-34A	Compliance	Trichloroethene	12	0%	0.46 (ND)	0.46	ug/L	B	1.0	ug/L	No	No
MW-34A	Compliance	Vinyl Chloride	12	8.3%	0.03	0.03	ug/L	A	0.20	ug/L	No	No
MW-34A	Compliance	Ammonia as N	12	0%	0.03 (ND)	0.03	mg/L	B	0.19	mg/L	No	No
MW-34C	Compliance	1,1-Dichloroethane	12	0%	0.38 (ND)	0.38	ug/L	B	50	ug/L	No	No
MW-34C	Compliance	1,4-Dichlorobenzene	12	0%	0.84 (ND)	0.84	ug/L	B	2.0	ug/L	No	No
MW-34C	Compliance	Arsenic, total	12	100%	84.6	84.6	ug/L	A**	0.462	ug/L	Yes	No
MW-34C	Compliance	Iron, total	12	100%	100	148	mg/L	LN	0.30	mg/L	Yes	No
MW-34C	Compliance	Manganese, total	12	100%	14	5.9	mg/L	Z	0.05	mg/L	Yes	No
MW-34C	Compliance	cis-1,2-dichloroethene	12	0%	0.81 (ND)	0.81	ug/L	B	35	ug/L	No	No

TABLE 3-1: 2016 Annual Groundwater Cleanup Level Statistical Evaluation Summary

Olympic View Sanitary Landfill

Statistical Methodology: calculation of 95% UCL of mean per MTCASat

Data Input (general): 3-year "moving window", updated annually

Data Input (specific): January 1, 2014 through December 31, 2016

Wells Evaluated: (1) Compliance -- MW-15R, MW-34A, MW-34C, MW-39, MW-42, MW-43; (2) Downgradient -- MW-9*, MW-29A, MW-32, MW-33A, MW-33C, MW-36A

Monitoring Well	Monitoring Well Type	Corrective Action Monitoring Parameter	N ^[1]	% Detect	Max ^[2]	95% UCL of Mean ^[3]	Units ^[4]	Note	Groundwater Cleanup Level ^[5]	Units ^[4]	Does 95% UCL Exceed Cleanup Level?	Significant Trend? ^[6]
MW-34C	Compliance	Ethyl ether	12	0%	0.72 (ND)	0.72	ug/L	B	50	ug/L	No	No
MW-34C	Compliance	Trichloroethene	12	0%	0.46 (ND)	0.46	ug/L	B	1.0	ug/L	No	No
MW-34C	Compliance	Vinyl Chloride	12	100%	0.16	0.12	ug/L	LN	0.20	ug/L	No	Yes (▼)
MW-34C	Compliance	Ammonia as N	12	25%	0.031	0.031	mg/L	A	0.19	mg/L	No	No
MW-39	Compliance	1,1-Dichloroethane	12	0%	0.38 (ND)	0.38	ug/L	B	50	ug/L	No	No
MW-39	Compliance	1,4-Dichlorobenzene	12	0%	0.84 (ND)	0.84	ug/L	B	2.0	ug/L	No	No
MW-39	Compliance	Arsenic, total	12	100%	2.16	1.70	ug/L	N	0.462	ug/L	Yes	No
MW-39	Compliance	Iron, total	12	100%	40	33.6	mg/L	Z	0.30	mg/L	Yes	No
MW-39	Compliance	Manganese, total	12	100%	0.49	0.43	mg/L	Z	0.05	mg/L	Yes	No
MW-39	Compliance	cis-1,2-dichloroethene	12	0%	0.81 (ND)	0.81	ug/L	B	35	ug/L	No	No
MW-39	Compliance	Ethyl ether	12	0%	0.72 (ND)	0.72	ug/L	B	50	ug/L	No	No
MW-39	Compliance	Trichloroethene	12	0%	0.46 (ND)	0.46	ug/L	B	1.0	ug/L	No	No
MW-39	Compliance	Vinyl Chloride	12	0%	0.02 (ND)	0.02	ug/L	B	0.20	ug/L	No	No
MW-39	Compliance	Ammonia as N	12	92%	0.48	0.39	mg/L	Z	0.19	mg/L	Yes	No
MW-42	Compliance	1,1-Dichloroethane	12	0%	0.38 (ND)	0.38	ug/L	B	50	ug/L	No	No
MW-42	Compliance	1,4-Dichlorobenzene	12	0%	0.84 (ND)	0.84	ug/L	B	2.0	ug/L	No	No
MW-42	Compliance	Arsenic, total	12	100%	1.93	1.73	ug/L	LN	0.462	ug/L	Yes	No
MW-42	Compliance	Iron, total	12	100%	32	26.8	mg/L	LN	0.30	mg/L	Yes	No
MW-42	Compliance	Manganese, total	12	100%	5.3	4.8	mg/L	LN	0.05	mg/L	Yes	No
MW-42	Compliance	cis-1,2-dichloroethene	12	0%	0.81 (ND)	0.81	ug/L	B	35	ug/L	No	No
MW-42	Compliance	Ethyl ether	12	0%	0.72 (ND)	0.72	ug/L	B	50	ug/L	No	No
MW-42	Compliance	Trichloroethene	12	0%	0.46 (ND)	0.46	ug/L	B	1.0	ug/L	No	No
MW-42	Compliance	Vinyl Chloride	12	92%	0.16	0.13	ug/L	LN	0.20	ug/L	No	No
MW-42	Compliance	Ammonia as N	12	100%	6.7	6.2	mg/L	LN	0.19	mg/L	Yes	No
MW-43	Compliance	1,1-Dichloroethane	12	0%	0.38 (ND)	0.38	ug/L	B	50	ug/L	No	No
MW-43	Compliance	1,4-Dichlorobenzene	12	0%	0.84 (ND)	0.84	ug/L	B	2.0	ug/L	No	No

TABLE 3-1: 2016 Annual Groundwater Cleanup Level Statistical Evaluation Summary**Olympic View Sanitary Landfill****Statistical Methodology:** calculation of 95% UCL of mean per MTCASat**Data Input (general):** 3-year "moving window", updated annually**Data Input (specific):** January 1, 2014 through December 31, 2016**Wells Evaluated:** (1) Compliance -- MW-15R, MW-34A, MW-34C, MW-39, MW-42, MW-43; (2) Downgradient -- MW-9*, MW-29A, MW-32, MW-33A, MW-33C, MW-36A

Monitoring Well	Monitoring Well Type	Corrective Action Monitoring Parameter	N ^[1]	% Detect	Max ^[2]	95% UCL of Mean ^[3]	Units ^[4]	Note	Groundwater Cleanup Level ^[5]	Units ^[4]	Does 95% UCL Exceed Cleanup Level?	Significant Trend? ^[6]
MW-43	Compliance	Arsenic, total	12	17%	0.05	0.05	ug/L	A	0.462	ug/L	No	No
MW-43	Compliance	Iron, total	11 ^[8]	100%	1.7	1.23	mg/L	LN	0.30	mg/L	Yes	No
MW-43	Compliance	Manganese, total	12	100%	0.26	0.34	mg/L	LN	0.05	mg/L	Yes	No
MW-43	Compliance	cis-1,2-dichloroethene	12	0%	0.81 (ND)	0.81	ug/L	B	35	ug/L	No	No
MW-43	Compliance	Ethyl ether	12	0%	0.72 (ND)	0.72	ug/L	B	50	ug/L	No	No
MW-43	Compliance	Trichloroethene	12	0%	0.46 (ND)	0.46	ug/L	B	1.0	ug/L	No	No
MW-43	Compliance	Vinyl Chloride	12	0%	0.02 (ND)	0.02	ug/L	B	0.20	ug/L	No	No
MW-43	Compliance	Ammonia as N	12	58%	0.12	0.08	mg/L	LN	0.19	mg/L	No	Yes (▼)
MW-29A	Downgradient	1,1-Dichloroethane	6	0%	0.38 (ND)	0.38	ug/L	B	50	ug/L	No	No
MW-29A	Downgradient	1,4-Dichlorobenzene	6	0%	0.84 (ND)	0.84	ug/L	B	2.0	ug/L	No	No
MW-29A	Downgradient	Arsenic, total	6	100%	1.99	1.94	ug/L	LN	0.462	ug/L	Yes	No
MW-29A	Downgradient	Iron, total	6	100%	4.7	4.63	mg/L	LN	0.30	mg/L	Yes	No
MW-29A	Downgradient	Manganese, total	6	100%	1.4	1.39	mg/L	Z	0.05	mg/L	Yes	No
MW-29A	Downgradient	cis-1,2-dichloroethene	6	0%	0.81 (ND)	0.81	ug/L	B	35	ug/L	No	No
MW-29A	Downgradient	Ethyl ether	6	0%	0.72 (ND)	0.72	ug/L	B	50	ug/L	No	No
MW-29A	Downgradient	Trichloroethene	6	0%	0.46 (ND)	0.46	ug/L	B	1.0	ug/L	No	No
MW-29A	Downgradient	Vinyl Chloride	6	0%	0.02 (ND)	0.02	ug/L	B	0.20	ug/L	No	No
MW-29A	Downgradient	Ammonia as N	6	100%	0.095	0.09	mg/L	LN	0.19	mg/L	No	Yes (▼)
MW-32	Downgradient	1,1-Dichloroethane	12	0%	0.38 (ND)	0.38	ug/L	B	50	ug/L	No	No
MW-32	Downgradient	1,4-Dichlorobenzene	12	0%	0.84 (ND)	0.84	ug/L	B	2.0	ug/L	No	No
MW-32	Downgradient	Arsenic, total	12	100%	26.6	13.8	ug/L	Z	0.462	ug/L	Yes	No
MW-32	Downgradient	Iron, total	12	100%	6.3	2.0	mg/L	Z	0.30	mg/L	Yes	No
MW-32	Downgradient	Manganese, total	12	100%	4.1	2.8	mg/L	LN	0.05	mg/L	Yes	No
MW-32	Downgradient	cis-1,2-dichloroethene	12	8.3%	0.81 (ND)	0.81	ug/L	A*	35	ug/L	No	No
MW-32	Downgradient	Ethyl ether	11	0%	0.72 (ND)	0.72	ug/L	B	50	ug/L	No	No
MW-32	Downgradient	Trichloroethene	12	67%	0.50	0.50	ug/L	A***	1.0	ug/L	No	No
MW-32	Downgradient	Vinyl Chloride	12	100%	0.54	0.43	ug/L	LN	0.20	ug/L	Yes	No

TABLE 3-1: 2016 Annual Groundwater Cleanup Level Statistical Evaluation Summary**Olympic View Sanitary Landfill****Statistical Methodology:** calculation of 95% UCL of mean per MTCASat**Data Input (general):** 3-year "moving window", updated annually**Data Input (specific):** January 1, 2014 through December 31, 2016**Wells Evaluated:** (1) Compliance -- MW-15R, MW-34A, MW-34C, MW-39, MW-42, MW-43; (2) Downgradient -- MW-9*, MW-29A, MW-32, MW-33A, MW-33C, MW-36A

Monitoring Well	Monitoring Well Type	Corrective Action Monitoring Parameter	N ^[1]	% Detect	Max ^[2]	95% UCL of Mean ^[3]	Units ^[4]	Note	Groundwater Cleanup Level ^[5]	Units ^[4]	Does 95% UCL Exceed Cleanup Level?	Significant Trend? ^[6]
MW-32	Downgradient	Ammonia as N	11	18%	0.039	0.039	mg/L	A	0.19	mg/L	No	No
MW-33A	Downgradient	1,1-Dichloroethane	6	0%	0.38 (ND)	0.38	ug/L	B	50	ug/L	No	No
MW-33A	Downgradient	1,4-Dichlorobenzene	6	0%	0.84 (ND)	0.84	ug/L	B	2.0	ug/L	No	No
MW-33A	Downgradient	Arsenic, total	6	100%	0.509	0.468	ug/L	LN	0.462	ug/L	Yes	No
MW-33A	Downgradient	Iron, total	6	100%	5.0	5.0	mg/L	A**	0.30	mg/L	Yes	No
MW-33A	Downgradient	Manganese, total	6	100%	0.10	0.08	mg/L	Z	0.05	mg/L	Yes	No
MW-33A	Downgradient	cis-1,2-dichloroethene	6	0%	0.81 (ND)	0.81	ug/L	B	35	ug/L	No	No
MW-33A	Downgradient	Ethyl ether	6	0%	0.72 (ND)	0.72	ug/L	B	50	ug/L	No	No
MW-33A	Downgradient	Trichloroethene	6	0%	0.46 (ND)	0.46	ug/L	B	1.0	ug/L	No	No
MW-33A	Downgradient	Vinyl Chloride	6	0%	0.02 (ND)	0.02	ug/L	B	0.20	ug/L	No	No
MW-33A	Downgradient	Ammonia as N	6	67%	0.30	0.30	mg/L	A	0.19	mg/L	Yes	No
MW-33C	Downgradient	1,1-Dichloroethane	12	0%	0.38 (ND)	0.38	ug/L	B	50	ug/L	No	No
MW-33C	Downgradient	1,4-Dichlorobenzene	12	0%	0.84 (ND)	0.84	ug/L	B	2.0	ug/L	No	No
MW-33C	Downgradient	Arsenic, total	12	100%	2.67	2.55	ug/L	LN	0.462	ug/L	Yes	No
MW-33C	Downgradient	Iron, total	12	83%	0.38	0.30	mg/L	LN	0.3	mg/L	No	No
MW-33C	Downgradient	Manganese, total	12	100%	0.29	0.22	mg/L	LN	0.05	mg/L	Yes	No
MW-33C	Downgradient	cis-1,2-dichloroethene	12	0%	0.81 (ND)	0.81	ug/L	B	35	ug/L	No	No
MW-33C	Downgradient	Ethyl ether	12	0%	0.72 (ND)	0.72	ug/L	B	50	ug/L	No	No
MW-33C	Downgradient	Trichloroethene	12	0%	0.46 (ND)	0.46	ug/L	B	1.0	ug/L	No	No
MW-33C	Downgradient	Vinyl Chloride	12	0%	0.02 (ND)	0.02	ug/L	B	0.20	ug/L	No	No
MW-33C	Downgradient	Ammonia as N	12	0%	0.03 (ND)	0.03	mg/L	B	0.19	mg/L	No	No
MW-36A	Downgradient	1,1-Dichloroethane	12	0%	0.38 (ND)	0.38	ug/L	B	50	ug/L	No	No
MW-36A	Downgradient	1,4-Dichlorobenzene	12	0%	0.84 (ND)	0.84	ug/L	B	2.0	ug/L	No	No
MW-36A	Downgradient	Arsenic, total	12	100%	0.68	0.586	ug/L	LN	0.462	ug/L	Yes	No
MW-36A	Downgradient	Iron, total	12	50%	0.18	0.13	mg/L	LN	0.3	mg/L	No	No
MW-36A	Downgradient	Manganese, total	12	83%	0.0068	0.006	mg/L	LN	0.05	mg/L	No	No

TABLE 3-1: 2016 Annual Groundwater Cleanup Level Statistical Evaluation Summary

Olympic View Sanitary Landfill

Statistical Methodology: calculation of 95% UCL of mean per MTCASat

Data Input (general): 3-year "moving window", updated annually

Data Input (specific): January 1, 2014 through December 31, 2016

Wells Evaluated: (1) Compliance -- MW-15R, MW-34A, MW-34C, MW-39, MW-42, MW-43; (2) Downgradient -- MW-9*, MW-29A, MW-32, MW-33A, MW-33C, MW-36A

Monitoring Well	Monitoring Well Type	Corrective Action Monitoring Parameter	N ^[1]	% Detect	Max ^[2]	95% UCL of Mean ^[3]	Units ^[4]	Note	Groundwater Cleanup Level ^[5]	Units ^[4]	Does 95% UCL Exceed Cleanup Level?	Significant Trend? ^[6]
MW-36A	Downgradient	cis-1,2-dichloroethene	12	0%	0.81 (ND)	0.81	ug/L	B	35	ug/L	No	No
MW-36A	Downgradient	Ethyl ether	12	0%	0.72 (ND)	0.72	ug/L	B	50	ug/L	No	No
MW-36A	Downgradient	Trichloroethene	12	0%	0.46 (ND)	0.46	ug/L	B	1.0	ug/L	No	No
MW-36A	Downgradient	Vinyl Chloride	12	0%	0.02 (ND)	0.02	ug/L	B	0.20	ug/L	No	No
MW-36A	Downgradient	Ammonia as N	12	8.3%	0.03	0.03	mg/L	A	0.19	mg/L	No	No

NOTES:

* Well MW-9 is no longer routinely sampled and no longer included on this table

^[1] N = number of data points used for UCL calculation of the mean; only SIM results used for Vinyl Chloride (e.g., duplicate results with higher RLs by non-SIM were omitted).

^[2] MAX = maximum detected result in the data set; if no detected results, then = maximum reporting limit for non-detect results (indicated with ND).

^[3] A 3-year moving data set is used for calculation of the UCL.

^[4] ug/L - micrograms per liter; mg/L = milligrams per liter.

^[5] Groundwater Cleanup Levels are listed on Table 3 of the October 2010 Draft Cleanup Action Plan.

^[6] Trend analysis results are based on data for the period January 2005 through December 2016; arrows indicated increasing (▲) or decreasing (▼) trends.

^[7] For MW-15R, outlier of 0.41 mg/L from 2-24-15 sampling event was removed prior to UCL calculation

^[8] For MW-43, outlier of 24 mg/L from 6-2-14 sampling event was removed prior to UCL calculation

A = Detection frequency of data set too low and/or N too few to calculate 95% UCL of mean; therefore, the highest detected result in the data set used to represent 95% UCL of mean.

A* = Same as note "A" except that the highest value in the data set is below the reporting limit of one or more non-detected results; therefore, the highest reporting limit is used to represent the 95% UCL of the mean.

A** = MTCASat suggests use of lognormal formula but calculation of 95% UCL of mean by Land's formula provides unrealistic result; therefore, the highest detected result is used to represent the 95% UCL of the mean.

A*** = MTCASat suggests use of the Z-score method but then cites inability to calculate due to presence of censored values; therefore, the highest detected result is used to represent the 95% UCL of the mean.

B = Detection frequency = 0; therefore, the highest reporting limit in the data set is used to represent the 95% UCL of mean.

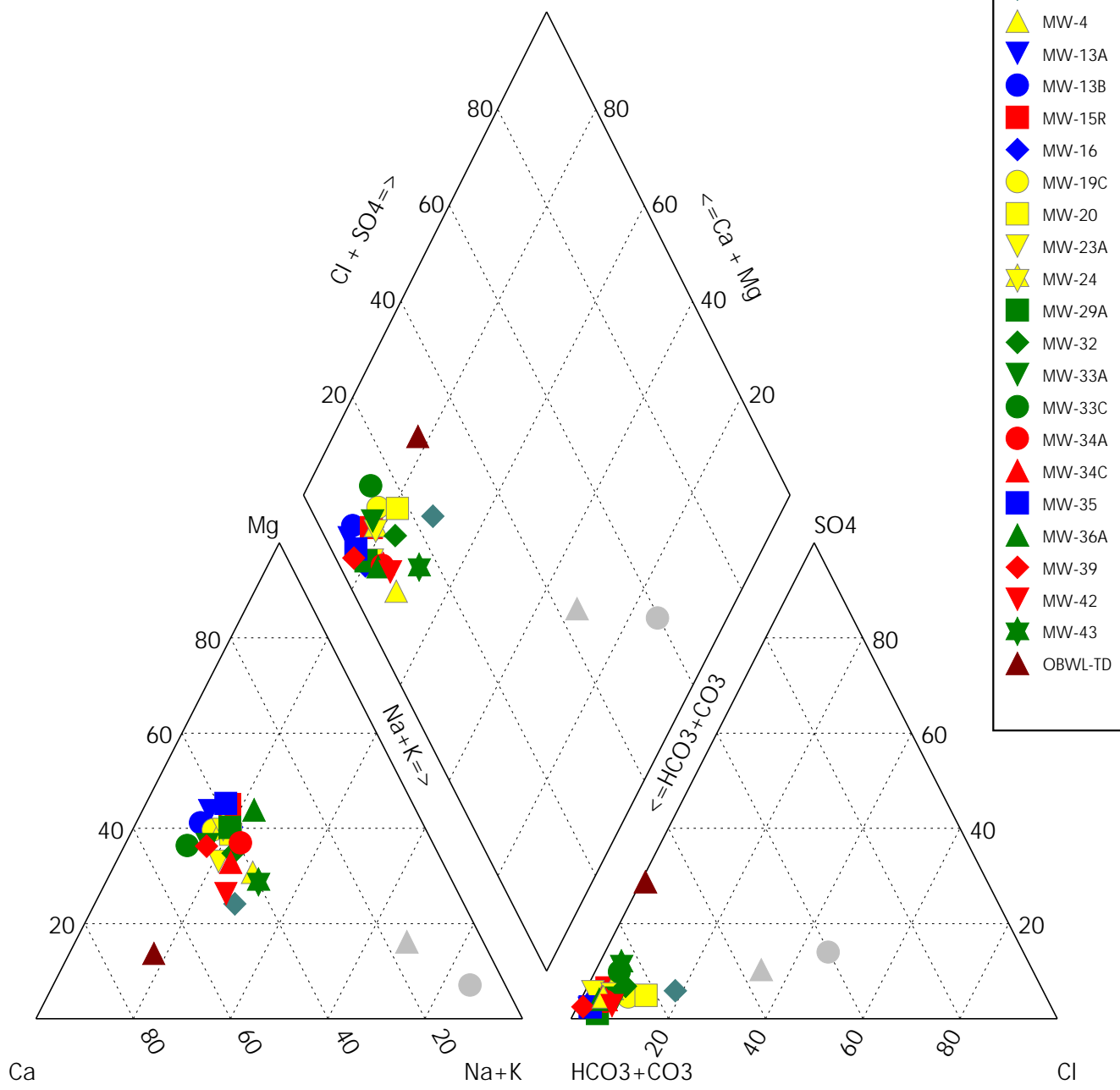
LN = The 95% UCL of the mean is calculated using Land's formula since lognormal distribution is indicated.

N = The 95% UCL of the mean is calculated using a normal-based t-statistic since a normal distribution is indicated.

Z = the 95% UCL of the mean is calculated using the Z-score method in MTCASat since neither normal nor lognormal distribution can be determined.

APPENDIX D
FOURTH QUARTER 2016
GROUNDWATER GEOCHEMICAL EVALUATION

Fourth Quarter 2016 Piper Diagram



DESCRIPTION: Piper Diagram, Fourth Quarter 2016 Annual Monitoring Report

PROJECT: Olympic View Sanitary Landfill

PROJECT NO: 04204027.19

CLIENT: Waste Management Closed Sites

DATE: February 2017

Cation/Anion Balance

Location MW-13A
Sample Date 11/14/2016

Major Ions	Conversion Factor +	mg/l	meq/l
Mn	0.0364	<0.00	<0.000
Fe	0.03581	<0.06	<0.000
Na	0.04350	5.40	0.23
K	0.02258	<1.00	<0.026
Ca	0.04990	16.00	0.80
Mg	0.08229	10.00	0.82
		Sum of Cations	1.88 meq/L
Cl	0.02821	1.80	0.05
SO4	0.02082	2.00	0.04
NO3	0.01613	0.48	0.01
HCO3	0.01639	110.40	1.81
		Sum of Anions	1.91 meq/L
Balance (% difference) *			-0.73 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location MW-13B
Sample Date 11/14/2016

Major Ions	Conversion Factor +	mg/l	meq/l
Mn	0.0364	0.00	0.000
Fe	0.03581	<0.06	<0.000
Na	0.04350	5.10	0.22
K	0.02258	<1.00	<0.026
Ca	0.04990	17.00	0.85
Mg	0.08229	9.30	0.77
		Sum of Cations	1.86 meq/L
Cl	0.02821	1.90	0.05
SO4	0.02082	3.00	0.06
NO3	0.01613	0.64	0.01
HCO3	0.01639	96.00	1.57
		Sum of Anions	1.7 meq/L
Balance (% difference) *			4.53 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location MW-15R
Sample Date 11/15/2016

Major Ions	Conversion Factor +	mg/l	meq/l
Mn	0.0364	0.00	0.000
Fe	0.03581	<0.06	<0.000
Na	0.04350	6.30	0.27
K	0.02258	<1.00	<0.026
Ca	0.04990	13.00	0.65
Mg	0.08229	9.40	0.77
		Sum of Cations	1.722 meq/L
Cl	0.02821	2.30	0.06
SO4	0.02082	4.80	0.10
NO3	0.01613	0.20	0.00
HCO3	0.01639	85.20	1.40
		Sum of Anions	1.564 meq/L
		Balance (% difference) *	4.79 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location MW-16
Sample Date 11/14/2016

Major Ions	Conversion Factor +	mg/l	meq/l
Mn	0.0364	0.00	0.000
Fe	0.03581	<0.06	<0.000
Na	0.04350	5.00	0.22
K	0.02258	<1.00	<0.026
Ca	0.04990	9.60	0.48
Mg	0.08229	5.90	0.49
		Sum of Cations	1.208 meq/L
Cl	0.02821	1.00	0.03
SO4	0.02082	1.60	0.03
NO3	0.01613	0.24	0.00
HCO3	0.01639	67.20	1.10
		Sum of Anions	1.167 meq/L
Balance (% difference) *			1.73 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location MW-19C
Sample Date 11/14/2016

Major Ions	Conversion Factor +	mg/l	meq/l
Mn	0.0364	1.20	0.044
Fe	0.03581	0.06	0.000
Na	0.04350	6.10	0.27
K	0.02258	1.50	0.038
Ca	0.04990	16.00	0.80
Mg	0.08229	8.80	0.72
		Sum of Cations	1.87 meq/L
Cl	0.02821	5.70	0.16
SO4	0.02082	3.70	0.08
NO3	0.01613	<0.05	<0.00
HCO3	0.01639	88.80	1.46
		Sum of Anions	1.694 meq/L
		Balance (% difference) *	4.94 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location MW-20
Sample Date 11/14/2016

Major Ions	Conversion Factor +	mg/l	meq/l
Mn	0.0364	<0.00	<0.000
Fe	0.03581	<0.06	<0.000
Na	0.04350	9.30	0.40
K	0.02258	3.10	0.079
Ca	0.04990	19.00	0.95
Mg	0.08229	11.00	0.91
		Sum of Cations	2.337 meq/L
Cl	0.02821	8.30	0.23
SO4	0.02082	4.20	0.09
NO3	0.01613	6.00	0.10
HCO3	0.01639	90.00	1.47
		Sum of Anions	1.893 meq/L
Balance (% difference) *			10.49 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location MW-23A
Sample Date 11/16/2016

Major Ions	Conversion Factor +	mg/l	meq/l
Mn	0.0364	0.04	0.001
Fe	0.03581	<0.06	<0.000
Na	0.04350	3.50	0.15
K	0.02258	<1.00	<0.026
Ca	0.04990	7.80	0.39
Mg	0.08229	3.40	0.28
		Sum of Cations	0.848 meq/L
Cl	0.02821	<1.00	<0.03
SO4	0.02082	2.30	0.05
NO3	0.01613	0.24	0.00
HCO3	0.01639	48.00	0.79
		Sum of Anions	0.867 meq/L
		Balance (% difference) *	-1.08 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location MW-24
Sample Date 11/17/2016

Major Ions	Conversion Factor +	mg/l	meq/l
Mn	0.0364	0.70	0.025
Fe	0.03581	<0.06	<0.000
Na	0.04350	5.00	0.22
K	0.02258	<1.00	<0.026
Ca	0.04990	11.00	0.55
Mg	0.08229	6.50	0.53
		Sum of Cations	1.352 meq/L
Cl	0.02821	2.50	0.07
SO4	0.02082	3.50	0.07
NO3	0.01613	0.16	0.00
HCO3	0.01639	68.40	1.12
		Sum of Anions	1.267 meq/L
		Balance (% difference) *	3.26 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location MW-29A
Sample Date 11/14/2016

Major Ions	Conversion Factor +	mg/l	meq/l
Mn	0.0364	1.40	0.051
Fe	0.03581	4.10	0.000
Na	0.04350	3.60	0.16
K	0.02258	<1.00	<0.026
Ca	0.04990	7.40	0.37
Mg	0.08229	4.50	0.37
		Sum of Cations	0.973 meq/L
Cl	0.02821	1.70	0.05
SO4	0.02082	<1.00	<0.02
NO3	0.01613	<0.05	<0.00
HCO3	0.01639	56.40	0.92
		Sum of Anions	0.994 meq/L
Balance (% difference) *			-1.08 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location MW-2B1
Sample Date 11/15/2016

Major Ions	Conversion Factor +	mg/l	meq/l
Mn	0.0364	2.50	0.091
Fe	0.03581	0.31	0.000
Na	0.04350	11.00	0.48
K	0.02258	2.80	0.072
Ca	0.04990	18.00	0.90
Mg	0.08229	5.60	0.46
		Sum of Cations	2.0 meq/L
Cl	0.02821	14.00	0.39
SO4	0.02082	6.00	0.13
NO3	0.01613	1.80	0.03
HCO3	0.01639	98.40	1.61
		Sum of Anions	2.16 meq/L
Balance (% difference) *			-3.88 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location MW-32
Sample Date 11/16/2016

Major Ions	Conversion Factor +	mg/l	meq/l
Mn	0.0364	1.70	0.062
Fe	0.03581	0.50	0.000
Na	0.04350	12.00	0.52
K	0.02258	1.00	0.026
Ca	0.04990	20.00	1.00
Mg	0.08229	10.00	0.82
		Sum of Cations	2.43 meq/L
Cl	0.02821	7.00	0.20
SO4	0.02082	8.30	0.17
NO3	0.01613	<0.05	<0.00
HCO3	0.01639	132.00	2.16
		Sum of Anions	2.534 meq/L
Balance (% difference) *			-2.10 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location MW-33A
Sample Date 11/17/2016

Major Ions	Conversion Factor +	mg/l	meq/l
Mn	0.0364	0.09	0.003
Fe	0.03581	2.50	0.000
Na	0.04350	3.00	0.13
K	0.02258	<1.00	<0.026
Ca	0.04990	8.60	0.43
Mg	0.08229	4.10	0.34
		Sum of Cations	0.926 meq/L
Cl	0.02821	2.20	0.06
SO4	0.02082	1.80	0.04
NO3	0.01613	<0.05	<0.00
HCO3	0.01639	46.80	0.77
		Sum of Anions	0.867 meq/L
Balance (% difference) *			3.26 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location MW-33C
Sample Date 11/17/2016

Major Ions	Conversion Factor +	mg/l	meq/l
Mn	0.0364	0.15	0.005
Fe	0.03581	0.08	0.000
Na	0.04350	4.20	0.18
K	0.02258	1.30	0.033
Ca	0.04990	17.00	0.85
Mg	0.08229	7.40	0.61
		Sum of Cations	1.68 meq/L
Cl	0.02821	2.80	0.08
SO4	0.02082	7.40	0.15
NO3	0.01613	<0.05	<0.00
HCO3	0.01639	81.60	1.34
		Sum of Anions	1.57 meq/L
Balance (% difference) *			3.30 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location MW-34A
Sample Date 11/15/2016

Major Ions	Conversion Factor +	mg/l	meq/l
Mn	0.0364	0.00	0.000
Fe	0.03581	<0.06	<0.000
Na	0.04350	9.70	0.42
K	0.02258	<1.00	<0.026
Ca	0.04990	15.00	0.75
Mg	0.08229	8.50	0.70
		Sum of Cations	1.896 meq/L
Cl	0.02821	3.20	0.09
SO4	0.02082	3.00	0.06
NO3	0.01613	<0.05	<0.00
HCO3	0.01639	96.00	1.57
		Sum of Anions	1.727 meq/L
		Balance (% difference) *	4.66 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location MW-34C
Sample Date 11/15/2016

Major Ions	Conversion Factor +	mg/l	meq/l
Mn	0.0364	0.54	0.020
Fe	0.03581	0.62	0.000
Na	0.04350	12.00	0.52
K	0.02258	<5.00	<0.128
Ca	0.04990	24.00	1.20
Mg	0.08229	11.00	0.91
		Sum of Cations	2.77 meq/L
Cl	0.02821	4.40	0.12
SO4	0.02082	4.60	0.10
NO3	0.01613	<0.05	<0.00
HCO3	0.01639	132.00	2.16
		Sum of Anions	2.384 meq/L
Balance (% difference) *			7.53 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location MW-35
Sample Date 11/15/2016

Major Ions	Conversion Factor +	mg/l	meq/l
Mn	0.0364	<0.00	<0.000
Fe	0.03581	<0.06	<0.000
Na	0.04350	6.30	0.27
K	0.02258	<1.00	<0.026
Ca	0.04990	14.00	0.70
Mg	0.08229	10.00	0.82
		Sum of Cations	1.82 meq/L
Cl	0.02821	1.80	0.05
SO4	0.02082	2.20	0.05
NO3	0.01613	0.47	0.01
HCO3	0.01639	109.20	1.79
		Sum of Anions	1.894 meq/L
		Balance (% difference) *	-1.96 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location MW-36A
Sample Date 11/15/2016

Major Ions	Conversion Factor +	mg/l	meq/l
Mn	0.0364	<0.00	<0.000
Fe	0.03581	<0.06	<0.000
Na	0.04350	7.30	0.32
K	0.02258	<1.00	<0.026
Ca	0.04990	10.00	0.50
Mg	0.08229	8.00	0.66
		Sum of Cations	1.5 meq/L
Cl	0.02821	1.70	0.05
SO4	0.02082	2.50	0.05
NO3	0.01613	0.49	0.01
HCO3	0.01639	72.00	1.18
		Sum of Anions	1.288 meq/L
Balance (% difference) *			7.62 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location MW-39
Sample Date 11/14/2016

Major Ions	Conversion Factor +	mg/l	meq/l
Mn	0.0364	0.02	0.001
Fe	0.03581	0.37	0.000
Na	0.04350	4.80	0.21
K	0.02258	<1.00	<0.026
Ca	0.04990	13.00	0.65
Mg	0.08229	6.10	0.50
		Sum of Cations	1.386 meq/L
Cl	0.02821	<1.00	<0.03
SO4	0.02082	1.40	0.03
NO3	0.01613	1.60	0.03
HCO3	0.01639	68.40	1.12
		Sum of Anions	1.204 meq/L
Balance (% difference) *			7.01 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location MW-4
Sample Date 11/14/2016

Major Ions	Conversion Factor +	mg/l	meq/l
Mn	0.0364	0.02	0.001
Fe	0.03581	<0.06	<0.000
Na	0.04350	3.00	0.13
K	0.02258	<1.00	<0.026
Ca	0.04990	4.30	0.21
Mg	0.08229	2.00	0.16
		Sum of Cations	0.536 meq/L
Cl	0.02821	1.40	0.04
SO4	0.02082	2.00	0.04
NO3	0.01613	0.33	0.01
HCO3	0.01639	50.40	0.83
		Sum of Anions	0.912 meq/L
Balance (% difference) *			-25.99 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location MW-42
Sample Date 11/16/2016

Major Ions	Conversion Factor +	mg/l	meq/l
Mn	0.0364	4.50	0.164
Fe	0.03581	27.00	0.000
Na	0.04350	21.00	0.91
K	0.02258	8.70	0.223
Ca	0.04990	42.00	2.10
Mg	0.08229	14.00	1.15
		Sum of Cations	4.55 meq/L
Cl	0.02821	12.00	0.34
SO4	0.02082	6.30	0.13
NO3	0.01613	<0.05	<0.00
HCO3	0.01639	264.00	4.33
		Sum of Anions	4.8 meq/L
Balance (% difference) *			-2.67 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location MW-43
Sample Date 11/14/2016

Major Ions	Conversion Factor +	mg/l	meq/l
Mn	0.0364	0.03	0.001
Fe	0.03581	<0.06	<0.000
Na	0.04350	2.30	0.10
K	0.02258	<1.00	<0.026
Ca	0.04990	3.20	0.16
Mg	0.08229	1.40	0.12
		Sum of Cations	0.402 meq/L
Cl	0.02821	<1.00	<0.03
SO4	0.02082	1.70	0.04
NO3	0.01613	0.52	0.01
HCO3	0.01639	15.60	0.26
		Sum of Anions	0.328 meq/L
Balance (% difference) *			10.15 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location OBWL-TD
Sample Date 11/14/2016

Major Ions	Conversion Factor +	mg/l	meq/l
Mn	0.0364	0.01	0.000
Fe	0.03581	<0.06	<0.000
Na	0.04350	5.70	0.25
K	0.02258	2.10	0.054
Ca	0.04990	24.00	1.20
Mg	0.08229	2.90	0.24
		Sum of Cations	1.738 meq/L
Cl	0.02821	<1.00	<0.03
SO4	0.02082	22.00	0.46
NO3	0.01613	0.27	0.00
HCO3	0.01639	68.40	1.12
		Sum of Anions	1.612 meq/L
		Balance (% difference) *	3.77 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location LP-LCD
Sample Date 11/22/2016

Major Ions	Conversion Factor +	mg/l	meq/l
Mn	0.0364	0.73	0.027
Fe	0.03581	0.54	0.000
Na	0.04350	740.00	32.19
K	0.02258	76.00	1.944
Ca	0.04990	58.00	2.89
Mg	0.08229	34.00	2.80
		Sum of Cations	39.85 meq/L
Cl	0.02821	630.00	17.77
SO4	0.02082	260.00	5.42
NO3	0.01613		
HCO3	0.01639	948.00	15.54
		Sum of Anions	38.7 meq/L
Balance (% difference) *			1.43 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location
Sample Date

L-INF
11/14/2016

Major Ions	Conversion Factor +	mg/l	meq/l
Mn	0.0364	2.70	0.098
Fe	0.03581	0.42	0.000
Na	0.04350	690.00	30.01
K	0.02258	100.00	2.558
Ca	0.04990	150.00	7.49
Mg	0.08229	94.00	7.74
		Sum of Cations	47.9 meq/L
Cl	0.02821	680.00	19.18
SO4	0.02082	280.00	5.83
NO3	0.01613	0.36	0.01
HCO3	0.01639	1920.0 0	31.47
		Sum of Anions	56.5 meq/L
Balance (% difference) *			-8.24 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

APPENDIX E
LANDFILL GAS MONITORING RESULTS

**Table E1. Historical Results of Methane (CH₄) Measurements
2016 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington**

Date Monitored	OV-GP-07	OV-GP-08	OV-GP-9S	OV-GP-9D	OV-GP10S	OV-GP10D	OV-GP11S	OV-GP11D	OV-GP12S	OV-GP12M	OV-GP12D	OV-GP13S	OV-GP13M	OV-GP13D	OV-GP14	OV-GP15	OV-GP16
11/15/2016	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0
9/20/2016	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6/27/2016	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3/24/2016	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
12/15/2015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9/29/2015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5/7/2015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	—	0.0	0.0	—	0.0	0.0	0.0	0.0	0.0	0.0
3/30/2015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	—	0.0	0.0	—	0.0	0.0	0.0	0.0	0.2	0.0
12/29/2014	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0
9/24/2014	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6/16/2014	0.0	0.0	0.0	0.0	0.0	0.0	0.0	—	0.0	0.0	—	0.0	0.0	0.0	0.0	1.0	0.0
3/28/2014	0.0	0.0	0.0	0.0	0.0	0.0	0.0	—	0.0	0.0	—	0.0	0.0	0.0	0.0	3.7	0.0
12/13/2013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	0.0
7/13/2013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	2.7	0.0
5/13/2013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2/13/2013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0
11/12/2012	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
8/12/2012	0.0	0.0	0.0	0.0	0.0	0.0	0.0	—	0.0	0.0	—	0.0	0.0	0.0	0.0	0.0	0.0
5/18/2012	0.0	0.0	0.0	0.0	0.0	0.0	0.0	—	0.0	0.0	—	0.0	0.0	0.0	0.0	0.2	0.0
3/12/2012	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	0.0
12/22/2011	0.0	0.0	0.0	—	0.0	—	0.0	—	0.0	0.0	—	0.0	0.0	—	0.0	1.5	0.0
9/27/2011	0.0	0.0	0.0	—	0.0	—	0.0	—	0.0	0.0	—	0.0	0.0	—	0.0	0.3	0.0
6/29/2011	0.1	0.0	0.0	—	0.0	—	0.0	—	0.0	0.0	—	0.0	0.0	—	0.0	1.0	0.0
3/16/2011	0.0	0.0	0.0	—	0.0	—	0.0	—	0.0	0.0	—	0.0	0.0	—	0.0	0.0	0.0
12/22/2010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9/27/2010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6/29/2010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3/16/2010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0
12/8/2009	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0
9/4/2009	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
6/5/2009	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3/3/2009	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.1
12/1/2008	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0
9/5/2008	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.8	0.0
6/23/2008	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.9	0.0
3/5/2008	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.4	0.0
12/28/2007	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.7	0.0
9/30/2007	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.3	0.0
6/15/2007	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.6	0.0
3/30/2007	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.2	1.6

Notes:
 OV-GP = Gas Probe
 S = Shallow Monitoring Zone
 M = Middle Monitoring Zone
 D = Deep Monitoring Zone
 Detected CH₄>0.3% vol.
 — Screened interval submerged

**Table E2. Historical Results of Carbon Dioxide (CO₂) Measurements
2016 Annual Monitoring Report
Olympic View Sanitary Landfill, Port Orchard, Washington**

Date Monitored	OV-GP-07	OV-GP-08	OV-GP-9S	OV-GP-9D	OV-GP10S	OV-GP10D	OV-GP11S	OV-GP11D	OV-GP12S	OV-GP12M	OV-GP12D	OV-GP13S	OV-GP13M	OV-GP13D	OV-GP14	OV-GP15	OV-GP16
11/15/2016	8.2	3.6	2.1	1.4	0.9	0.7	2.2	1.5	1.2	1.3	0.4	3.0	2.6	0.2	5.6	6.6	1.5
9/20/2016	11.2	5.0	2.2	1.4	0.5	0.3	1.9	0.6	0.9	0.9	0.7	1.8	2.5	0.1	2.0	3.0	2.0
6/27/2016	7.3	2.8	1.9	1.0	0.7	0.5	1.0	2.9	1.0	1.1	0.5	2.8	2.4	0.3	5.8	3.3	2.5
3/24/2016	3.1	1.4	1.8	1.3	0.7	0.7	2.1	2.1	1.7	1.6	1.1	3.3	3.3	2.1	4.8	4.3	2.4
12/15/2015	6.4	2.3	1.9	1.6	0.9	0.7	2.6	2.0	1.2	1.0	1.0	3.9	3.5	1.6	5.9	3.5	3.8
9/29/2015	10.8	6.2	1.6	1.5	0.6	0.7	2.0	2.6	0.9	1.0	1.3	2.9	1.9	0.2	8.7	9.4	4.0
5/7/2015	7.9	3.6	2.6	1.7	0.9	0.8	3.6	—	1.1	2.4	—	3.4	3.3	0.0	6.1	5.0	4.5
3/30/2015	6.2	2.0	2.4	1.7	0.9	0.8	3.3	—	1.3	1.4	—	0.8	3.3	3.4	5.7	6.5	3.8
12/29/2014	8.3	2.6	2.6	1.8	1.0	0.9	3.2	3.5	1.3	1.2	1.7	3.6	3.5	0.1	6.8	7.3	3.9
9/24/2014	11.2	6.1	2.0	1.6	0.8	0.7	3.4	3.0	1.2	1.3	1.6	2.9	3.3	1.3	9.3	10.1	4.2
6/16/2014	8.9	4.0	2.9	1.8	1.2	1.0	4.2	—	2.0	1.7	—	3.7	3.3	1.1	6.6	6.1	5.0
3/28/2014	5.9	2.0	1.8	1.8	0.8	0.9	2.5	—	1.9	2.2	—	3.3	3.5	3.2	6.4	2.2	3.3
12/13/2013	9.6	5.4	2.6	1.7	1.1	0.9	3.5	3.6	1.7	1.9	1.7	3.9	3.8	3.7	8.5	9.5	5.1
7/13/2013	9.6	4.5	2.9	1.5	1.1	0.7	3.9	0.4	1.8	1.7	0.4	3.5	3.1	3.1	7.8	7.8	7.4
5/13/2013	6.2	2.6	2.3	1.7	0.8	0.7	2.4	2.2	1.9	1.0	0.8	2.3	2.6	0.1	5.3	4.0	5.0
2/13/2013	4.2	2.5	1.7	1.5	0.7	0.7	1.8	2.4	1.1	0.9	0.8	2.3	2.4	0.8	5.1	6.2	3.9
11/20/2012	8.3	2.8	1.9	1.6	0.9	0.7	2.2	2.9	1.3	1.2	1.2	2.9	2.1	3.0	7.5	3.5	4.8
8/20/2012	9.6	4.6	2.5	1.4	0.8	0.6	2.8	2.8	1.8	1.5	—	3.5	2.1	1.6	7.9	1.7	6.1
5/18/2012	6.0	3.1	2.6	1.7	0.8	0.6	2.1	—	2.2	1.1	—	2.6	1.7	1.1	5.7	3.4	5.1
3/12/2012	4.2	1.7	2.3	1.7	0.7	0.7	1.7	2.4	1.9	1.9	0.1	3.0	3.2	2.8	—	6.2	4.4
12/22/2011	1.5	5.5	3.2	—	1.3	—	1.3	—	1.4	1.0	—	2.0	2.0	—	5.1	5.2	4.6
9/27/2011	9.7	4.7	1.7	—	0.7	—	1.8	—	0.7	0.7	—	2.9	1.8	—	8.9	8.8	2.4
6/29/2011	6.6	3.0	3.0	—	0.7	—	2.1	—	2.3	0.9	—	3.4	3.0	—	6.4	3.9	6.2
3/16/2011	1.5	0.5	2.1	—	0.7	—	1.4	—	2.4	1.7	—	3	3.1	—	0.3	0.3	3.8
12/22/2010	8.3	2.4	2.3	1.7	3.2	2.8	2.4	2.1	2.2	1.8	1.0	3.9	3.5	0.4	3.4	1.3	6.7
9/27/2010	11.0	4.1	2.1	1.5	0.9	1.0	2.0	0.4	1.9	1.3	0.7	1.1	3.2	0.3	10.2	0.8	7.4
6/29/2010	8.0	0.2	3.5	1.6	0.9	0.7	2.5	1.6	2.3	2.2	0.7	2.7	3.0	2.4	7.3	0.2	9.3
3/16/2010	5.1	2.1	2.5	1.7	0.2	0.7	1.9	1.7	1.5	1.3	1.4	1.2	3.2	2.5	6.0	1.9	7.0
12/8/2009	6.9	6.1	2.3	1.7	0.1	0.4	1.8	0.2	1.5	1.8	0.2	1.5	3.3	3.3	10.0	2.8	7.1
9/4/2009	11.3	6.8	2.7	2.0	0.9	0.9	2.6	2.0	2.4	2.7	2.2	3.4	3.8	3.9	11.7	5.1	1.9
6/5/2009	7.6	4.9	3.2	1.9	0.6	0.6	2.2	1.6	2.3	2.3	1.5	2.9	3.8	2.4	8.2	2.4	2.0
3/3/2009	7.7	2.8	2.1	1.4	0.6	0.6	1.6	1.4	1.5	1.4	1.3	2.1	4.0	3.6	8.0	2.4	1.1
12/1/2008	9.2	7.0	0.7	0.7	2.9	1.7	2.0	1.6	2.3	2.3	1.8	2.9	4.2	2.4	9.9	2.9	1.8
9/5/2008	10.3	6.2	3.0	1.9	1.0	0.8	2.8	2.1	3.1	2.6	2.3	4.2	4.7	3.9	9.8	14.3	1.9
6/23/2008	8.5	4.6	2.9	1.6	0.8	0.7	2.5	1.8	1.8	2.0	1.0	3.4	4.4	4.3	7.5	12.4	2.3
3/5/2008	4.9	2.6	2.3	1.6	0.6	0.7	2.0	1.7	1.0	0.8	1.1	2.3	4.7	5.0	6.6	8.9	1.2
12/28/2007	7.7	1.2	2.2	1.8	0.9	0.8	2.3	1.9	5.3	5.3	2.2	2.9	5.7	4.2	8.2	8.5	1.5
9/30/2007	11.7	7.1	2.4	1.6	1.0	0.7	2.7	1.7	2.7	3.1	2.2	4.4	5.9	6.0	11.0	18.1	1.5
6/15/2007	8.1	4.3	3.2	1.7	0.9	0.7	2.7	1.5	2.7	2.5	0.6	3.6	6.6	6.6	8.1	12.5	1.8
3/30/2007	4.7	0.8	2.5	2.0	0.7	0.7	1.8	1.5	2.2	2.1	1.1	2.7	7.5	8.2	0.1	8.8	19.1

Notes:

- OV-GP = Gas Probe
- S = Shallow Monitoring Zone
- M = Middle Monitoring Zone
- D = Deep Monitoring Zone
- Detected CO₂>0.3% vol.
- Screened interval submerged

**Table E3. Historical Results of Oxygen (O₂) Measurements
2016 Annual Monitoring Report
Olympic View Sanitary Landfill, Port Orchard, Washington**

Date Monitored	OV-GP-07	OV-GP-08	OV-GP-9S	OV-GP-9D	OV-GP10S	OV-GP10D	OV-GP11S	OV-GP11D	OV-GP12S	OV-GP12M	OV-GP12D	OV-GP13S	OV-GP13M	OV-GP13D	OV-GP14	OV-GP15	OV-GP16
11/15/2016	4.7	4.0	17.5	18.9	19.7	19.4	18.3	19.1	18.3	18.1	20.0	16.6	17.8	20.7	8.2	0.0	17.3
9/20/2016	7.7	11.9	19.7	19.6	20.5	20.7	19.2	19.9	19.5	20.0	17.8	18.5	17.9	21.1	15.8	16.8	18.8
6/27/2016	6.8	11.3	19.3	18.6	20.2	19.3	18.7	18.2	19.7	19.9	19.4	18.5	17.5	20.6	8.0	7.0	18.5
3/24/2016	9.7	6.7	18.4	18.8	20.1	18.2	17.5	15.6	18.7	18.8	17.7	16.7	15.9	18.5	4.9	0.0	17.6
12/15/2015	5.9	3.7	18.6	19.7	20.1	19.3	18.3	17.5	20.7	20.3	18.8	16.6	17.3	19.0	5.0	5.7	16.1
9/29/2015	7.0	7.8	19.8	19.6	20.4	19.6	19.2	18.5	19.9	19.6	16.2	17.4	18.4	20.4	7.4	5.0	16.6
5/7/2015	4.1	7.0	19.0	19.4	20.2	18.9	17.6	—	18.9	18.3	—	16.9	16.6	20.7	5.5	5.5	16.0
3/30/2015	4.5	9.4	18.6	19.0	20.3	18.9	17.7	—	19.3	18.3	—	19.7	17.1	17.7	5.0	0.1	16.3
12/29/2014	3.6	5.3	18.5	19.6	20.5	19.8	17.9	14.4	20.1	19.5	16.4	17.5	17.5	20.7	5.7	0.0	16.4
9/24/2014	8.3	8.6	19.9	19.6	20.4	19.4	18.6	17.4	19.5	18.7	15.2	18.5	17.7	19.5	7.0	3.2	17.7
6/16/2014	3.7	5.7	18.5	18.8	20.0	18.5	16.9	—	19.1	18.8	—	17.7	17.3	20.1	5.9	0.0	16.9
3/28/2014	4.8	3.3	19.0	19.5	20.9	18.8	18.7	—	18.7	18.2	—	18.3	18.1	18.2	5.5	5.8	16.8
12/13/2013	4.9	6.3	19.4	19.6	20.1	19.3	17.6	11.5	18.5	17.8	16.6	17.6	17.3	17.3	3.9	1.2	16.1
7/13/2013	4.4	5.8	18.5	19.1	20.0	19.2	16.9	20.2	17.3	16.3	19.1	17.0	17.7	18.0	0.0	0.0	13.6
5/13/2013	4.5	8.4	18.8	19.0	20.1	18.7	18.2	15.7	19.6	20.0	18.7	18.2	17.9	20.8	6.2	7.2	15.4
2/13/2013	4.0	7.4	19.2	18.2	20.4	18.4	18.9	14.2	20.5	20.2	18.1	18.6	17.1	20.2	5.8	0.3	15.9
11/20/2012	4.8	4.5	18.0	19.5	20.2	19.7	18.9	14.0	18.9	18.9	16.8	17.9	18.9	18.1	5.2	7.2	13.8
8/20/2012	5.0	6.7	18.5	18.4	19.3	18.6	17.9	12.5	18.3	18.0	—	16.9	17.5	18.4	4.3	19.1	15.3
5/18/2012	4.2	5.8	17.7	18.7	19.8	19.3	18.1	—	19.2	19.3	—	18.0	19.1	19.8	5.5	13.0	15.0
3/12/2012	3.5	5.4	18.6	19.0	20.1	18.6	19.1	15.4	18.0	17.7	21.4	18.2	17.6	18.3	—	0.0	15.6
12/22/2011	20.0	5.7	17.6	—	19.8	—	18.9	—	19.6	19.3	—	17.7	18.4	—	6.7	12.4	15.2
9/27/2011	8.9	10.8	19.9	—	20.6	—	20.0	—	20.4	19.9	—	18.3	18.8	—	7.6	4.4	18.8
6/29/2011	3.6	6.5	17.9	—	20.2	—	18.7	—	19.4	19.8	—	17.2	14.9	—	4.8	6.5	14.8
3/16/2011	20.1	20.7	18.3	—	20.5	—	16.5	—	16.7	17.4	—	16.6	15	—	20.6	20.4	15.3
12/22/2010	1.8	2.4	16.3	17.8	11.1	10.1	16.5	16.4	16.1	16.1	18.8	14.7	14.5	19.5	18.6	19.4	11.2
9/27/2010	6.6	9.7	18.5	19.0	20.5	20.6	19.1	20.5	19.0	19.0	19.4	17.5	15.3	20.7	8.2	20.3	12.6
6/29/2010	3.5	20.1	16.6	18.0	19.3	18.3	17.3	18.1	16.8	16.8	18.4	15.8	13.4	14.9	4.5	19.6	9.2
3/16/2010	3.0	8.5	18.4	19.3	21.6	19.3	18.0	18.9	20.9	20.9	18.0	17.0	12.7	15.6	2.8	10.0	10.4
12/8/2009	2.5	6.0	16.6	18.8	21.3	21.6	19.3	21.7	17.9	17.9	20.1	17.9	15.2	15.7	1.8	5.3	10.4
9/4/2009	7.5	6.4	19.8	19.8	21.1	20.2	20.1	19.6	15.9	15.9	14.3	17.3	14.3	13.9	3.0	3.3	19.3
6/5/2009	2.4	3.4	17.0	18.3	20.1	18.9	18.3	19.0	16.3	16.3	17.0	15.3	12.6	12.4	3.0	6.2	18.9
3/3/2009	2.9	7.5	18.8	18.9	20.4	18.9	18.8	19.3	19.0	19.0	16.7	16.3	13.4	13.7	2.7	0.0	19.5
12/1/2008	1.4	1.0	20.2	19.6	17.6	19.1	18.9	19.1	16.5	16.5	15.2	16.4	13.1	12.4	1.6	0.0	18.8
9/5/2008	6.8	8.0	18.9	19.3	20.5	19.7	19.1	19.4	17.1	17.1	14.4	15.8	11.7	13.0	5.0	0.0	19.5
6/23/2008	6.0	10.8	18.5	19.3	20.1	19.3	18.9	19.2	17.5	17.5	18.1	16.3	11.3	10.5	4.3	0.0	19.1
3/5/2008	4.0	13.6	19.3	19.5	20.2	18.7	18.8	18.2	20.0	20.0	18.4	15.4	8.8	8.5	5.5	0.0	20.3
12/28/2007	3.9	5.7	17.7	18.9	20.3	19.0	18.8	18.5	15.0	15.0	15.3	14.7	6.0	10.6	2.2	0.3	19.6
9/30/2007	6.2	5.7	19.7	19.3	20.0	19.5	19.2	19.6	16.4	13.9	12.2	14.5	7.8	6.5	4.3	0.0	19.7
6/15/2007	4.8	7.2	18.4	18.8	20.1	18.9	18.1	18.8	17.7	17.7	18.4	15.3	6.6	5.5	3.7	0.0	20.0
3/30/2007	4.6	6.8	17.7	18.1	19.9	18.4	17.7	16.7	17.1	17.1	17.0	12.7	2.5	2.1	20.9	0.0	18.8

Notes:

- OV-GP = Gas Probe
- S = Shallow Monitoring Zone
- M = Middle Monitoring Zone
- D = Deep Monitoring Zone
- Depressed O₂ < 20.3% vol.
- Screened interval submerged

Table E-4. 2016 Landfill Gas Collection (at Flare Inlet)
2016 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington

Device Name	Date Time	CH4 (Methane %)	CO ₂ (Carbon Dioxide %)	O ₂ (Oxygen %)	Balance Gas (%)	Temperature (°F)	Flow (SCFM)
OV-FL-IN	1/4/2016 8:44	28.7	19.6	2.4	49.3	56	227
OV-FL-IN	1/5/2016 8:36	30	20.2	2	47.8	56	216
OV-FL-IN	1/7/2016 7:49	26.7	18.6	3.1	51.6	55	186
OV-FL-IN	1/11/2016 7:52	27	18.8	2.8	51.4	53	211
OV-FL-IN	1/13/2016 8:58	30.5	20.1	1.9	47.5	61	193
OV-FL-IN	1/18/2016 7:41	28	20.1	2.2	49.7	60	175
OV-FL-IN	1/19/2016 7:43	28.1	19.4	2.2	50.3	61	217
OV-FL-IN	1/21/2016 8:03	28	19.6	1.7	50.7	62	249
OV-FL-IN	1/25/2016 7:39	24.3	17.7	3.4	54.6	62	228
OV-FL-IN	1/28/2016 8:07	28.9	20.2	1.1	49.8	67	244
OV-FL-IN	2/1/2016 7:41	23.8	17.4	3.6	55.2	61	228
OV-FL-IN	2/9/2016 7:36	25.3	18.2	2.9	53.6	59	245
OV-FL-IN	2/10/2016 7:19	25.2	18.2	3	53.6	62	237
OV-FL-IN	2/15/2016 7:17	24.6	18.2	2.8	54.4	66	239
OV-FL-IN	2/17/2016 7:20	27.7	19.6	1.6	51.1	67	272
OV-FL-IN	2/22/2016 8:37	22.2	17.1	3.6	57.1	62	220
OV-FL-IN	2/23/2016 7:22	23.3	17	3.4	56.3	57	249
OV-FL-IN	2/25/2016 10:07	24.4	17.9	3.6	54.1	61.4	226
OV-FL-IN	2/25/2016 17:05	25.7	18.4	3.4	52.5	66.1	226
OV-FL-IN	2/29/2016 7:33	25.1	18.3	2.8	53.8	61	200
OV-FL-IN	3/7/2016 7:05	27.4	18.8	2.9	50.9	60	222
OV-FL-IN	3/8/2016 7:02	23.9	17	4	55.1	59	232
OV-FL-IN	3/14/2016 6:41	24.3	17.5	3.9	54.3	60	204
OV-FL-IN	3/21/2016 5:58	26.4	18.8	2.5	52.3	63	224
OV-FL-IN	3/22/2016 6:13	25	18	3.5	53.5	64	205
OV-FL-IN	3/28/2016 6:36	23.5	17.3	3.8	55.4	61	212
OV-FL-IN	3/31/2016 6:38	23.8	17.2	3.7	55.3	59	222
OV-FL-IN	4/4/2016 5:59	24	17.7	3.3	55	63	213
OV-FL-IN	4/6/2016 7:28	23.2	17.2	3.5	56.1	61	221
OV-FL-IN	4/7/2016 17:31	27	18.9	2.1	52	96.8	213
OV-FL-IN	4/8/2016 10:05	25.5	18.8	2.8	52.9	79.5	203
OV-FL-IN	4/11/2016 7:19	23.3	17.4	3.6	55.7	67	203
OV-FL-IN	4/13/2016 7:18	23.7	17.4	3.5	55.4	64	211
OV-FL-IN	4/18/2016 7:11	22.9	17	3.7	56.4	67	229
OV-FL-IN	4/20/2016 7:16	23.5	17.2	3.6	55.7	68	227
OV-FL-IN	4/25/2016 7:17	22.4	16.9	3.7	57	67	190
OV-FL-IN	4/28/2016 7:24	23.1	17.3	3.5	56.1	68	191
OV-FL-IN	5/2/2016 7:20	25	17.9	3.1	54	70	198
OV-FL-IN	5/23/2016 13:26	25.8	18.8	2.9	52.5	75.8	188
OV-FL-IN	5/24/2016 8:56	23.1	17.2	4.1	55.6	73.5	208
OV-FL-IN	5/25/2016 10:19	22.3	16.9	4	56.8	70.8	203
OV-FL-IN	5/26/2016 8:31	23.2	17.4	3.9	55.5	67.2	196
OV-FL-IN	5/26/2016 15:54	24.1	18.3	3.4	54.2	75	192
OV-FL-IN	6/22/2016 11:38	26	18.7	2.9	52.4	87.1	184
OV-FL-IN	7/11/2016 10:12	25.5	18.6	3.5	52.4	73	179
OV-FL-IN	7/18/2016 11:30	26.8	19.2	3.3	50.7	79	176
OV-FL-IN	7/25/2016 11:04	27	19.3	3	50.7	91	171
OV-FL-IN	8/1/2016 11:43	25	18.4	4.2	52.4	88	182
OV-FL-IN	8/8/2016 18:10	26	18.6	4.1	51.3	86	181
OV-FL-IN	8/22/2016 14:29	24.9	18.2	3.8	53.1	92	168
OV-FL-IN	8/25/2016 9:33	24.8	17.8	4.3	53.1	87	205
OV-FL-IN	8/25/2016 14:39	25.8	17.8	3.8	52.6	104.6	273
OV-FL-IN	8/26/2016 10:46	25.6	18.2	3.9	52.3	93.5	278
OV-FL-IN	8/29/2016 11:14	24.4	18.3	4.2	53.1	90	300
OV-FL-IN	9/6/2016 10:26	26	19.6	3.4	51	75	287
OV-FL-IN	9/12/2016 10:20	24.8	18.7	3.6	52.9	80	280

Table E-4. 2016 Landfill Gas Collection (at Flare Inlet)
2016 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington

Device Name	Date Time	CH ₄ (Methane %)	CO ₂ (Carbon Dioxide %)	O ₂ (Oxygen %)	Balance Gas (%)	Temperature (°F)	Flow (SCFM)
OV-FL-IN	9/19/2016 14:09	25.3	19	3.2	52.5	74	270
OV-FL-IN	9/26/2016 9:31	26.3	19.4	2.7	51.6	67	298
OV-FL-IN	9/29/2016 8:23	24.3	18.4	3.7	53.6	46	284
OV-FL-IN	10/4/2016 9:38	25.2	18.8	3	53	57	291
OV-FL-IN	10/10/2016 10:58	23.8	18.5	3.1	54.6	61	264
OV-FL-IN	10/11/2016 17:21	23.7	18.6	3.4	54.3	67.2	272
OV-FL-IN	10/12/2016 19:39	26.8	19.6	2.7	50.9	68.4	303
OV-FL-IN	10/13/2016 13:50	29.1	21	1.8	48.1	63.4	296
OV-FL-IN	10/13/2016 19:13	29.3	21.2	1.7	47.8	67.3	336
OV-FL-IN	10/17/2016 11:15	24.6	19.1	3.3	53	64	272
OV-FL-IN	10/25/2016 8:44	23.9	18.5	3.3	54.3	62	283
OV-FL-IN	10/31/2016 10:10	26.7	19.7	2.2	51.4		277
OV-FL-IN	11/7/2016 20:11	24.3	18.4	3	54.3	63	302
OV-FL-IN	11/14/2016 16:47	24.4	18.8	2.8	54		291
OV-FL-IN	11/21/2016 18:24	23	17.8	4	55.2	60	278
OV-FL-IN	11/28/2016 18:53	22	17.9	3.8	56.3	56	256
OV-FL-IN	11/29/2016 19:01	22.9	18.5	3.5	55.1	59	301
OV-FL-IN	12/2/2016 12:39	23.4	18.2	3.3	55.1	56.3	308
OV-FL-IN	12/5/2016 11:12	23.6	18.3	2.8	55.3	53	310
OV-FL-IN	12/12/2016 10:38	21.6	17.5	3.1	57.8		289
OV-FL-IN	12/19/2016 18:20	21.5	17.4	3.2	57.9	51	337
OV-FL-IN	12/29/2016 8:40	22.3	17.9	2.7	57.1	51	333
OV-FL-IN	12/29/2016 11:56	22.2	18	2.6	57.2		331
Annualized Average LFG Component (% , °F or scfm)		25.02	18.40	3.16	53.42	67.31	239.76
Estimated Volume of LFG Removed During 2016 (MMscf)							126.02

Figure E-1: LFG Probe Methane Timeseries

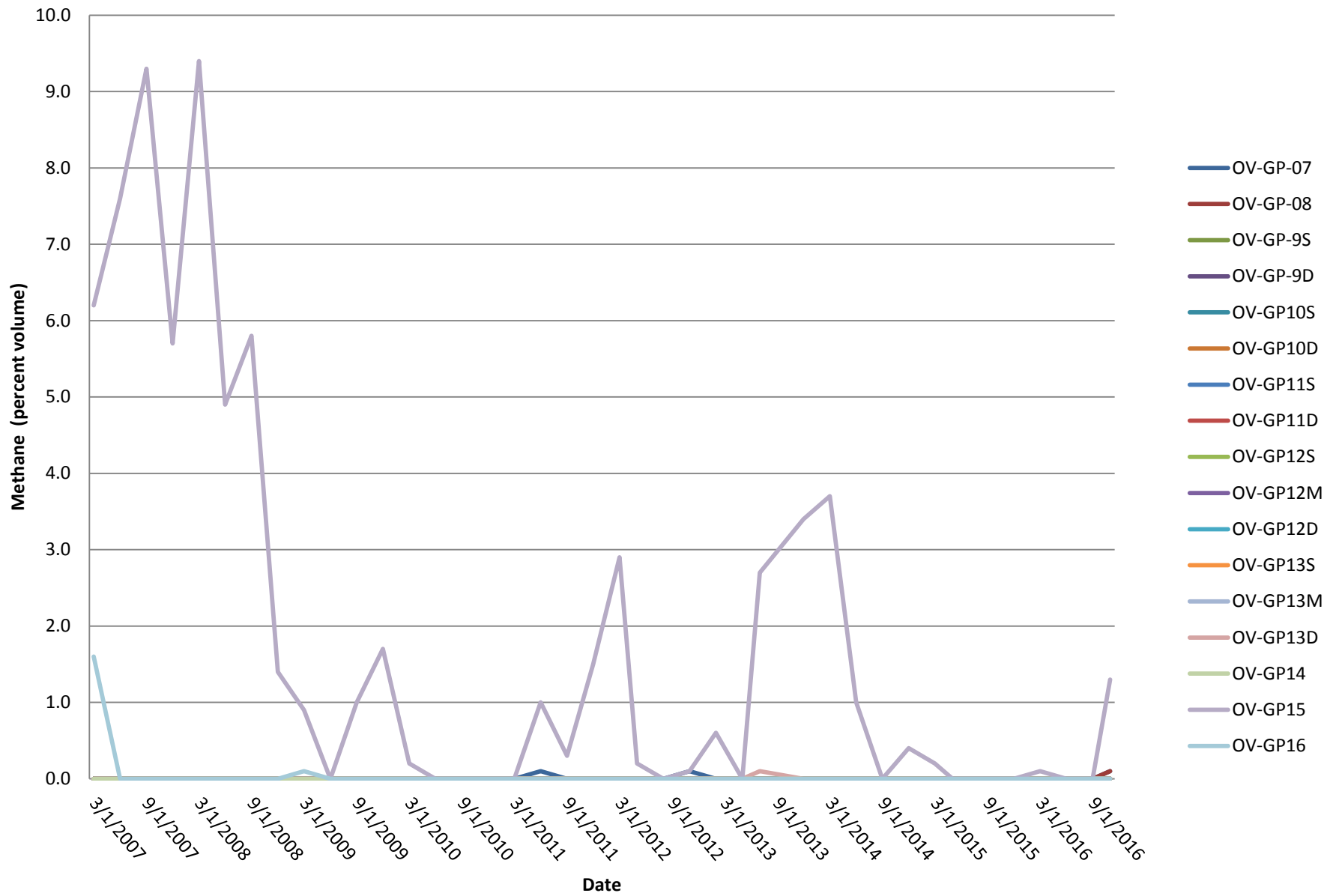


Figure E-2: LFG Probe Carbon Dioxide Timeseries

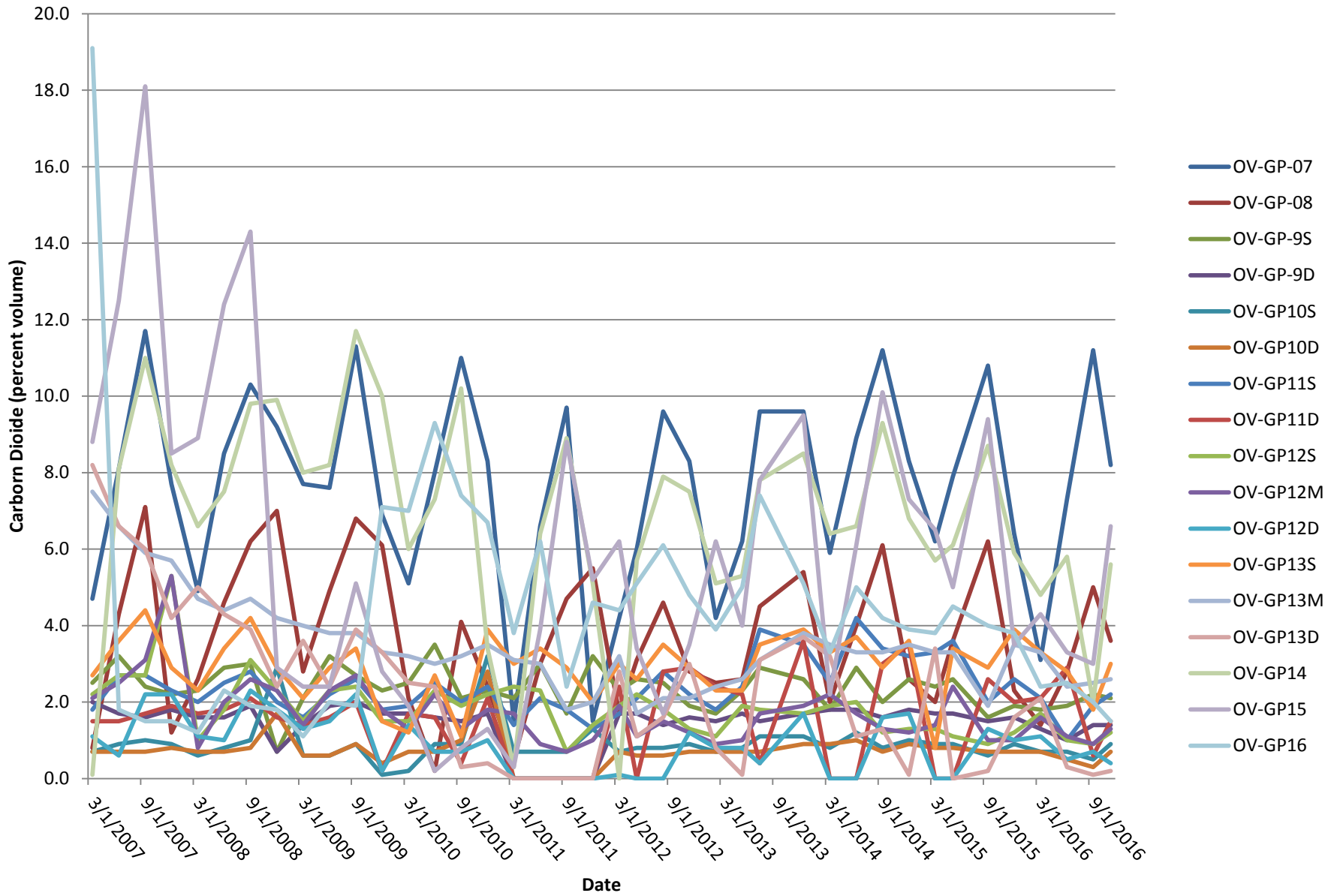


Figure E-3: LFG Probe Depressed Oxygen Timeseries

