RIVERBEND LANDFILL CO.
13469 SW Highway 18
McMinnville, OR 97128
(503) 472-8788

April 29, 2022

Mr. James McCourt
Oregon Department of Environmental Quality
DEQ - Western Region
165 E. Seventh Ave., Suite 100
Eugene, OR 97401-3049

SUBJECT: Submittal of 2021 Annual Environmental Monitoring Report
Riverbend Landfill Solid Waste Disposal Site Permit No. 345
Yamhill County, Oregon

Dear Mr. McCourt:

This letter accompanies the enclosed copy of the 2021 annual environmental monitoring report (AEMR) for the Riverbend Landfill (RL) and provides a Statement of Compliance, per Section 17.3 of RL's Solid Waste Disposal Permit (SWDP) 345 issued to Riverbend Landfill Co. (RLC) from Oregon Department of Environmental Quality (DEQ) on December 3, 1999.

SCS Engineers (SCS), in Portland, Oregon prepared the 2021 AEMR at the request of RLC. The 2021 AEMR presents and evaluates the RL environmental monitoring data from 2021, consistent with the RL's SWDP, December 10, 2012 administrative modification to the SWDP, and DEQ-approved environmental monitoring plan (EMP) dated December 2014.

Statement of Compliance Per Section 17.3 of SWDP

Evaluation of the 2021 compliance groundwater monitoring data did not identify any significant change in groundwater quality at RL's point-of-compliance boundary, as defined in the site's SWDP and EMP.

Comparison of the 2021 compliance groundwater analytical results to the EMP-required data evaluation standards, which include prescriptive or statistically-derived concentration limits, showed the following notable results:

- No concentrations of volatile organic compounds (i.e., action limits or permit-specific concentration limits) were detected in groundwater samples collected from the site compliance wells in 2021, consistent with historical results.

- Three or more inorganic parameters were not detected at concentrations above their respective site-specific limits in site compliance wells during a single semiannual monitoring event.

- Consistent with previous results reported to the DEQ, dissolved iron, dissolved manganese, and/or total dissolved solids were detected at concentrations above their secondary groundwater quality standards (i.e., Oregon numerical groundwater quality guidance levels) in groundwater samples collected from a subset of site compliance wells in 2021. Conclusions from past evaluations of site groundwater have attributed the concentrations of these parameters in site groundwater to be reflective of natural variation in groundwater chemistry.

Please contact me (602) 757-3352 if you have any questions related to the contents of the AEMR.

Sincerely,



James L. Denson, Jr.
PNW/BC Environmental Protection Manager

Enclosure – RL's 2021 AEMR (hardcopy and electronic)

Cc (w/enclosure): Seth Sadofsky, DEQ (Eugene Office)
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2021 Annual Environmental Monitoring Report

Riverbend Landfill
McMinnville, Oregon

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McMinnville, Oregon 97128
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SCS ENGINEERS

04208022.22 | April 29, 2022

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2021 Annual Environmental Monitoring Report

Riverbend Landfill McMinnville, Oregon

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Appendices

Appendices listed below are provided in hard copy and in electronic format on the compact disc (CD) attached to this report:

Appendix A Historical Groundwater Elevation Data (including Hydrographs), and Field Water Quality Monitoring Results for Groundwater and Leachate Management System Samples
Appendix F Geochemical Diagrams (Piper [Trilinear] and Stiff Plots) for Groundwater and Leachate Management System Samples

The appendices listed below are only included in the compact disc (CD) attached to this report:

Appendix B Field Documentation
Appendix C 2021 Laboratory Analytical Reports (Including Chain-of-Custody Forms, Cation-Anion Balance Data, and Laboratory QA/QC Documentation) and TestAmerica Laboratories ORELAP Certification
Appendix D Results of Field and Laboratory QA/QC Review

Appendix E Time-Concentration Graphs of 2021 and Historical Groundwater, Surface Water, and Leachate Management System Samples Analytical Data
Appendix G: 2021 Annual Geotechnical Monitoring Report, Riverbend Landfill, McMinnville, Oregon

ACRONYMS AND ABBREVIATIONS

AEMR	annual environmental monitoring report
Alexin	Alexin Analytical Laboratories, Inc.
Ca	calcium
CD	compact disc
Cl	chloride
COC	chain of custody
DEQ	Oregon Department of Environmental Quality
DO	dissolved oxygen
EMP	environmental monitoring plan
Eurofins	Eurofins TestAmerica Laboratories, Inc.
Fe	iron
FGPM	Final Grading Plan Modification
FSDS	field sampling data sheet
ft/ft	feet per foot
ft/yr	feet per year
gal/acre/day	gallons-per-acre-per-day
GCCS	gas collection and control system
GEM	CES LandTec GEM™ 2000 or 5000 Landfill Gas Analyzer
HCO_3	bicarbonate alkalinity
K	potassium
LCRS	leachate collection and removal system
LDS	secondary leak detection system
LEL	lower explosive limit
LFG	landfill gas
LMS	leachate management system
MEK	2-butanone
Mg	magnesium
mg/L	milligrams per liter
Mn	manganese
MSE	mechanically stabilized earthen
Na	sodium
NGQGL	numerical groundwater quality guidance level
NGQRL	numerical groundwater quality reference level
ORELAP	Oregon Environmental Laboratory Accreditation Program
ORP	oxidation-reduction potential
PQL	practical quantitation limit
QA/QC	quality assurance/quality control
SCS	SCS Engineers
RL	Riverbend Landfill
RLC	Riverbend Landfill Co.
SM	Standard Methods
SMP	stability monitoring plan
SO_4	sulfate
SSL	site-specific concentration limit
S.U.	standard units
SWDP	solid waste disposal permit
TDS	total dissolved solids

ACRONYMS AND ABBREVIATIONS (CONTINUED)

TICs	tentatively identified compounds
TOC	total organic carbon
VOC	volatile organic compound
WBZ	water-bearing zone
WM	Waste Management

EXECUTIVE SUMMARY

This annual environmental monitoring report presents and evaluates monitoring data for groundwater, surface water, leachate management system (LMS) liquids (leachate and secondary leak detection system [LDS] liquids), and landfill gas (LFG) collected during 2021 at Riverbend Landfill (RL) in Yamhill County, Oregon. Monitoring and reporting were performed in 2021 consistent with the requirements of (1) RL's solid waste disposal site permit (SWDP) 345, issued by the Oregon Department of Environmental Quality (DEQ) on December 3, 1999, and subsequent addenda, and (2) RL's approved environmental monitoring plan (EMP) [SCS Engineers (SCS), 2014].

RESULTS AND CONCLUSIONS

Compliance Well Groundwater Quality

Analytical results of groundwater samples collected in 2021 from the site's compliance monitoring well network did not indicate any change in groundwater quality, as defined in the SWDP and the EMP. Volatile organic compounds (VOCs) were not detected in compliance well groundwater samples in 2021. Concentrations of three or more site-specific inorganic parameters were not detected above their respective statistically-derived site-specific limits (SSLs) in any groundwater sample collected from a single compliance well during a semiannual monitoring event.

Groundwater Quality in Detection Wells MW-5A and MW-5B

Low-level concentrations of VOCs were detected in groundwater samples collected from detection monitoring well MW-5A in 2021, consistent with historical results. Results of a remedial investigation performed in 1993 demonstrated that LFG is the source of VOCs impacting groundwater in the shallow water-bearing zone (WBZ) in the MW-5A area. Concentrations of VOCs historically detected in MW-5A have significantly decreased in response to active LFG collection at RL. VOCs were not detected in the groundwater sample collected in 2021 from detection well MW-5B (located adjacent to MW-5A and screened in the deep WBZ) or in compliance wells located hydraulically downgradient of MW-5A (including MW-12A), consistent with historical results.

Groundwater Quality in Poplar Tree Farm Detection Wells and Piezometers

Analytical results of groundwater samples collected in 2021 from detection wells MW-19A and MW-20A, located downgradient of the south and north poplar tree farm areas, respectively, continue to show incremental improvements (i.e., recent decreases or stabilized concentrations for inorganic parameters compared to historical increasing trends) in localized water quality in the shallow WBZ at these locations. These improvements are related to the suspension of leachate irrigation in the poplar tree farm areas in 2013.

Leachate Management System

The landfill module sumps collected and pumped 10.48 million gallons of liquids to the leachate pond in 2021, which is a reduction in generation compared to 12.51 million gallons in 2020. Pumping volume data from LDSs during 2021 showed that small volumes (relative to the volumes pumped from the associated primary leachate collection and removal systems [LCRS]) of liquids

detected in and pumped from LDSs are not attributed to leachate leakage through the primary liner systems.

Analytical results of liquid samples collected from the LCRSs and LDSs in 2021 are generally consistent with historical results. VOCs were not detected in liquid samples collected from LDS Sumps 4/5S and 8S. A few, low-level concentrations of VOCs were detected in the LDS Sumps 6/7S and 9S liquid samples, which is consistent with previous results that have shown sporadic detections of VOCs in these sumps. No changes in groundwater quality, including VOC detections, have been identified downgradient of Modules 6/7 and 9 at compliance monitoring well pairs MW-16A/B and MW-21A/B, respectively. It should be noted that liquids that accumulate in the LDS sumps are effectively contained and pumped into RL's primary LCRS.

Leachate Pond and Leachate Pond Secondary Detection System

An additional geomembrane liner was installed in the leachate pond in September/October 2017 to address defects and reduce the potential for leachate in the pond from leaking into the pond LDS sump. Monitoring results from 2021 continues to indicate that this improvement has been effective as only 1,410 gallons were pumped from the pond LDS in 2021. This volume is consistent with the decreased annual volumes pumped from this sump since the improvement was completed in 2017.

A review of analytical results from groundwater samples collected from monitoring wells in the vicinity of the leachate pond (i.e., wells MW-14A/B, MW-21A/B, and MW-22A) identified no changes in groundwater quality. These results indicate that liquids in the pond LDS sump are being effectively contained and removed, and that these liquids have not affected groundwater quality in the area near the leachate pond.

Landfill Gas Monitoring Results

Methane in perimeter (compliance) LFG monitoring probes and facility structures were not detected above regulatory compliance levels, consistent with previous results.

Compliance LFG monitoring results for 2021 continue to show that RL's LFG collection and control has been effective at managing lateral LFG migration in the subsurface at the compliance boundary and into facility structures.

1.0 INTRODUCTION

1.1 TERMS OF REFERENCE

SCS Engineers (SCS), in Portland, Oregon has prepared this annual environmental monitoring report (AEMR) on behalf of Riverbend Landfill Co. (RLC), to present and evaluate monitoring data for groundwater, surface water, leachate management system (LMS) liquids, and landfill gas (LFG) collected during 2021 at Riverbend Landfill (RL) in Yamhill County, Oregon (Figure 1-1). Monitoring and reporting were consistent with requirements in (1) RL's solid waste disposal permit (SWDP) No. 345, issued by Oregon Department of Environmental Quality (DEQ) on December 3, 1999 and subsequent addenda, and (2) RL's DEQ-approved environmental monitoring plan (EMP; SCS, 2014).

SCS performed 2021 compliance monitoring activities for groundwater, surface water, LMS liquids, and LFG. RL personnel conducted the management and performance monitoring of the LMS in 2021. With the exception of bacterial analyses in surface water samples, Eurofins TestAmerica Laboratories Inc. (Eurofins) in Denver, Colorado, analyzed all groundwater, surface water, and LMS liquid samples collected in 2021. Bacterial analyses for *E. coli* and fecal coliform in surface water samples were performed by Alexin Analytical Laboratories, Inc. (Alexin) in Tigard, Oregon.

1.2 SITE DESCRIPTION

RL is located approximately three miles southwest of McMinnville, Oregon, in Yamhill County (Figure 1-1). RL is owned and operated by RLC and is permitted by DEQ to receive municipal solid waste and approved special waste.

The RL property is over 700 acres and encompasses the active landfill and ancillary facilities, north and south poplar tree farm areas, a former recreational vehicle park west to southwest of the landfill, and undeveloped land south of the landfill extending to and beyond the South Yamhill River (see Figure 1-2). Agricultural land surrounds the landfill site.

The landfill is composed of nine constructed modules (Modules 1 through 9) covering 87.4 acres (see Figure 1-2) and includes a vertical expansion above existing permitted final grades in the southwest portion of the landfill. As of 2021 only Phase 1 of the vertical expansion has been built. The north and south poplar tree farm areas occupy approximately 43 acres.

1.3 SIGNIFICANT ACTIVITIES OF 2021

Significant site and monitoring activities performed at RL in 2021 include the following:

- Submitted the 2020 AEMR to DEQ (SCS, 2021a). DEQ approved the 2020 AEMR in a letter dated June 25, 2021 (DEQ, 2021).

- Submitted technical memorandum via email to DEQ on December 29, 2021, Subject: Riverbend Landfill: Updated Groundwater Concentration Limits and Proposed Modifications to the Environmental Monitoring Plan; Solid Waste Disposal Site Permit (SWDP) No. 345 (SCS, November 8, 2021b.)

- RL performed routine quarterly monitoring and inspections of the mechanically-stabilized earthen (MSE) berm in 2021. MSE Berm instrumentation (inclinometers, extensometer, and piezometers) monitoring activities were performed in accordance with the stability monitoring plan (SMP) provided by the geotechnical engineer (Geosyntec, 2013). This frequency was increased during onsite construction in May through September. The results of the monitoring performed throughout 2021 do not indicate stability concerns (Geosyntec, 2022).

1.4 SUMMARY OF SUPPORTING DOCUMENTATION

Supporting documentation is provided in the following report appendices:

- Appendix A: Historical groundwater elevations (including hydrographs), and field water quality monitoring results for groundwater and LMS samples.

- Appendix B (included only on the attached compact disc [CD]): Field documentation, including groundwater elevation survey forms, field sampling data sheets (FSDSs), site inspection checklists, and field report forms.

- Appendix C (included only on the attached CD): Laboratory analytical reports, including chain-of-custody (COC) forms, cation-anion balance data, and laboratory quality assurance/quality control (QA/QC) documentation for groundwater, surface water, and LMS samples. Appendix C also includes a copy of Eurofin's Oregon Environmental Laboratory Accreditation Program (ORELAP) certification.

- Appendix D (included only on the attached CD): Results of SCS's field and laboratory QA/QC reviews.

- Appendix E (included only on the attached CD): Time-concentration graphs of 2021 and historical groundwater, surface water, and LMS analytical data.

- Appendix F: Geochemical diagrams (Piper [Trilinear] and Stiff Plots) for groundwater and LMS samples.

- Appendix G (included only on the attached CD): 2021 Annual Geotechnical Monitoring Report, Riverbend Landfill, McMinnville, Oregon.

The CD provided with this AEMR also includes (1) the historical analytical database for groundwater, surface water, and LMS samples in a searchable (Excel) format, and (2) a complete electronic version of this 2021 AEMR.

2.0 HYDROGEOLOGIC SETTING

Numerous local and regional hydrogeologic investigations have been performed at and in the vicinity of RL. In general, investigations included (1) interpreting topographic maps, (2) drilling soil borings, (3) installing monitoring wells and piezometers, (4) conducting geophysical investigations, (5) collecting and analyzing soil, groundwater and leachate samples, and (6) analyzing aquifer hydraulic parameters. These studies provide the foundation for hydrogeologic interpretations and the technical basis for the environmental monitoring program at RL.

Most interpretive information on the site's geology was obtained from previous RL studies, in particular the additional hydrogeologic investigation conducted by EMCON (1994). Other geologic information was collected during drilling of boreholes for compliance and detection monitoring wells and piezometers (EMCON, 1995, 1996; CH2M Hill, 2000; SCS, 2015).

2.1 HYDROGEOLOGY

For the purposes of environmental monitoring at RL, groundwater occurs in two water-bearing zones (WBZs): (1) upper (shallow) silt-clay alluvial deposits (both Willamette Silt and late-Quaternary alluvium) comprised predominantly of bedded silts, clays, clayey silts and silty clays, and (2) lower (deep) sand-gravel deposits. Pliocene-age sand-gravel deposits overlay the Eocene bedrock deposits, are predominantly laterally continuous units, and consist mostly of sandy gravels and gravelly sands, with localized interbeds of clayey and silty gravels and clay and silt lenses.

Groundwater elevations measured in site groundwater monitoring wells and piezometers since January 1993 have been used to evaluate hydraulic parameters and flow characteristics of both WBZs. A description of these two WBZs based on interpretive information collected as part of previous hydrogeologic investigations (EMCON, 1994, 1995, and 1996; CH2M Hill, 2000; SCS, 2015) and groundwater monitoring (elevations and chemistry) performed since 1994 are provided below.

2.1.1 Upper (Shallow) Silt-Clay Water-Bearing Zone

Across most of RL, the groundwater flow direction and gradient in the upper shallow WBZ show minor seasonal and spatial variability, typically in response to variations in seasonal precipitation patterns. The direction of groundwater flow in the upper shallow WBZ is typically south-southeast, toward the South Yamhill River. In the extreme southwestern portion of the site, groundwater flow is predominantly toward the east. The historical seasonal range of groundwater gradients is generally from 0.005 to 0.01 foot per foot (ft/ft). Average groundwater flow velocities in the shallow WBZ generally range from 0.1 to 24.2 feet per year (ft/yr).

Historical groundwater level data for monitoring wells screened in the upper shallow WBZ near the South Yamhill River indicate that temporal fluctuations of approximately 10 to 15 feet occur. Groundwater elevations measured in those wells are typically higher than the river elevation, indicating that groundwater in the upper silt-clay WBZ discharges to the river. This relationship between the South Yamhill River and groundwater indicates that the South Yamhill River acts as a hydraulic boundary to groundwater flow in the shallow WBZ.

2.1.2 Lower (Deep) Sand-Gravel Water-Bearing Zone

Groundwater flow direction and gradient in the deep WBZ do not vary significantly as a result of seasonal changes in precipitation. In most areas of RL, groundwater flows toward the southeast, in the direction of the South Yamhill River, and shifts southward as it approaches the South Yamhill River. The historical seasonal range of groundwater gradients is generally from 0.0088 to 0.012 ft/ft. The average groundwater flow velocity in the deep WBZ has been estimated to be about 124 ft/yr.

Interpretation of RL stratigraphic information indicates that the deep WBZ does not receive direct recharge from precipitation in the vicinity of RL due to the presence of the overlying shallow WBZ, which has a relatively low hydraulic conductivity. Furthermore, because the lower sand-gravel stratigraphic unit partially transects the South Yamhill River, the river most likely represents a hydraulic barrier for groundwater in the lower sand-gravel zone. Historically, groundwater elevations measured in wells screened in the lower sand-gravel WBZ near the South Yamhill River were consistently higher than the river elevation. The differences in elevation suggest that groundwater in the lower sand-gravel WBZ discharges to the river during those time periods.

RL has a production well (PW-1) near the facility entrance that is completed in and pumps water from the deep WBZ. There is another production well (MB-1) on the former Bernard property on the east side of the RL entrance that is also active. During the dry season, when PW-1 and MB-1 are used most frequently, groundwater elevations in the deep WBZ are affected (decreased by 10 to 20 feet) in the northwest corner of RL by production well pumping.

3.0 ENVIRONMENTAL MONITORING NETWORKS AND SCHEDULES

3.1 GROUNDWATER MONITORING NETWORK AND SCHEDULE

3.1.1 Monitoring Network

The groundwater monitoring network at RL is shown in Figure 1-2. Monitoring well and piezometer construction information is summarized in Table 3-1. Wells and piezometers labeled "A" are screened in the upper silt-clay unit, and those labeled "B" are screened in the lower sand-gravel unit, except for the designations of MW-1A and MW-1B, which are reversed. Wells and piezometers with no designation (e.g., MW-2R, P-01) are screened in the upper silt-clay unit.

3.1.2 Monitoring Schedule

SCS performed spring sampling activities April 12 through 16, 2021 (hereafter referred to as Spring). SCS performed fall sampling activities November 15 through 19, 2021 (i.e., Fall). The 2021 semiannual and annual groundwater monitoring schedule is summarized in Table 3-2 and included the following activities:

- Compliance monitoring: MW-12A/B, MW-14A/B, MW-15A/B, MW-16A/B, and MW-21A/B were monitored semiannually in Spring and Fall 2021.

- Detection monitoring: Detection well MW-5A was sampled semiannually in Spring and Fall 2021 and detection well MW-5B was sampled annually in Spring 2021. MW-5A/B were monitored for VOC concentrations, consistent with the EMP.

- Poplar tree farm detection monitoring: MW-19A and MW-20A were monitored semiannually in Spring and Fall 2021, and MW-20B was monitored annually in Spring 2021 (see Figure 1-2). These wells monitor groundwater quality downgradient of the south and north poplar tree farm areas, respectively. Water quality monitoring of piezometers P-05A, P-06A, and P-07A located in and near the north poplar tree farm area was also performed Spring 2021.

- Detection monitoring downgradient of leachate pond: MW-22A was not monitored annually in Spring 2021 due to insufficient groundwater in the well to purge and sample, consistent with past years. During subsequent site visit in Fall 2021, sufficient water was available and this well was sampled.

- Groundwater elevation monitoring: Groundwater elevations were monitored semiannually in Spring and Fall 2021 in the compliance and detection monitoring wells listed above, and in monitoring wells (and well pairs) MW-1A/B, MW-2R, MW-3A/B, MW-4A/B, MW-6A/B, MW-9A/B(R), MW-10A/B, MW-17A, MW-18A/B, MW-22B, MW-23A/B, MW-24, and MW-25A/B, and piezometers P-01, P-02, P-03, SA-BH-1, SA-BH-3, SA-BH-5, SA-BH-6, and GT-10-12. Groundwater elevation was also measured in onsite production well PW-1.

Locations of site monitoring wells and piezometers are shown in Figure 1-2. Well construction information for site monitoring wells in RL's groundwater monitoring program, including reference elevations, screen interval elevations, and screened unit, is provided in Table 3-1.

3.2 SURFACE WATER MONITORING NETWORK AND SCHEDULE

Surface water quality samples were collected from the South Yamhill River adjacent to the landfill property in April 2021 at the following locations (see Figure 1-2):

- SYR SW-1 located upstream of the RL operations.
- SYR SW-2 located downstream of the RL operations and near the Unnamed Creek that runs along the eastern property boundary of RL.
- SYR MW-12A located at the South Yamhill River gauging station to the southwest and downgradient of MW-12A[1] .

3.3 LEACHATE MANAGEMENT SYSTEM MONITORING NETWORK AND SCHEDULE

The LMS monitoring network at RL is shown in Figure 1-2 and includes leachate collection and removal systems (LCRSs) and secondary leak detection systems (LDSs). The LCRSs remove leachate from landfill modules and convey it to a double-lined collection pond for storage, treatment and disposal. The LDSs provide containment and monitoring below the primary LCRSs.

The 2021 leachate and LDS monitoring schedule is summarized in Table 3-2 and included collecting the following samples:

- Liquid from the leachate pond and LDS semiannually in Spring and Fall 2021.
- Leachate from Modules 1/5, 6/7, 8, and 9 LCRS sumps annually in Spring 2021.
- Liquid from Modules 4/5, 6/7, 8, and 9 LDS sumps annually in Spring 2021.

3.4 LANDFILL GAS MONITORING NETWORK AND SCHEDULE

The LFG monitoring network at RL is shown in Figure 1-2. LFG compliance monitoring is performed to determine whether explosive gases (i.e., methane) are migrating from the landfill into facility structures or to RL's property boundary. Monitoring of compliance LFG monitoring probes and facility structures was performed quarterly in 2021 at the following locations:

- Compliance boundary LFG probes: CGP-09R, CGP-10R, CGP-11, CGP-12, CGP-13, and CGP-14.
- Facility structures: office building, scale house, maintenance building, operations building, and landfill gas to energy building.

[1] Surface water sample location SYR MW-12A was added in 2016 as part of the MW-12A informal preliminary assessment (IPA) and is monitored for informational purposes and is not included in the EMP.

To supplement the six compliance LFG probes, there are six performance LFG probes (PGP-01 [dual completion], PGP-02 [dual completion], PGP-03, PGP-04, PGP-06, and PGP-08R) designed to monitor performance of the facility's GCCS. These performance probes are located adjacent to the facility waste modules (Modules 1, 2, 3, and 8; see Figure 1-2) and are not used for compliance LFG monitoring and reporting purposes and are noted for informational purposes only.

4.0 FIELD PROCEDURES

4.1 GROUNDWATER

During each semiannual monitoring event, depth-to-groundwater levels in site monitoring wells and piezometers were measured using an electronic water-level probe before groundwater samples were collected. Historical and 2021 depth-to-groundwater measurements and groundwater elevation data are summarized in Appendix A (Table A-1).

Compliance and detection wells were purged and sampled using dedicated QED® bladder pumping systems with pump intakes in the approximate middle of the well screen interval. Piezometers P-05A, P-06A, and P-07A, which are not fitted with dedicated bladder pumps, were purged and sampled using a portable peristaltic pump.

Traditional Purging. Compliance and detection monitoring wells (and piezometers) screened in the shallow WBZ were sampled using the traditional purging technique that involves purging each well of at least three casing volumes (unless the well purged dry). Purged groundwater was discharged through a flow-through cell to measure field water quality parameters. At a minimum, after each casing volume was purged, water quality parameters (temperature, pH, specific conductance, oxidation-reduction potential [ORP], and dissolved oxygen [DO] content) were measured and recorded on a FSDS (provided in Appendix B). Groundwater in each well was sampled after at least three casing volumes were purged (unless the well purged dry) and the water quality parameters stabilized. After stabilization, representative groundwater samples were collected directly from the dedicated pump discharge tubing and into laboratory-supplied containers. For wells that were purged dry, groundwater samples are collected after the well has either recovered to at least 90 percent of its original water level or within a 24-hour period. This was done at P-06A during the Spring monitoring event.

Low Flow Purging. Compliance and detection monitoring wells screened in the lower WBZ were sampled using the low-flow purging and sampling technique. Low-flow purging requires purging at a low discharge rate, while monitoring water quality parameters (temperature, pH, specific conductance, ORP, and DO content) at approximately 0.1 to 0.25-gallon intervals during purging. Purge rates were maintained at approximately 400 milliliters per minute or less, and groundwater levels were maintained within 0.3 feet of their initial water level measurement. Once pumping levels stabilize and water quality parameters are within the stabilization criteria outlined in the EMP (SCS, 2014) groundwater samples were collected.

The cumulative volume of groundwater purged and field-measured water quality parameters were recorded on an FSDS after each measurement (see Appendix B). Table A-2 (Appendix A) summarizes historical and 2021 field-measured water quality parameters in groundwater samples collected at RL.

The condition of wells, piezometers, and the surrounding area were noted on the landfill inspection checklist forms (see Appendix B). All wells were in good condition, secure, and accessible.

4.2 SURFACE WATER

Surface water samples were collected at SYR SW-1, SYR SW-2, and SYR MW-12A by dipping laboratory-supplied sample bottles into the surface water and allowing them to slowly fill.

4.3 LEACHATE MANAGEMENT SYSTEM

Liquid samples from the LCRS and LDS sumps were collected using dedicated submersible pumps installed in each sump's riser pipe. Sample bottles were filled directly from submersible pump discharge lines. Leachate grab samples were collected from the leachate pond by lowering a non-dedicated, single-use disposable polyvinyl chloride bailer into the pond at four locations. Leachate pond grab samples were then composited, and the composite used to fill sample bottles.

Field parameters (temperature, pH, specific conductance, ORP, and DO) were measured during sampling of each leachate and LDS sump and recorded on FSDSs (provided in Appendix B). Table A-3 (Appendix A) summarizes 2021 and historical field-measured water quality parameters in LMS liquid samples.

4.4 LANDFILL GAS

LFG concentrations (i.e., methane) were measured in RL's LFG monitoring probes and facility structures using a CES LandTec GEM™ 2000 or 5000 landfill gas analyzer (GEM). The probes were purged using the internal pump in the GEM for a minimum of one minute before LFG concentrations stabilized and could be recorded. The facility structures were monitored for LFG using the GEM in potentially confined areas where air movement may be restricted. At each of these locations, LFG concentrations were recorded after the GEM was purged and stabilized for at least one minute. Some of the facility structures are also equipped with dedicated continuous monitoring fixed gas detectors.

4.5 FIELD QA/QC PROCEDURES

Environmental and QA/QC samples were packed in coolers with wet ice and sent using COC protocol by overnight courier to Eurofins in Denver, Colorado for analysis, except for the surface water samples collected for fecal coliform and *E. coli* analyses, which were submitted to Alexin in Tigard, Oregon. Samples shipped and delivered to Eurofins and Alexin arrived at acceptable temperatures and in good condition.

Field QA/QC procedures included (1) collecting at least one field blank and one field duplicate sample for each day of sampling or for every ten samples, whichever was more frequent, and (2) carrying and submitting laboratory-supplied trip blanks with the VOC samples collected in the field.

5.0 LABORATORY METHODS

This section summarizes laboratory methods used in 2021. Analytical laboratory reports (with COCs and cation-anion balance values) are provided in Appendix C.

5.1 ANALYTICAL PARAMETERS FOR GROUNDWATER

Consistent with the site's EMP (SCS, 2014b), 2021 semiannual environmental monitoring samples were analyzed as follows:

- Groundwater samples were analyzed for parameters summarized in Table 5-1.
- Surface water samples collected from the South Yamhill River were analyzed for parameters summarized in Table 5-2.
- LMS samples were analyzed for parameters summarized in Table 5-3.

Groundwater samples were analyzed by Eurofins[2] using applicable U.S. Environmental Protection Agency (EPA) methods in SW-846, third edition (USEPA, 1986), EPA Methods for Chemical Analysis of Water and Wastes (MCAWW) (USEPA, 1983), and Standard Methods (SM) for Examination of Water and Wastewater, eighteenth edition (American Public Health Association, et. al., 1992).

5.2 LABORATORY QA/QC PROCEDURES AND RESULTS

Results of SCS's QA/QC reviews of the laboratory reports (Appendix C) indicated that 2021 analytical data were acceptable for their intended use (see Appendix D).

Laboratory data and QA/QC procedures were reviewed to determine whether the data met QC requirements, consistent with the procedures outlined in the EMP. Eurofins incorporated its laboratory data quality review comments in the QA/QC case narrative included with each final laboratory report.

The hold time was exceeded on the reanalysis of TDS during the Fall event for samples MW-15A, MW-15B and the associated field blank. The original results appeared anomalous and the reanalysis was done after the hold time. The reanalysis results are reported and flagged as such in the laboratory report.

The hold time was exceeded for the Fall event sample MW-20A for bicarbonate alkalinity due to an instrument malfunction. The hold time exceedance is appropriately flagged in the laboratory report.

Cation-anion balance results for groundwater and LMS samples collected in 2021 are summarized in Table 5-4. Cation-anion balances in groundwater samples collected in 2021 were below the QC guidance level of variability of plus or minus 10 percent. Consistent with the SWDP and the EMP, Eurofins performed a library search for tentatively identified compounds (TICs) during the Method 8260 VOC scan. The TICs are presented in the laboratory reports.

[2] A copy of Eurofin's Oregon Environmental Laboratory Accreditation Program (ORELAP) certification is provided in Appendix C.

6.0 MONITORING RESULTS AND DATA EVALUATION

6.1 GROUNDWATER ELEVATIONS

The 2021 groundwater elevation data and flow directions were consistent with historical data (and interpretations) reported in previous AEMRs submitted to DEQ. Historical depth-to-groundwater measurements and groundwater elevation data, including data collected in 2021, are provided in Appendix A (see Table A-1); hydrographs for each well are also provided in Appendix A. The groundwater elevations were plotted on the site map and contoured to depict the groundwater potentiometric surface of the shallow and deep WBZs (see Figures 6-1 through 6-4).

6.1.1 Shallow (Silt-Clay) WBZ

The 2021 shallow WBZ groundwater potentiometric elevation and gradient data were reasonably consistent with historical data, although the effects from the 2021 precipitation patterns were notable. There was extremely low precipitation during April (0.52 inches), before the Spring monitoring event occurred. The result was insufficient water for sampling in monitoring well MW-22A. In November, 4.67 inches of rain fell during the 14 days immediately preceding the monitoring event, including 2.8 inches during the 2 days prior to the monitoring event. The effects observed onsite were elevated water levels at several wells, including MW-22A with a measured depth to water at 3.2 feet below the top of casing. While the wide variations are noted in water levels, the groundwater flow direction remained the same, as detailed below.

- The groundwater flow direction in the shallow WBZ was generally south to southeast, toward the South Yamhill River (see Figures 6-1 and 6-3).

- Groundwater elevations measured in the western and southwestern portion of the site showed that (1) the groundwater flow was more towards the east-southeast (see Figures 6-1 and 6-3), and (2) both the flow direction and hydraulic gradient are influenced by the South Yamhill River.

- The groundwater elevations measured in piezometer P-07A are typically higher than elevations measured in nearby monitoring wells and piezometers resulting in a localized groundwater elevation high centered around this piezometer (see Figures 6-1 and 6-3).

- Horizontal hydraulic gradients in the shallow WBZ in 2021 ranged from approximately 0.010 to 0.040 ft/ft, which were consistent with historical results. The highest horizontal gradients occurred in the southwest section of the site between MW-19A and the South Yamhill River.

6.1.2 Deep (Sand-Gravel) WBZ

The 2021 deep WBZ groundwater potentiometric elevation and gradient data were generally consistent with historical data and showed the following:

- In most areas of RL, groundwater in the deep WBZ flowed generally south to more southeasterly in the eastern portion of the site (see Figures 6-2 and 6-4). The flow direction

was more southerly as groundwater approaches the South Yamhill River in the area of wells MW-12B, MW-14B, MW-15B, MW-22B, and MW-23B during the Spring 2021.

- Horizontal hydraulic gradients in the deep WBZ in 2021 ranged from 0.006 to 0.02 ft/ft. Typically, the gradient is steeper in the southwestern portion of the site where the deep WBZ is thinner.

6.1.3 Vertical Hydraulic Gradients

Trends in groundwater elevations between the shallow and deep WBZs (exhibited by adjacent piezometers and monitoring well pairs) are generally similar, with periods of high and low elevations in both WBZs occurring at the same time of the year. The highest water levels in the shallow and deep WBZs typically occur during the Spring event, while the lowest elevations occur during the Fall event. As described in Section 6.1.1, unseasonably low precipitation occurred in the Spring, and the heavy precipitation prior to the Fall monitoring event resulted in comparatively higher water levels during the Fall event. Although seasonal trends are similar in the two WBZs, the magnitudes of the water-level fluctuations are variable indicating a low degree of hydraulic connection between the shallow and deep WBZs.

The 2021 monitoring well pair groundwater elevation data (for 15 of the 17 well pairs) typically show higher water levels in the shallow WBZ than those in the deep WBZ, indicating downward vertical hydraulic gradients (see Table 6-1). For monitoring well pairs MW-9A/BR and MW-14A/B, the 2021 groundwater elevation data showed upward vertical hydraulic gradients during both monitoring events. Slight upward vertical gradients also occurred during the Spring event in well pair MW20A/B and during the Fall event at MW-21A/B (see Table 6-1).

6.2 GROUNDWATER ANALYTICAL RESULTS

As summarized in Section 6.2.2, SCS did not identify a significant change in groundwater quality in 2021 at RL's point-of-compliance boundary, as defined in the site's SWDP and EMP.

6.2.1 Evaluation Methods

Analytical results of the 2021 groundwater samples collected from site compliance wells MW-12A/B, MW-14A/B, MW-15A/B, MW-16A/B, and MW-21A/B were evaluated to determine whether a potentially significant change in water quality occurred based on the following criteria, consistent with RL's EMP (SCS, 2014):

- Detection of one or more VOCs above a practical quantitation limit (PQL), which are permit-specific concentration limits for vinyl chloride and action limits for all other VOCs. Any VOC detected and verified (i.e., confirmed during subsequent resampling) at a concentration above the PQL would be considered a change in groundwater quality.

- Confirmed detections of three or more inorganic (non-hazardous) parameters at concentrations (as verified by resampling if necessary) above their respective statistically-derived site-specific limits (SSLs) in a sample collected from a site compliance well during a routine monitoring event. Well-specific SSLs for total organic carbon (TOC), total dissolved solids (TDS), bicarbonate (HCO_3), chloride (Cl), sulfate (SO_4), Mg, dissolved potassium (K),

and dissolved sodium (Na) are specified in the EMP (SCS, 2014) and summarized in Table 6-2.

Additionally, a statistical trend analysis was performed on 2021 and historical inorganic parameter data using the Sen's Test method with the DUMPStat® computer software. The analysis was conducted on data collected from compliance wells MW-12A/B, MW-14A/B, MW-15A/B, MW-16A/B, and MW--21A/B and detection wells/piezometers MW-5A, MW-19A, MW-20A, MW-20B, MW-22A, P-05A, P-06A, and P-07A. Statistically significant concentration trends in groundwater collected from these site compliance and detection wells using the 2021 and historical data set are summarized in Table 6-3, and trend graphs are provided in Appendix E.

6.2.2 Compliance Well Groundwater Samples Analytical Results

SCS did not identify a significant change in groundwater quality in 2021 at RL's point-of-compliance boundary, as defined in the site's SWDP and EMP. Analytical results supporting this conclusion include the following:

- No VOCs were detected in groundwater samples collected from site compliance wells, consistent with historical results.

- Three or more inorganic parameters were not detected at concentrations above their respective SSLs in site compliance wells during a single semiannual monitoring event (see Table 6-2).

Other notable results based on evaluation of analytical data for compliance well groundwater samples collected in 2021 include the following (see Table 6-2):

- Individual parameters detected at a concentration above its SSL were:

    - Na in MW-12A during Fall and Spring 2021,

    - TDS and TOC in MW-15A groundwater sample during Fall 2021.

    - Bicarbonate alkalinity in MW-15B and the duplicate sample from MW-16B during Fall 2021, and

Since there were not three or more exceedances in any one groundwater sample, these results do not meet the criteria for a potentially significant change in groundwater quality, as described in Section 6.2.1.

Additional 2021 data observations include:

- Statistical trend analysis results of 2021 and historical compliance groundwater analytical data were consistent with previous results except for one increasing trend and three where it changed to no significant trend (see Table 6-3 and time-concentration graphs provided in Appendix E).

- No order-of-magnitude increases in parameter concentrations or anomalous data were identified in compliance groundwater analytical data, as shown in time-concentration graphs provided in Appendix E.

- Field water quality parameter values were generally consistent with historical values and trends (see Appendix A, Table A-2). The field-measured pH values were below the secondary standard range of 6.5 to 8.5 standard units (S.U.) in groundwater samples collected during the Spring and/or Fall 2021 sampling event from wells MW-12A, MW-14A, MW-15A, MW-16A, and MW-21A. Groundwater collected from site monitoring wells (and piezometers) screened in the shallow (silt-clay) WBZ has been shown to have an intrinsic pH that is often below 6.5 S.U. (USA Waste, Inc., 1997). DEQ has agreed with this conclusion (DEQ, 1998).

- Dissolved iron (Fe), dissolved Mn, and TDS were detected at concentrations above their secondary groundwater quality standards (i.e., per Oregon numerical groundwater quality guidance levels [NGQGLs]) of 0.3, 0.05, and 500 mg/L, respectively, in groundwater samples collected from the site compliance wells listed below, consistent with previous results:

  - Fe in MW-12B, MW-14B, and MW-16B.

  - Mn in MW-12B, MW-14B, MW-15B, MW-16A, MW-16B, and MW-21B.

  - TDS in MW-16B.

The Fe and Mn concentrations that were above the NGQGLs were consistent with historical concentrations (see Appendix E) previously reported to the DEQ. The results of an IPA conducted in 2001 concluded that the elevated Fe and Mn concentrations in groundwater samples were attributable to natural variation in groundwater chemistry and reflective of background groundwater conditions (HWA Geosciences, Inc., 2001). This conclusion is further supported by Fe and Mn analytical results from upgradient monitoring wells sampled as part of the 5-year comprehensive monitoring event, last performed in 2018, that showed levels above the NGQGLs (SCS, 2019).

6.2.3 Analytical Results for Detection Well Groundwater Samples

6.2.3.1 Detection Monitoring Wells MW-5A/MW-5B

Detection monitoring wells are not part of the compliance monitoring network and are sampled to track groundwater quality or to monitor historical detections that are not a component of the current compliance monitoring network.

Low concentrations of four VOCs (benzene, chlorobenzene, 1,4-dichlorobenzene, and cis-1,2-dichloroethene) were detected in samples collected in 2021 from MW-5A at concentrations that were consistent with recent results (see Table 6-4). Although benzene hasn't been recently detected in groundwater from MW-5A, it was commonly detected in 2005 through 2010. VOCs were not detected in groundwater samples collected from detection well MW-5B (located adjacent to MW-5A and screened in the deep WBZ) in 2021, or in groundwater collected from compliance monitoring wells located hydraulically downgradient of MW-5A, including MW-12A.

Results of a remedial investigation performed in 1993 (EMCON, 1993) demonstrated that LFG is the source of VOCs impacting shallow groundwater in the MW-5A area. The number and concentrations of VOCs originally detected in MW-5A groundwater have significantly decreased since the early 1990s (see Table 6-4 and Figure 6-5). These trends indicate that the GCCS continues to be effective at (1) reducing VOC concentrations in shallow groundwater near MW-5A and (2) mitigating lateral migration of VOCs, as noted by DEQ (DEQ, 2001).

6.2.3.2 Poplar Tree Farm Detection Wells and Piezometers

Sample analytical results in 2021 for detection wells MW-19A and MW-20A, located downgradient of the south and north poplar tree farm areas, respectively, continue to show that suspension of leachate irrigation in the poplar tree farm areas since 2013 has had positive effects on MW-19A and MW-20A water quality. Recent results that support this conclusion include stabilized or decreasing concentrations for (1) Ca, Cl, Mg, Mn, Na, SO_4 and TDS in MW-19A groundwater and (2) Ca, Cl, Mg, Mn, Na, SO_4, TDS, and TOC in MW-20A groundwater.[3]

Consistent with the EMP, SCS evaluated analytical results for groundwater samples from detection monitoring wells by reviewing 2021 data for order-of-magnitude increases over historical results using Sen's statistical trend analysis.

Notable results based on evaluation of the analytical data for groundwater samples collected in 2021 (and historically) from detection wells MW-19A, MW-20A, and MW-20B and piezometers P-05A, P-06A, and P-07A installed to monitor the poplar tree farm areas include the following:

- No VOCs were detected in detection wells MW-19A, MW-20A, and MW-20B.[4]
- No order-of-magnitude increase in parameter concentrations or anomalous data were identified (see time-concentration graphs provided in Appendix E).
- Statistical trend analysis results were generally consistent with previous results (see Table 6--3 and time-concentration graphs provided in Appendix E), except for a statistically decreasing trend for Nitrate + Nitrite in P-05A groundwater.
- Consistent with historical results previously reported to DEQ, Fe, Mn, and TDS (November only) were detected at concentrations above their NGQGLs of 0.3, 0.05, and 500 mg/L, respectively, in MW-20A groundwater samples collected in 2021. It should be noted that Cl concentrations in MW-20A groundwater continued to decrease and were below the NGQGL of 250 mg/L in 2021.
- Fe and/or Mn were detected at concentrations above their NGQGLs of 0.3 and 0.05 mg/L, respectively, in MW-19A, MW-20B, P-05A, and P-06A groundwater samples collected in 2021, consistent with historical results previously reported to DEQ.

[3] Although recent data for these parameters in MW-19A and MW-20A groundwater show stabilized or decreasing concentrations, statistical trend analysis (Sen's Test) of the entire historical data set (2001 through 2021) continues to identify these parameters as statistically significant increasing trends.

[4] VOCs are not required by the site's EMP to be analyzed in piezometer P-05A, P-06A, and P-07A groundwater samples.

As part of a continued evaluation of the groundwater quality near MW-20A, RL continues to monitor piezometer P-07A, located approximately 300 feet south of MW-20A. Laboratory results of groundwater samples collected from P-07A in 2021 (and since 2012 when this well was installed) indicate that Cl concentrations were considerably lower than recent Cl concentrations detected in MW-20A groundwater. Additionally, none of the other statistically significant increasing concentration trends identified in MW-20A groundwater were identified in P-07A groundwater, consistent with previous results (see Table 6-3).

6.2.3.3 Geochemical Diagrams for Compliance and Detection Well Samples

Ionic chemistries of groundwater samples collected in 2021 are generally consistent with historical results. Piper (trilinear) and Stiff diagrams showing the relative concentrations of common cations and anions in groundwater samples collected in 2021 and historically from site compliance and detection wells are provided in Appendix F.

6.3 SURFACE WATER ANALYTICAL RESULTS

Analytical results of South Yamhill River 2021 surface water samples showed uniformity in concentrations of water quality parameters in samples collected both upstream and downstream of RL, including the sample collected downgradient of MW-12A (SYR SW-12A). Field water quality parameters and laboratory analytical results of inorganic parameters in surface water samples collected in Spring 2021 are summarized in Tables 6-5 through 6-8.

6.4 LANDFILL GAS MONITORING RESULTS

LFG monitoring of the perimeter (compliance) LFG probes (CGP-09R, CGP-10R, CGP-11, CGP-12, CGP-13, and CGP-14) did not detect methane at or above the compliance level of 5 percent (%) (i.e., lower explosive limit [LEL] of methane) in 2021.

Historical (since 2011) and 2021 monitoring data for compliance boundary LFG probes and facility structures are summarized in Table 6-9.

Methane was not detected at or above the GEM detection limit of 0.1 % in the facility structures (office, scale building, maintenance building, operations building, and landfill gas to energy building) in 2021. The GEM detection limit of 0.1 % is below the 1.25% (i.e., 25% of the LEL of methane) compliance level for structures.

7.0 OPERATIONAL AND PERFORMANCE MONITORING RESULTS OF LEACHATE MANAGEMENT SYSTEMS

This section presents operational and performance monitoring results for RL's LMS to meet the requirements of SWDP Sections 17.5 and 17.6 for submitting an annual leachate treatment report.

7.1 OPERATION AND MAINTENANCE OF LEACHATE MANAGEMENT SYSTEMS

No LMS performance issues were identified in 2021 by RLC staff. A discussion of the LMS maintenance and operations are provided below.

7.1.1 LMS Maintenance

The following includes notable maintenance activities completed to the LMS in 2021:

February
- Removed, cleaned and reinstalled pump in Module 9A.
- Removed, cleaned and reinstalled condensate pump 8.
- Reinstalled pump in Module 9B following cleaning.
- Checked Module 8 pump and changed power rotation.

April
- Replaced power cord to the pump in Module 9.

August
- Removed, cleaned and reinstalled condensate pump 6.
- Replaced Module 4/5 pump with a temporary pump until pump can be replaced.
- Installed new pump and power cord in Module 4/5.

September
- Removed, cleaned and reinstalled condensate pump 7.

November
- Removed, cleaned and reinstalled pump in Module 9B.
- Diagnosed Module 9B pump and replaced motor.
- Cleaned out riser pipe at Module 9B.

December
- Replaced pump in Module 9B.
- Replaced transducer in Module 8.

7.1.2 LMS Operations

Leachate head on liner is continuously monitored in all sumps. Levels above the 12-inch threshold occurred intermittently in 2021 due to short-term operational issues of the LCRS pumping systems at Module 4/5, Module 8 and Module 9 as follows. All instances of the 12-inch threshold events were reported to the DEQ in a timely manner and each system was put back into service once the repairs were completed. A summary of the events reported to DEQ is listed below:

- January: Module 9 on January 29 due to due to low amperage to the transducer, causing power to the pump to shut off.
- February: Module 8 on February 4 due to sump collector repairs in proximal locations that discharge into Module 8. Module 9 on February 9 due to viscous leachate buildup on the pump impellers, restricting flow and pumping efficiency. Module 8 on February 16 and 17 due to excess buildup of leachate in an upgradient sump that feeds into the Module 8 sump creating a level that the pump cannot immediately remove.
- March: Module 9B on March 26 due pump repair and replacement.
- August: Module 4/5 on August 12-19 due to pump failure. An undersized pump was used in place of the damaged pump until a properly sized pump could be secured from the vendor; as such, the small pump at times was unable to keep levels below the compliance threshold.
- November: Module 9 on November 4 due to erroneous readings from a transducer with excessive buildup causing the high-level readings. Module 9 on November 5 due to servicing the pump in response to sub optimal performance.

7.2 LCRS AND LDS PUMPING SYSTEM PERFORMANCE RESULTS

7.2.1 LCRS and LDS Pumping Volumes

Monthly and annual leachate and LDS liquid pumping volume data for 2021 are summarized in Table 7-1. Notable results include the following:

- Total volume of leachate collected by RL's LMS from the landfill modules was 10.48 million gallons, which is similar to 2020 (11.34 million gallons) and 2019 (10.53 million gallons) but a notable decrease relative to the total volumes in 2018 (16.36 million gallons) and 2017 (23.48 million gallons).
- Monthly leachate pumping volumes from RL's combined LCRSs ranged from 1,855,642 gallons in January to 325,056 gallons in September.
- Total volume of liquid pumped from the LDS sumps was 203,724 gallons. Total volume from the leachate pond LDS sump was 1,410 gallons. The 2021 leachate pond LDS pumped liquid volume continues to show a significant reduction in volume compared to pre-2018 volumes. The decrease in liquids pumped from the leachate pond LDS is a result of the improvement made to the primary geomembrane liner in September/October 2017 (SCS, 2018).

In terms of gallons-per-acre-per-day (gal/acre/day), approximate quantities of liquid generated in 2021 from LDSs included Modules 4/5 (10.5 to 42.3), Modules 6/7 (2.2 to 4.6), Module 8 (1.9 to 7.8), and Module 9 (0 to 37.7), with some variability across the site.

Data from LDSs indicates influence from seasonality, with relatively higher flows coinciding with seasonal high groundwater levels in the late fall/winter and spring, and relatively lower flows during low groundwater conditions in the summer. As discussed in Section 7.3, these results further support the historical conclusion that liquids detected in and pumped from RL's landfill LDSs are associated with groundwater intrusion and not leakage through the primary landfill liner system.

7.2.2 Leachate Management

Site leachate generated at RL in 2021 was managed by collection, storage, and truck-haul to offsite, permitted wastewater treatment facilities. The truck haul program removed approximately 16.51 million gallons of leachate from the site in 2021, which included liquids collected from RL's GCCS.

7.3 LCRS LEACHATE AND LANDFILL LDS LIQUID ANALYTICAL RESULTS

Time-concentrations graphs presenting the 2021 and historical analytical results for LCRS and LDS samples are provided in Appendix E. Notable results based on evaluation of the LCRS and LDS analytical data are described below:

- In general, leachate samples collected from the LCRS sumps are characterized by significantly higher relative concentrations of Cl and Na composition and higher TDS relative to corresponding LDS samples (Appendix F Figures F24-28).

- Consistent with historical results, VOCs detected in one or more of the leachate samples collected from the Modules 1/5P, 6/7P, 8P, and 9P included acetone, benzene, MEK, carbon disulfide, ethylbenzene, toluene, trichloroethene, vinyl chloride, total xylenes, 1,2,4 trimethylbenzene, 1,3,5-trimethylbenzene, 1,4-dichlorobenzene, cis 1,2-dichloroethene, isopropylbenzene, 4-isopropyltoluene, naphthalene, and 4-methyl-2-pentanone (see Table 7-2).

- Ionic chemistries of leachate samples collected from Module 1/5P, 6/7P, 8P, and 9P LCRS sumps were different to varying degrees than the ionic chemistries of liquid samples collected from their associated LDS sumps (see Piper [trilinear] and Stiff diagrams provided in Appendix F). The most pronounced difference was between ionic chemistries of leachate and LDS samples collected from Module 1/5P and 4/5S (Figure F-24).

- No VOCs were detected in liquid samples collected from LDS Sumps 4/5S and 8S (see Table 7-2).

- Only a low-level concentration of naphthalene was detected in 2021 LDS Sump 6/7S liquid sample, consistent with previous results that have shown sporadic low-level detections of this VOC and some others (see Table 7-2). It should be noted that liquids that accumulate in the LDS Sump 6/7S are effectively contained and pumped into RL's primary LCRS. As such, these sporadic detections have not influenced groundwater quality as no VOCs have been detected downgradient of Modules 6/7 at compliance monitoring well pair MW-16A/B.

- Only low-level concentrations of benzene, ethylbenzene and total xylenes were detected in the Spring 2021 LDS Sump 9S liquid sample. This is a marked decrease from the 11 VOCs detected in 2019. Given that liquids in the LDS Sump 9S sumps are effectively contained and pumped into RL's primary LCRS, these detections have not influenced groundwater quality as no VOCs have been detected downgradient of Module 9 at compliance monitoring well pair MW-21A/B.

Based on the 2021 liquid pumping data, the limited volume of liquids observed in and pumped from RL's secondary LDS sumps (compared to leachate volumes) are not attributed to potential leachate leakage through the primary liner systems. Instead, these liquids are likely a result from inward gradients from the underlying groundwater, i.e., limited quantities of groundwater that enter the LDSs and are removed by pumping, as noted in Section 7.2.1. Analytical results supporting this finding include the following:

- Geochemical compositions of liquid samples collected from the LDS sumps are either very similar to or closely aligned with the chemistry of groundwater samples collected from the shallow WBZ compliance monitoring wells (see Figure 7-1).

- The VOC signature of leachate samples collected from the LCRS sumps were distinctively different than liquid samples collected during the same monitoring event from the LDS sumps associated with the same landfill modules. Also notable is that no VOCs were detected in liquid samples collected from LDS Sumps 4/5S and 8S.

- Inorganic chemistries of leachate and LDS liquid samples are different. Leachate impacts to LDS liquids would be expected to affect the inorganic chemistry of LDS liquids, such that there would be a close correlation in inorganic chemistries.

7.4 LEACHATE POND AND LDS LIQUID ANALYTICAL RESULTS

Comparison of 2021 and past groundwater, leachate pond, and leachate pond LDS analytical results indicates that liquids in the pond LDS are being effectively contained and removed, and that these liquids have not affected groundwater quality in the area near the leachate pond.

Laboratory reports for liquid samples collected from the leachate pond in 2021 are provided in Appendix C. Time-concentration graphs presenting the 2021 and historical analytical results for the leachate pond and LDS samples are provided in Appendix E.

The volume of liquid pumped from the leachate pond LDS in 2021 (1,410 gallons) decreased significantly compared to previous years (66,137 gallons in 2017) before the 2017 liner repair was completed. This liner repair was documented in the construction quality assurance report (Geosyntec, 2018). Liquid sampling of the pond LDS sump continues to track the effectiveness of the 2017 liner repair.

Notable results based on an evaluation of the 2021 leachate pond and LDS sump analytical data include the following:

- Concentrations of acetone and MEK were detected in the leachate pond sample during the Spring 2021 event (see Table 7-2). MEK, which has sporadically been observed in the leachate pond results, was absent during the Fall 2021 event and only acetone was observed to be present, at a lower concentration than what was detected in the spring.

- The ionic chemistries of leachate pond samples collected in 2021 were similar to previous results (see Piper diagram provided in Appendix F). Samples are characterized by significantly higher concentrations of sodium and HCO_3 relative to other ionic species.

Comparison of 2021 and past groundwater, leachate pond, and leachate pond LDS analytical results indicates that liquids in the pond LDS are being effectively contained and removed, and that these liquids have not affected groundwater quality in the area near the leachate pond. Analytical results of groundwater samples collected from monitoring wells in the vicinity of the leachate pond (i.e., wells MW-14A/B and MW-21A/B, and MW-22A) did not show any changes in groundwater quality in 2021. Additionally, geochemical evaluation of groundwater analytical results for samples collected from these wells did not indicate any potential mixing of groundwater with leachate pond liquid (e.g., Cl enrichment) (see Figure 7-2).

8.0 RECOMMENDED MODIFICATIONS

Groundwater monitoring program modifications proposed for 2022 include updating the EMP, and using the new SSLs as proposed in a memo dated November 8, 2021 (see Section 1.3). Additional proposed modifications to the groundwater and LFG monitoring networks will be incorporated into the updated EMP. These proposed changes will optimize the monitoring networks based on the current site conditions.

9.0 REFERENCES

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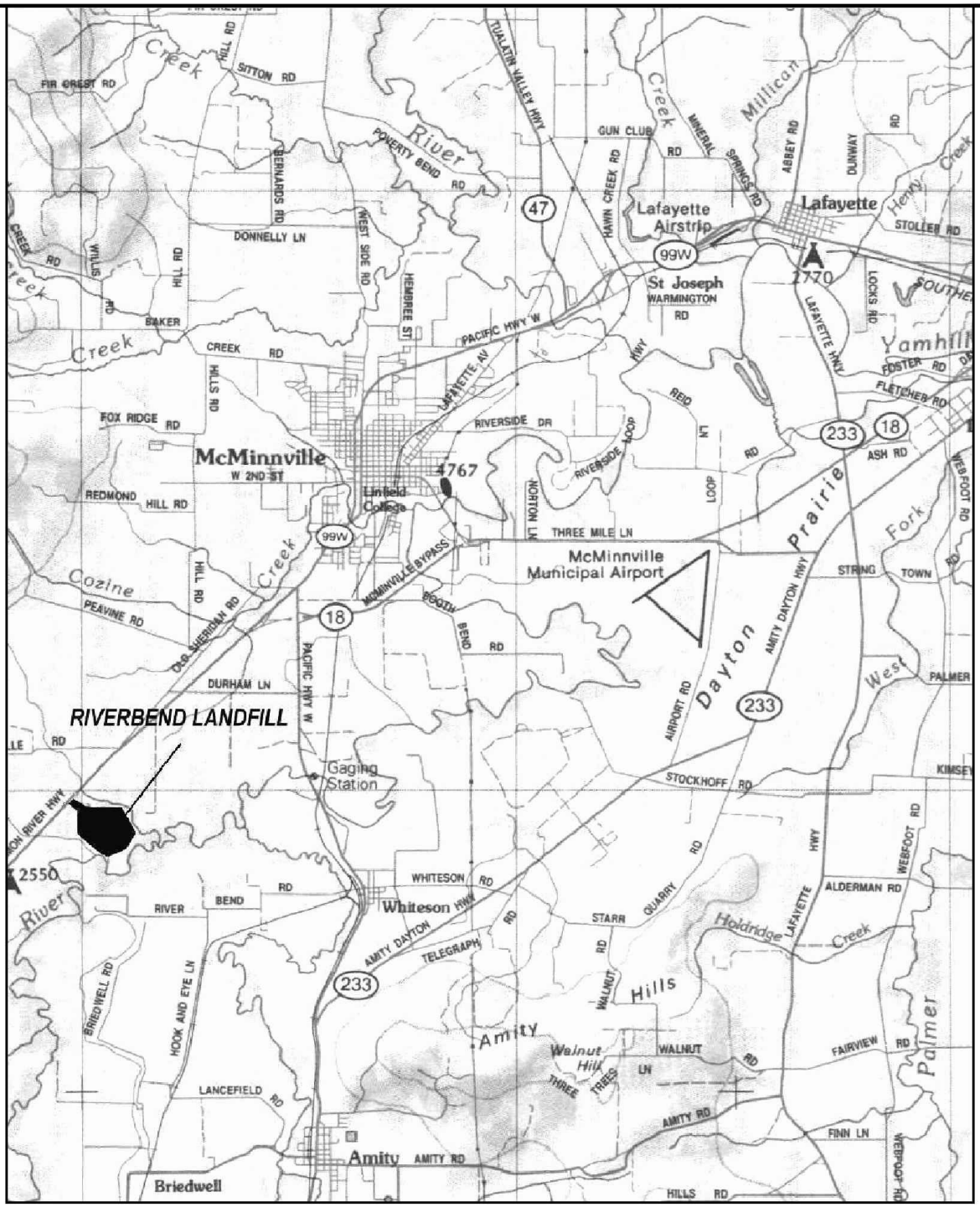
FIGURES



Basemap from Oregon Atlas and Gazetteer (DeLorme)

0 1 2

MILES



WASTE MANAGEMENT

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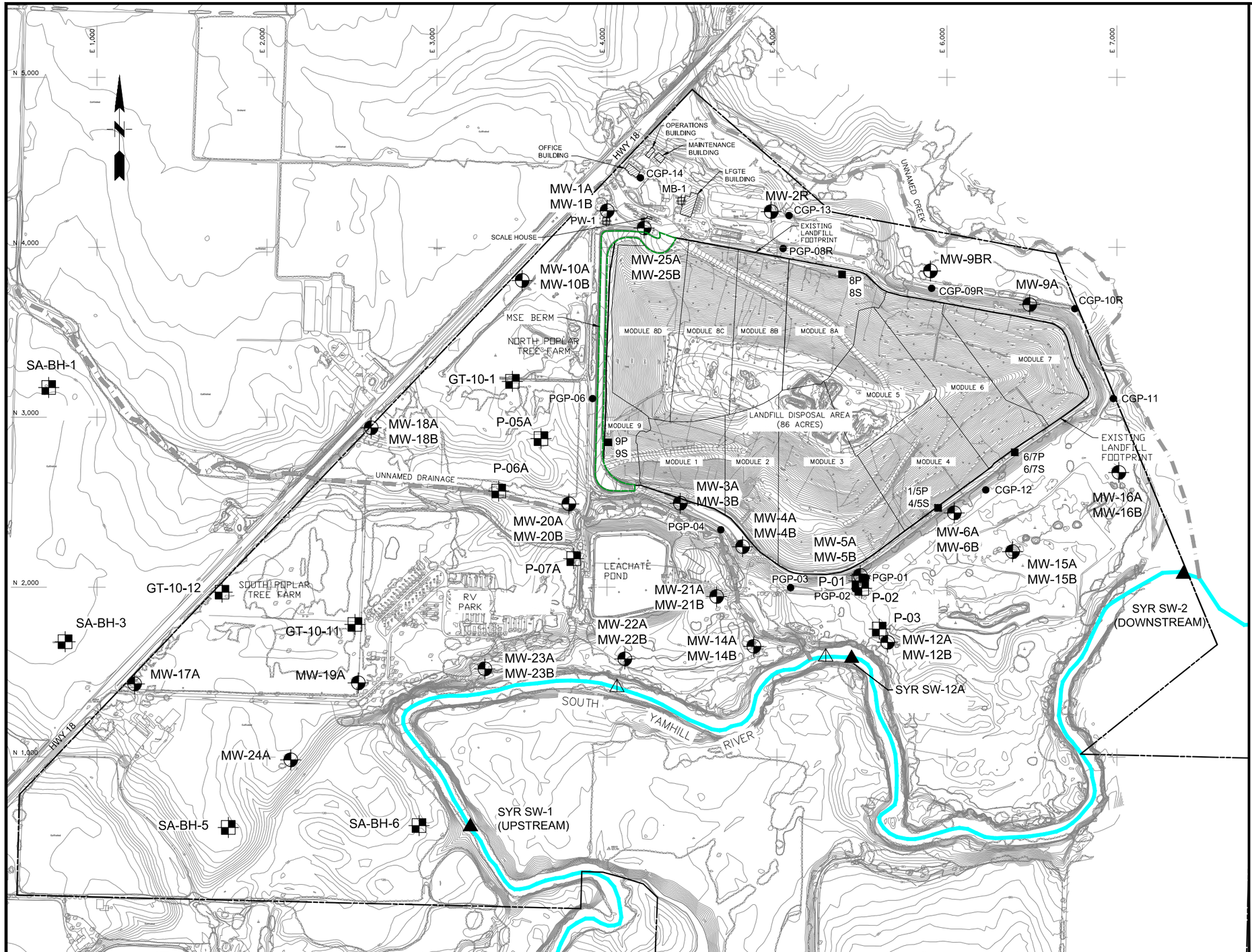
PROJECT NO.	DES BY
04208022.22	B.L.
SCALE	CHK BY
AS SHOWN	B.L.
CAD FILE	APP BY
FIGURE 1-1	G.H.

SITE LOCATION MAP

RIVERBEND LANDFILL
McMINNVILLE, OREGON

DATE
MARCH 2022

FIGURE
1-1



LEGEND:

- Topographic Contours (Surveyed)
- Topographic Contours (USGS)
- Property Boundary
- Flow Line - Yamhill River
- Flow Line - Tributary Stream
- MW-19A — Groundwater Monitoring Well
- P-05A — Piezometer
- PW-1 — On-Site Water Well
- CGP-11 — Compliance Landfill Gas Monitoring Probe
- PGP-06 — Performance Landfill Gas Monitoring Probe
- 6/7P 6/7S — LCRS and LSCS Monitoring Location
- SYR SW-1 — South Yamhill River Sampling Location (Approximate)
- South Yamhill River Gauging Station

SOURCE:

1) Existing contours based on aerial topography provided by Miller Creek Associates, date of photograph January 27, 2022. Contours are based on NAVD 88.

2) Horizontal Datum: Assumed
Iron pipe at scale house = N4000.000 E4000.000
Iron pipe at maintenance building = N2825.685 E4000.000

NOTES:

1) Monitoring wells and piezometers with "A" designation are screened in the shallow (Silt-Clay) water-bearing zone, and monitoring wells and piezometers with "B" designation are screened in the deeper (Sand-Gravel) water-bearing zone.

2) Piezometers with "GT" and "SA-BH" designations are screened in the shallow (Silt-Clay) water-bearing zone.

3) Leachate Collection and Removal System (LCRS) monitoring locations are identified by a "P" designation and Leak Detection System (LDS) monitoring locations are identified with a "S" designation.

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WASTE MANAGEMENT

0 600 1200
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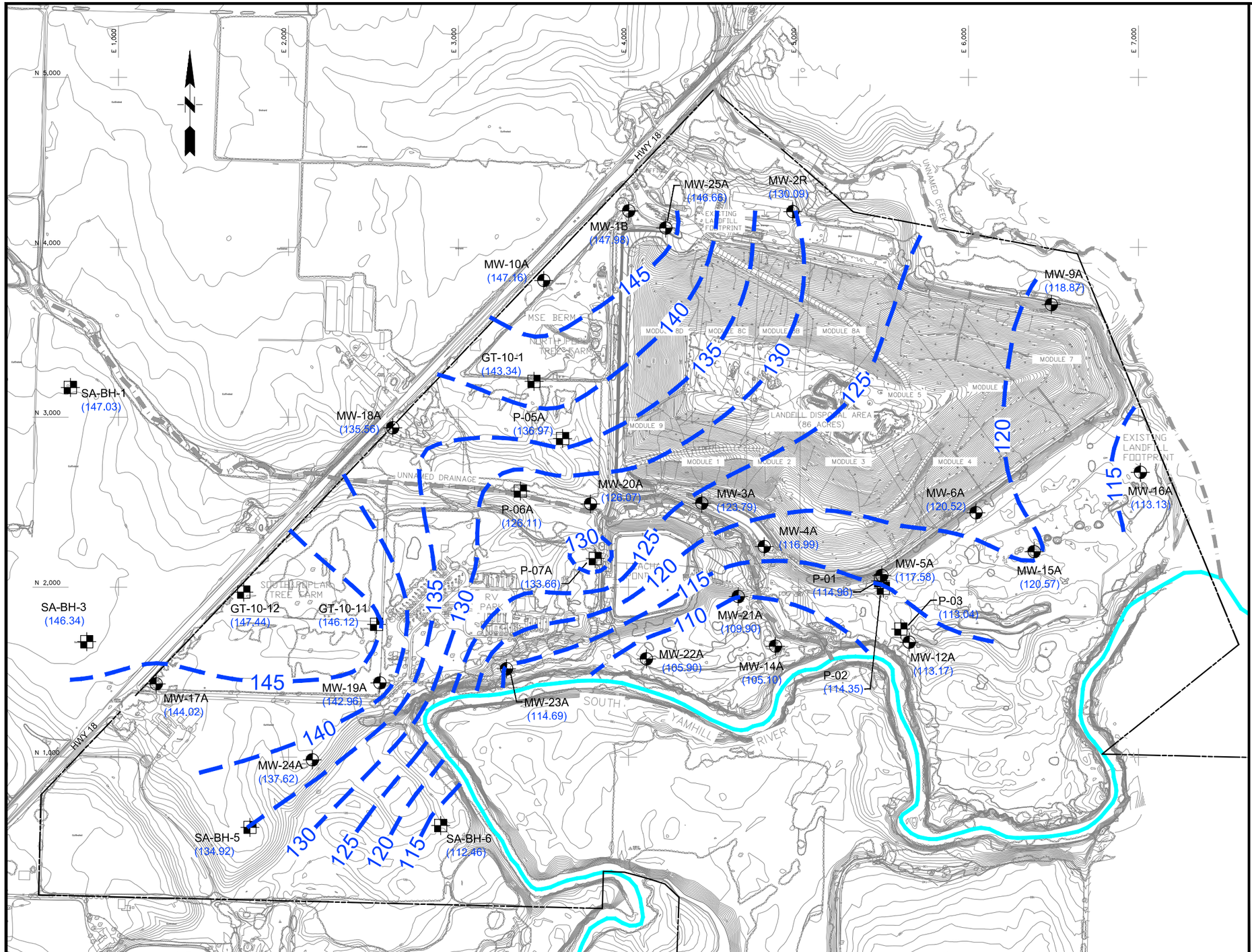
PROJECT NO. 04208022.22	DES BY B.L.
SCALE AS SHOWN	CHK BY B.L.
CAD FILE FIGURE 1-2	APP BY G.H.

SITE PLAN AND MONITORING LOCATIONS

RIVERBEND LANDFILL
McMINNVILLE, OREGON

DATE MARCH 2022

FIGURE 1-2



LEGEND:

- Topographic Contours (Surveyed)
- Topographic Contours (USGS)
- Property Boundary
- Flow Line - Yamhill River
- Flow Line - Tributary Stream
- 110 — Potentiometric Surface Contours for shallow water - bearing zone (Feet MSL) Contour Interval = 5 Feet (Quieried where uncertain)
- MW-19A — Groundwater Monitoring Well
- P-05A — Piezometer
- (136.97) — Groundwater Elevation in Feet Above Mean Sea Level on April 12, 2021

SOURCE:

1) Existing contours based on aerial topography provided by Miller Creek Associates, date of photograph January 27, 2022. Contours are based on NAVD 88.

2) Horizontal Datum: Assumed
Iron pipe at scale house = N4000.000 E4000.000
Iron pipe at maintenance building = N2825.685 E4000.000

NOTES:

1) Monitoring wells and piezometers with "A" designation are screened in the shallow (Silt-Clay) water-bearing zone, and monitoring wells and piezometers with "B" designation are screened in the deeper (Sand-Gravel) water-bearing zone.

2) Piezometers with "GT" and "SA-BH" designations are screened in the shallow (Silt-Clay) water-bearing zone.

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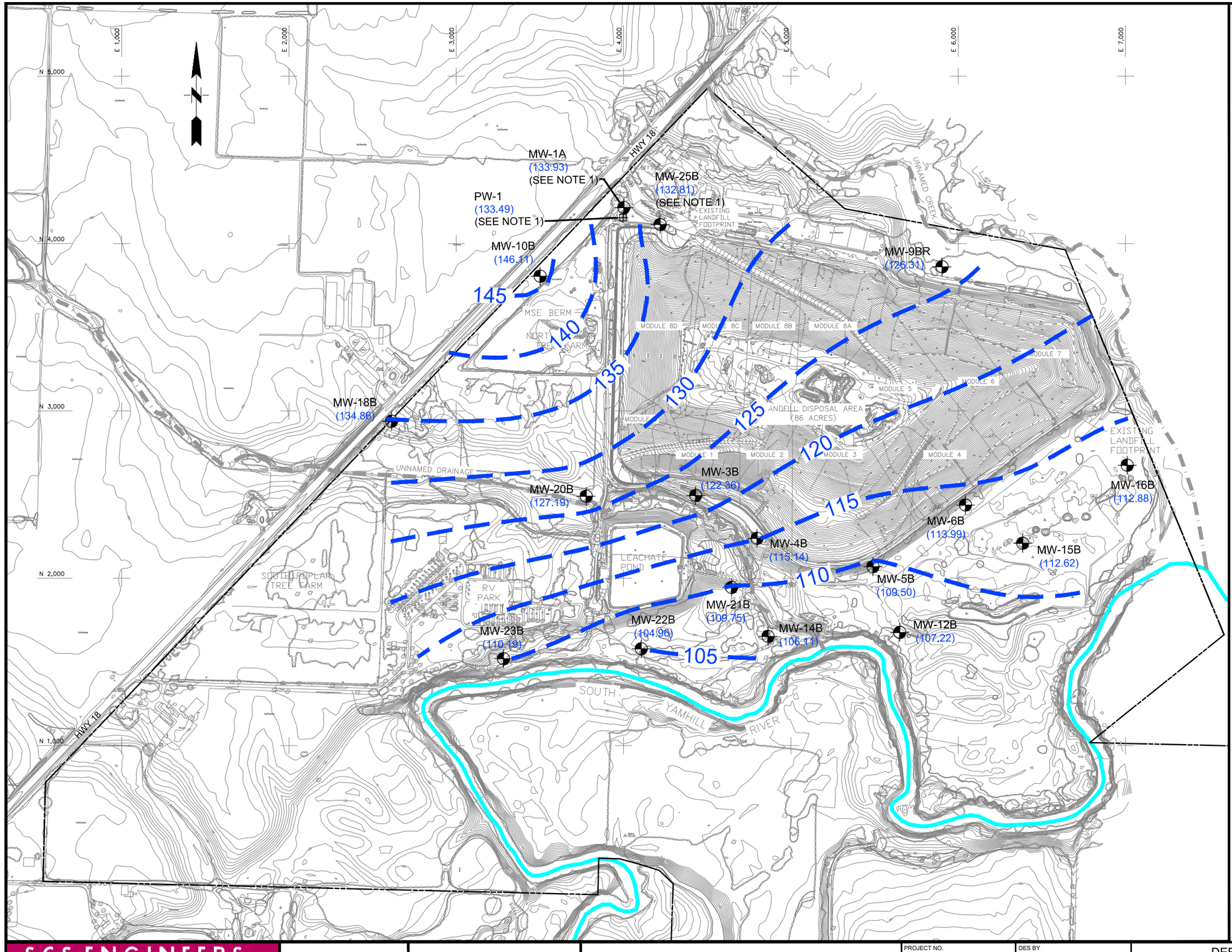
PROJECT NO. 04208022.22	DES BY B.L.
SCALE AS SHOWN	CHK BY B.L.
CAD FILE FIGURE 6-1	APP BY G.H.

SHALLOW WATER - BEARING ZONE
POTENTIOMETRIC SURFACE CONTOURS
(APRIL 12, 2021)

RIVERBEND LANDFILL
McMINNVILLE, OREGON

DATE APRIL 2022

FIGURE 6-1



LEGEND:

- Topographic Contours (Surveyed)
- Topographic Contours (USGS)
- Property Boundary
- Flow Line - Yamhill River
- Flow Line - Tributary Stream
- 120 — Potentiometric Surface Contours for deep water - bearing zone (Feet MSL) Contour Interval = 5 Feet
- MW-18B — Groundwater Monitoring Well
- PW-1 — On-Site Water Well
- (133.49) — Groundwater Elevation in Feet Above Mean Sea Level on April 12, 2021

SOURCE:

1) Existing contours based on aerial topography provided by Miller Creek Associates, date of photograph January 27, 2022. Contours are based on NAVD 88.

2) Horizontal Datum: Assumed
Iron pipe at scale house = N4000.000 E4000.000
Iron pipe at maintenance building = N2825.685 E4000.000

NOTES:

1) Water level in well is depressed due to periodic pumping of the site production well (PW-1). These wells were not used in the interpretation of potentiometric contours.

2) Monitoring wells and piezometers with "A" designation are screened in the shallow (Silt-Clay) water-bearing zone, and monitoring wells and piezometers with "B" designation are screened in the deeper (Sand-Gravel) water-bearing zone.

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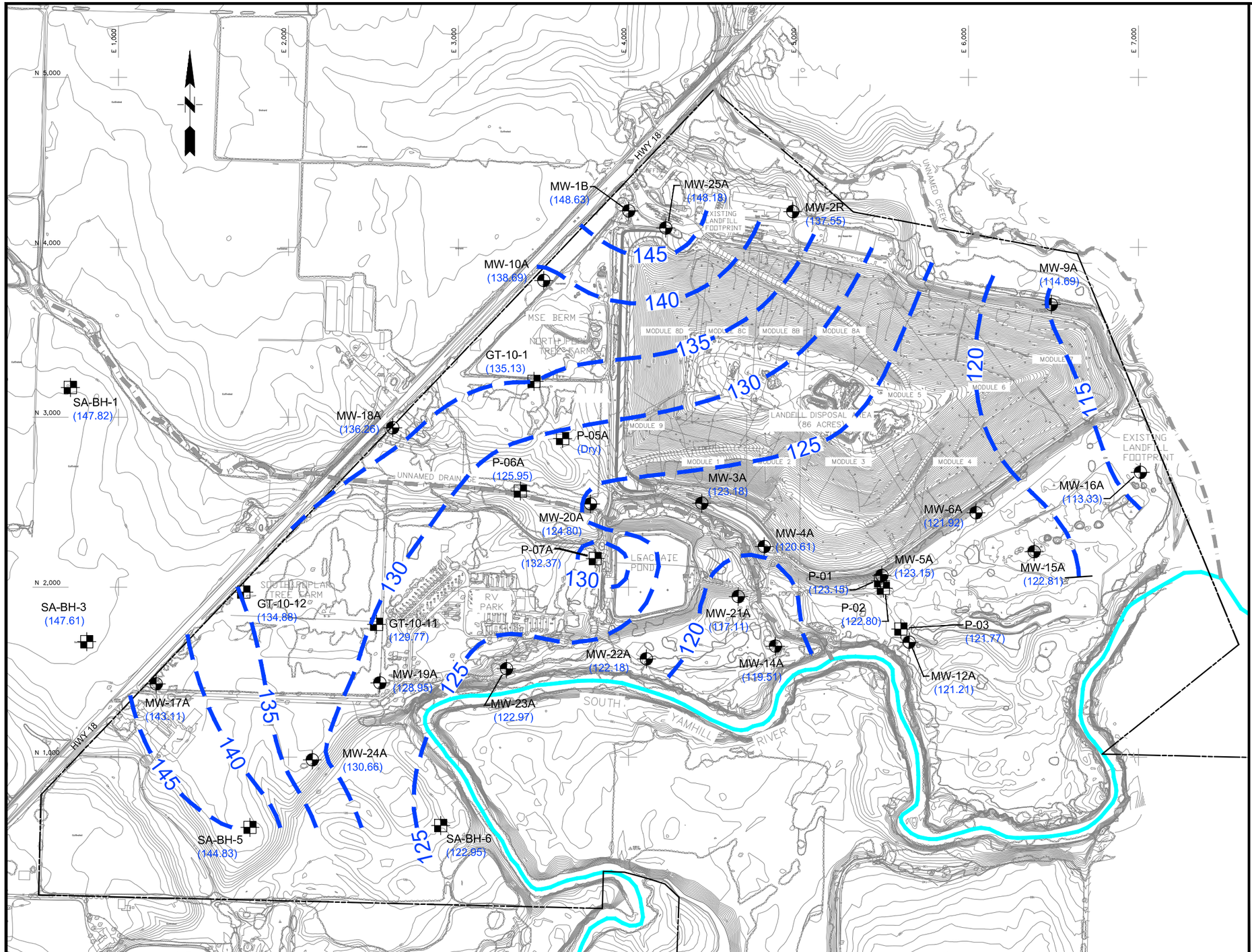
PROJECT NO. 04208022.22	DES BY B.L.
SCALE AS SHOWN	CHK BY B.L.
CAD FILE FIGURE 6-2	APP BY G.H.

DEEP WATER - BEARING ZONE
POTENTIOMETRIC SURFACE CONTOURS
(APRIL 12, 2021)
RIVERBEND LANDFILL
McMINNVILLE, OREGON

DATE APRIL 2022

FIGURE 6-2



LEGEND:

- Topographic Contours (Surveyed)
- Topographic Contours (USGS)
- Property Boundary
- Flow Line - Yamhill River
- Flow Line - Tributary Stream
- 120 — Potentiometric Surface Contours for shallow water - bearing zone (Feet MSL) Contour Interval = 5 Feet (Quieried where uncertain)
- MW-19A — Groundwater Monitoring Well
- P-06A — Piezometer
- (125.95) — Groundwater Elevation in Feet Above Mean Sea Level on November 15, 2021

SOURCE:

1) Existing contours based on aerial topography provided by Miller Creek Associates, date of photograph January 27, 2022. Contours are based on NAVD 88.

2) Horizontal Datum: Assumed
Iron pipe at scale house = N4000.000 E4000.000
Iron pipe at maintenance building = N2825.685 E4000.000

NOTES:

1) Monitoring wells and piezometers with "A" designation are screened in the shallow (Silt-Clay) water-bearing zone, and monitoring wells and piezometers with "B" designation are screened in the deeper (Sand-Gravel) water-bearing zone.

2) Piezometers with "GT" and "SA-BH" designations are screened in the shallow (Silt-Clay) water-bearing zone.

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WASTE MANAGEMENT

0 600 1200
SCALE IN FEET

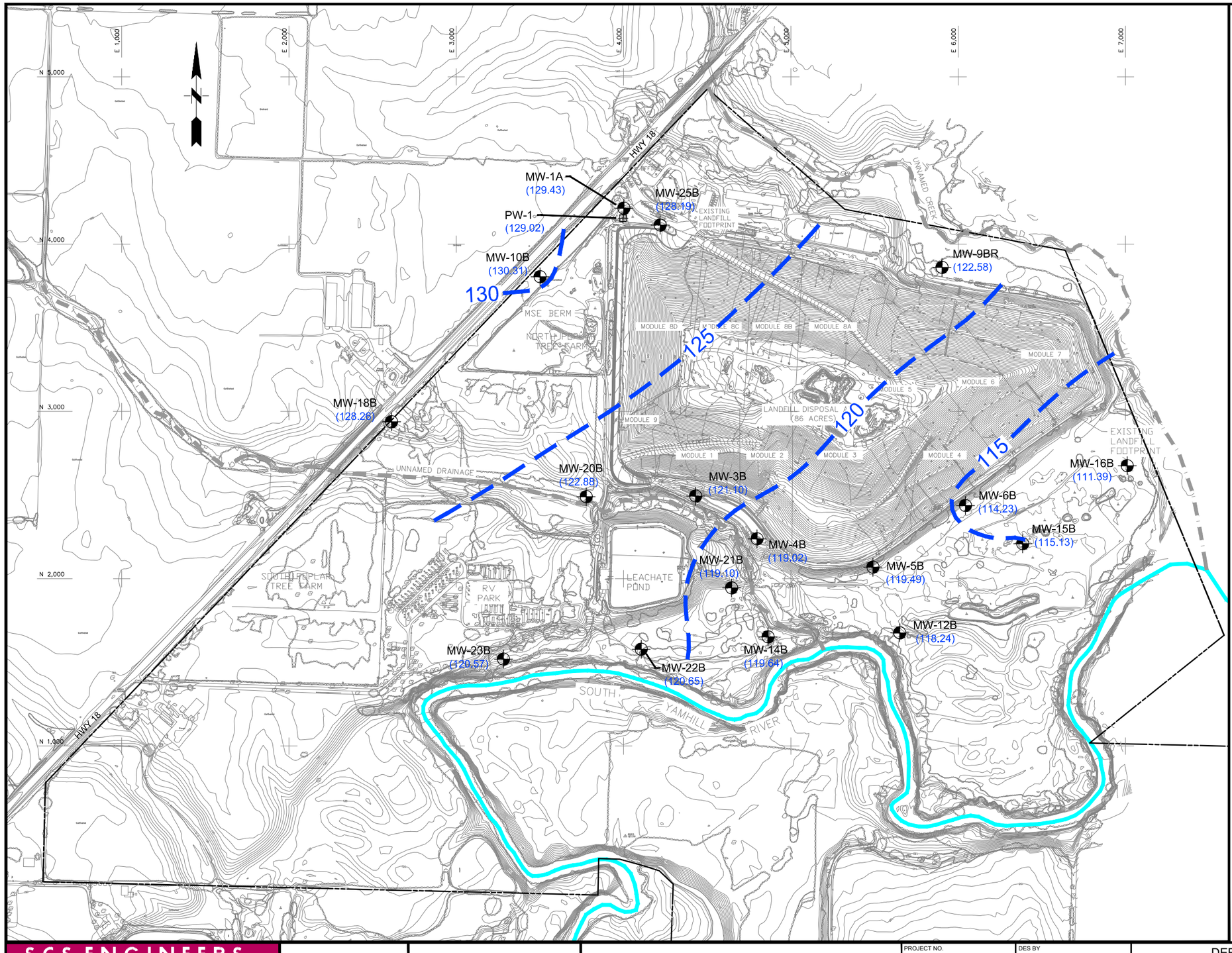
PROJECT NO. 04208022.22	DES BY B.L.
SCALE AS SHOWN	CHK BY B.L.
CAD FILE FIGURE 6-3	APP BY G.H.

SHALLOW WATER - BEARING ZONE
POTENTIOMETRIC SURFACE CONTOURS
(NOVEMBER 15, 2021)

RIVERBEND LANDFILL
McMINNVILLE, OREGON

DATE APRIL 2022

FIGURE 6-3



LEGEND:

- Topographic Contours (Surveyed)
- Topographic Contours (USGS)
- Property Boundary
- Flow Line - Yamhill River
- Flow Line - Tributary Stream
- 120 — Potentiometric Surface Contours for deep water - bearing zone (Feet MSL) Contour Interval = 5 Feet
- MW-18B — Groundwater Monitoring Well
- PW-1 — On-Site Water Well
- (129.02) — Groundwater Elevation in Feet Above Mean Sea Level on November 15, 2021

SOURCE:

1) Existing contours based on aerial topography provided by Miller Creek Associates, date of photograph January 27, 2022. Contours are based on NAVD 88.
2) Horizontal Datum: Assumed
   Iron pipe at scale house = N4000.000 E4000.000
   Iron pipe at maintenance building = N2825.685 E4000.000

NOTES:

1) Monitoring wells and piezometers with "A" designation are screened in the shallow (Silt-Clay) water-bearing zone, and monitoring wells and piezometers with "B" designation are screened in the deeper (Sand-Gravel) water-bearing zone.

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WM WASTE MANAGEMENT

0 600 1200
SCALE IN FEET

PROJECT NO. 04208022.22	DES BY B.L.
SCALE AS SHOWN	CHK BY B.L.
CAD FILE FIGURE 6-4	APP BY G.H.

DEEP WATER - BEARING ZONE
POTENTIOMETRIC SURFACE CONTOURS
(NOVEMBER 15, 2021)

RIVERBEND LANDFILL
McMINNVILLE, OREGON

DATE APRIL 2022

FIGURE 6-4

Figure 6-5
Volatile Organic Compounds Detected in MW-5A Groundwater Samples
Riverbend Landfill

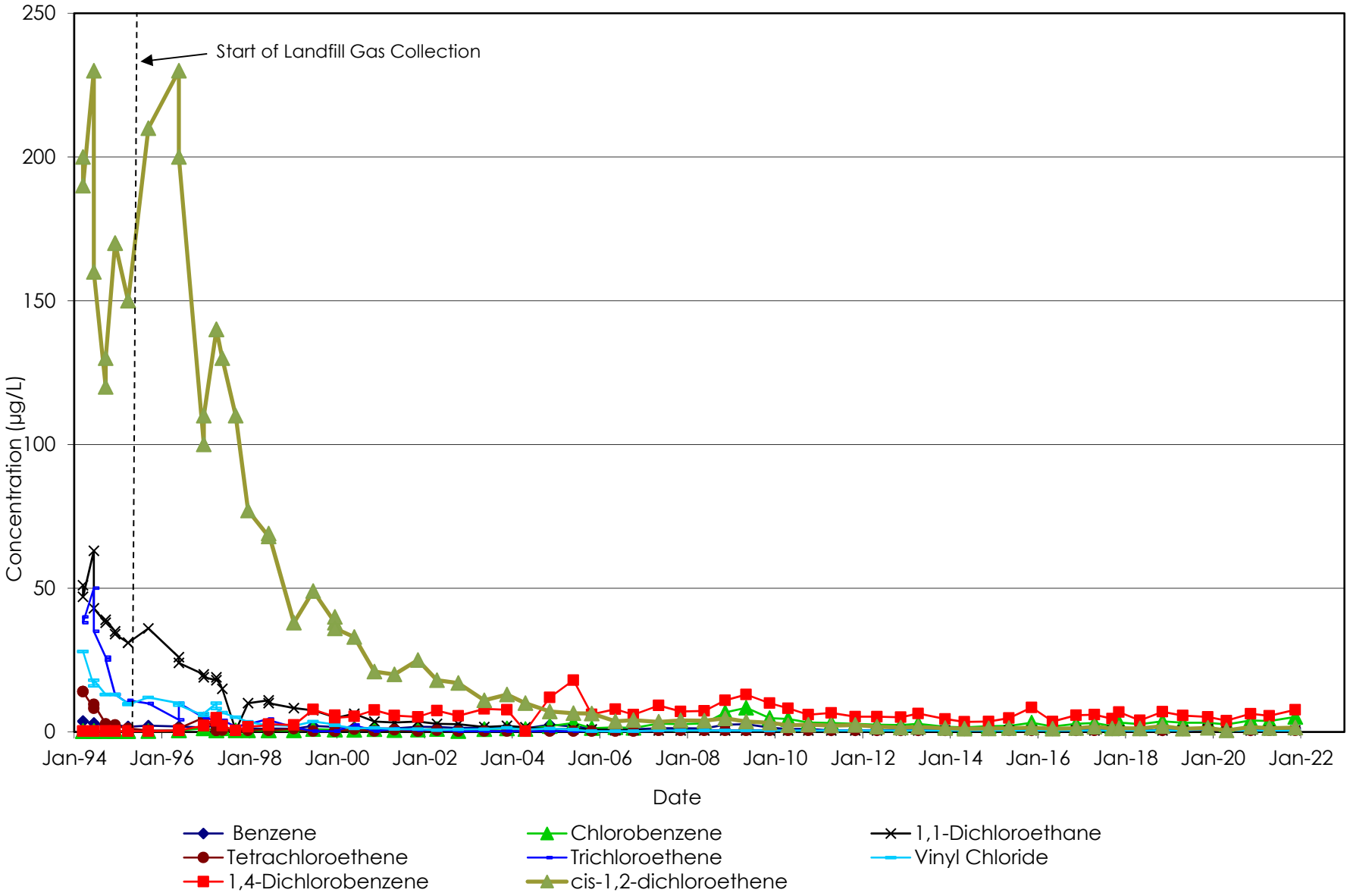
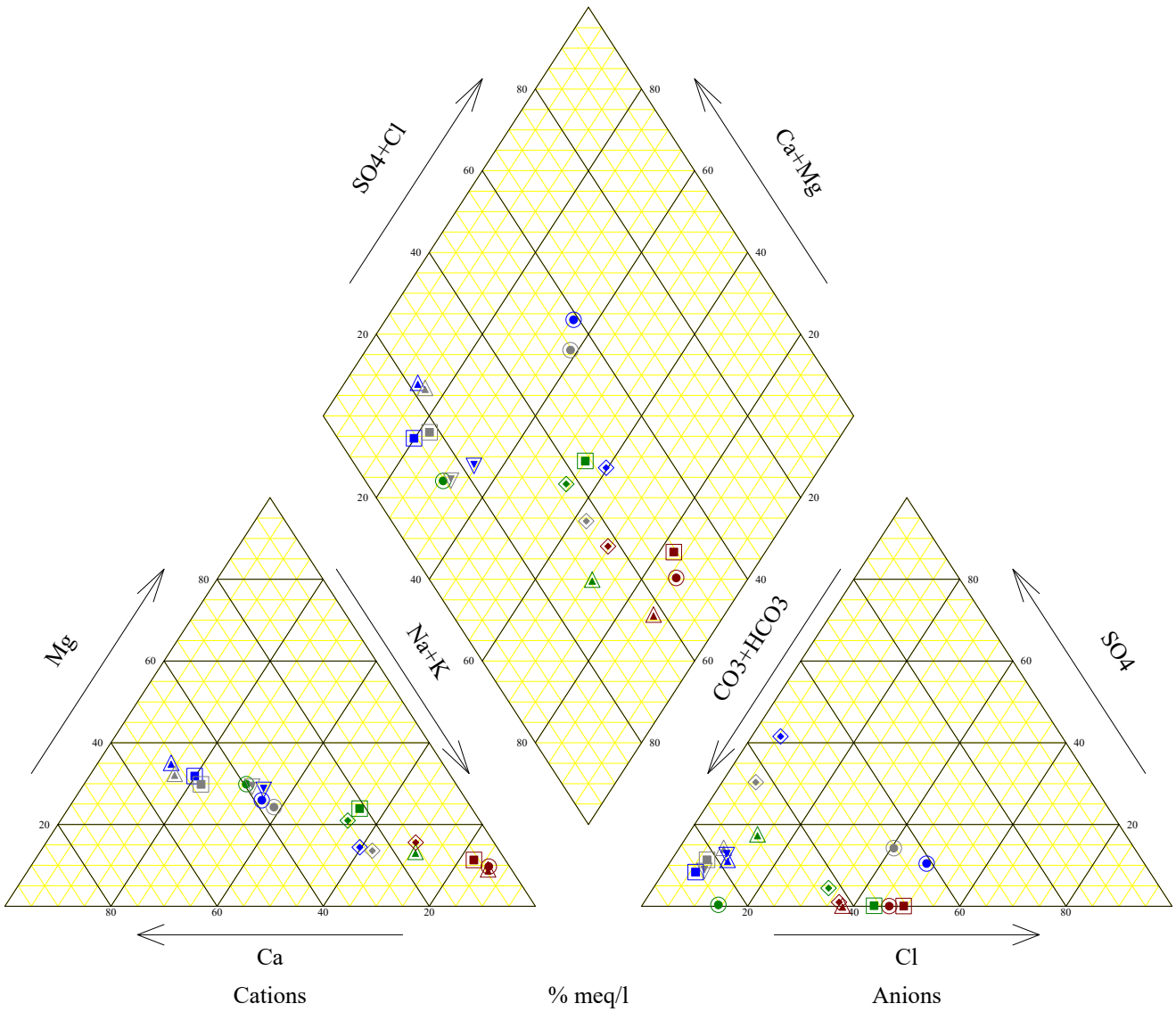


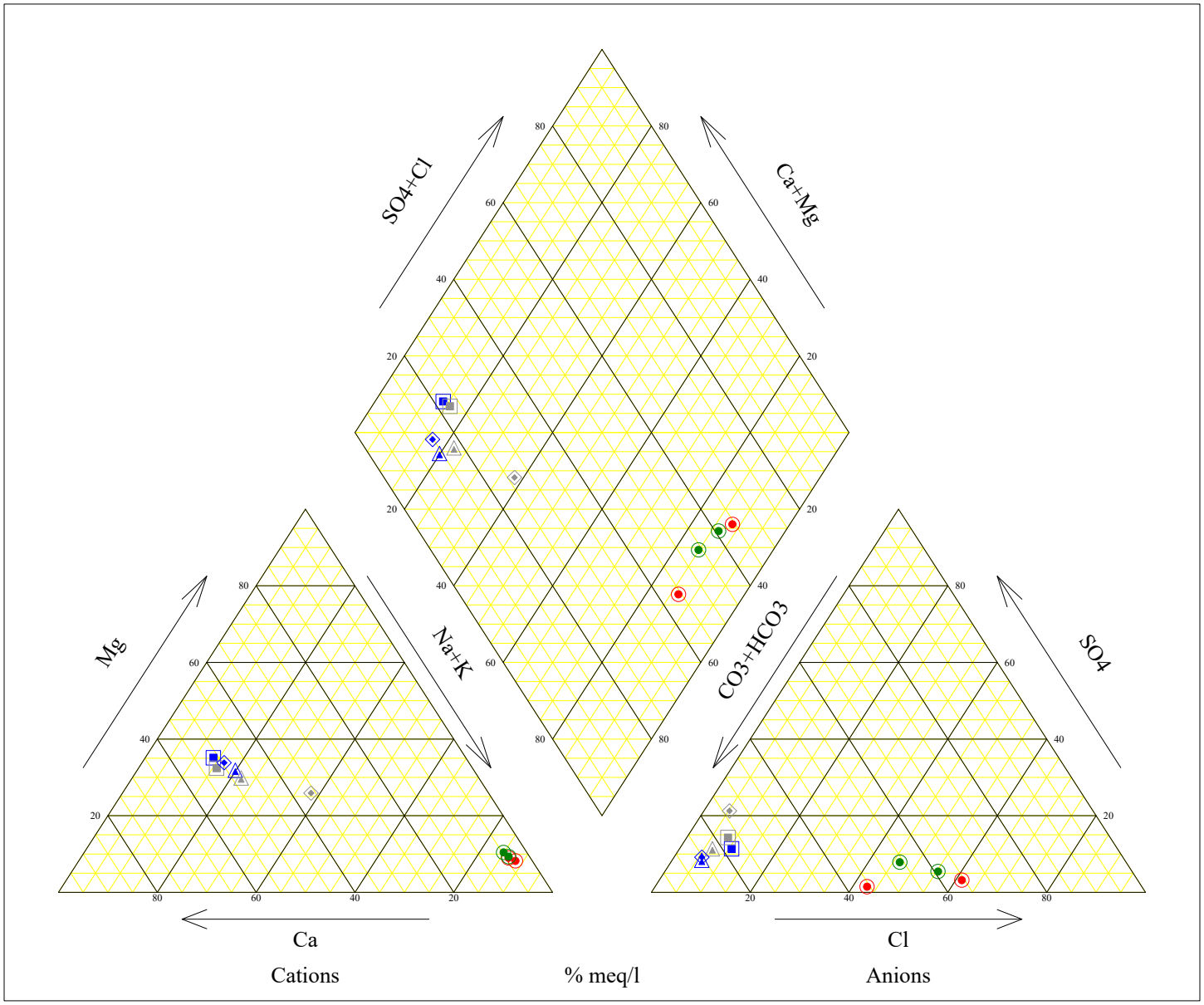
Figure 7-1 2021 Shallow Groundwater and Sumps Trilinear



1/5 P	4/15/2021	MW-12A	4/16/2021	MW-21A	4/13/2021
4/5 S	4/15/2021	MW-12A	11/19/2021	MW-21A	11/18/2021
6/7 P	4/15/2021	MW-14A	4/13/2021		
6/7 S	4/15/2021	MW-14A	11/17/2021		
8P	4/15/2021	MW-15A	4/15/2021		
8S	4/15/2021	MW-15A	11/17/2021		
9P	4/15/2021	MW-16A	4/14/2021		
9S	4/15/2021	MW-16A	11/17/2021		

Prepared by: SCS Engineers

Figure 7-2 2021 Leachate Pond, LDS Liquid, and nearby Shallow Groundwater Samples



LEACHATE POND	4/15/2021	MW-22A	4/24/2019
LEACHATE POND	11/18/2021	MW-22A	11/16/2021
LPOND LDS	4/15/2021		
LPOND LDS	11/18/2021		
MW-14A	4/13/2021		
MW-14A	11/17/2021		
MW-21A	4/13/2021		
MW-21A	11/18/2021		

Prepared by: SCS Engineers

TABLES

Table 3-1
Groundwater Monitoring Network Construction Information
Riverbend Landfill

Well Designation	Hydro-stratigraphic Unit Screened	Date Installation Completed	Eastings[a]	Northings[a]	Ground Elevation[a] (ft-msl)	TOC Elevation[a] (ft-msl)	Boring Depth (ft-bgs)	Boring Diameter (inches)	Well Diameter (inches)	Well Screen Interval (ft-bgs)	Sand Pack Interval (ft-bgs)	Well Seal Interval (ft-bgs)
Monitoring Wells												
MW-1A	Sand-Gravel	6-Sep-89	3999.9	4210.2	153.40	155.30	61.5	10	2	50.0 to 60.0	48.0 to 61.5	3.0 to 48.0
MW-1B	Silt-Clay	8-Sep-89	4001.1	4214.5	153.40	155.00	26.5	10	2	15.0 to 25.0	13.0 to 26.5	3.0 to 13.0
MW-2R	Silt-Clay	29-Jul-16	4966.1	4210.2	144.50	147.02	31.0	10	2	20.0 to 30.0	18.0 to 31.0	3.0 to 18.0
MW-5A	Silt-Clay	8-Sep-92	5490.7	2069.0	132.00	138.73	28.0	10	2	18.0 to 28.0	16.0 to 28.0	3.0 to 16.0
MW-5B	Sand-Gravel	9-Mar-92	5481.2	2073.1	132.80	138.88	44.7	10	2	42.0 to 45.0	40.0 to 45.0	3.0 to 40.0
MW-9A	Silt-Clay	21-Oct-93	6486.5	3663.2	128.10	128.42	24.5	8	2	14.3 to 23.8	27.0 to 40.0	2.0 to 11.0
MW-9BR	Sand-Gravel	24-Aug-94	5903.2	3760.8	124.76	127.40	36.5	10	2	28.2 to 33.7	27.0 to 37.5	2.0 to 26.0
MW-10A	Silt-Clay	28-Oct-93	3501.0	3805.0	150.75	153.21	28.3	8	2	17.3 to 26.8	14.0 to 28.3	2.2 to 14.0
MW-10B	Sand-Gravel	27-Oct-93	3492.5	3795.5	150.76	152.87	69.0	10	2	44.3 to 53.8	40.9 to 55.3	2.0 to 40.9
MW-12A	Silt-Clay	19-Jul-95	5650.8	1676.5	123.80	126.81[b]	25.5	10	2	15.3 to 24.8	12.0 to 25.5	0.5 to 15.3
MW-12B	Sand-Gravel	19-Jul-95	5643.6	1676.5	124.00	126.05[b]	49.9	10	2	34.3 to 43.8	31.0 to 45.0	0.5 to 31.0
MW-14A	Silt-Clay	16-Oct-96	4863.8	1652.6	118.80	121.87	21.0	10	2	10.7 to 20.2	7.8 to 21.0	2.2 to 7.8
MW-14B	Sand-Gravel	15-Oct-96	4854.1	1653.7	119.10	123.32	42.0	10	2	31.7 to 41.2	2.85 to 42.0	2.2 to 28.5
MW-15A	Silt-Clay	21-Oct-96	6385.5	2209.1	126.00	130.07	22.8	10	2	12.5 to 22.0	10.0 to 22.8	2.0 to 10.0
MW-15B	Sand-Gravel	21-Oct-96	6393.5	2214.7	126.00	129.73	44.0	10	2	33.2 to 42.7	30.2 to 44.0	2.0 to 30.2
MW-16A	Silt-Clay	23-Oct-96	7010.7	2675.6	126.30	128.89	23.5	10	2	13.5 to 23.0	11.0 to 23.5	1.5 to 11.0
MW-16B	Sand-Gravel	23-Oct-96	7004.3	2670.7	126.30	128.95	45.0	10	2	34.8 to 44.3	31.6 to 45.0	2.0 to 31.6
MW-17A	Silt-Clay	26-Sep-00	1221.4	1431.4	151.12	153.83	24.5	10	2	14.0 to 24.0	11.5 to 24.5	0.5 to 11.5
MW-18A	Silt-Clay	26-Sep-00	2612.9	2938.0	146.77	148.77	26.0	10	2	13.5 to 23.5	11.0 to 24.0	0.5 to 11.0
MW-18B	Sand-Gravel	26-Sep-00	2621.6	2931.1	146.58	148.57	62.0	10	2	47.0 to 53.0	45.0 to 53.0	0.5 to 45.0
MW-19A	Silt-Clay	27-Sep-00	2537.0	1437.0	149.05	151.27	30.0	10	2	18.0 to 28.0	18 .5 to 28.5	0.5 to 16.5
MW-20A	Silt-Clay	26-Sep-00	3776.2	2490.1	127.20	129.92	21.0	10	2	10.0 to 20.0	8.5 to 21.0	0.5 to 8.5
MW-20B	Sand-Gravel	26-Sep-00	3759.5	2491.2	127.10	129.72	40.0	10	2	29.0 to 34.0	26.5 to 95.3	0.5 to 26.5
MW-21A	Silt-Clay	26-Sep-00	4645.5	1945.3	116.18	120.02	13.0	10	2	8.0 to 13.0	7.0 to 23.0	0.5 to 7.0
MW-21B	Sand-Gravel	26-Sep-00	4631.3	1941.6	116.56	119.53	34.0	10	2	21.0 to 26.0	18.5 to 27.0	0.5 to 18.5
MW-22A	Silt-Clay	23-Sep-10	4105.3	1578.5	123.50	125.38	22.5	10	2	10.0 to 20.0	8.0 to 21.0	2.0 to 8.0
MW-22B	Sand-Gravel	23-Sep-10	4110.8	1584.6	123.50	125.43	38.0	10	2	27.0 to 37.0	25.0 to 38.0	2.0 to 25.0
MW-23A	Silt-Clay	18-Aug-10	3281.9	1515.9	129.00	131.79	28.0	10	2	16.0 to 26.0	14.0 to 28.0	2.0 to 14.0
MW-23B	Sand-Gravel	17-Aug-10	3290.0	1516.5	129.00	131.60	42.0	10	2	36.5 to 41.5	34.5 to 42.0	2.0 to 34.5
MW-24A	Silt-Clay	20-Aug-10	2140.0	984.2	147.50	149.93	26.0	10	2	15.0 to 25.0	13.0 to 26.0	2.0 to 13.0
MW-25A	Silt-Clay	22-Jul-15	4218.8	4114.0	153.0	155.62	26.6	6	2	15.0 to 25.0	13.0 to 26.6	2.0 to 13.0
MW-25B	Sand-Gravel	22-Jul-15	4208.3	4114.6	152.8	155.54	90.0	6 and 7	2	75.0 to 85.0	73.0 to 86.0	2.0 to 73.0
Piezometers												
MW-3A	Silt-Clay	23-Jun-93	4430.9	2493.9	138.20	140.81	35.0	8	2	24.0 to 34.0	21.0 to 35.0	2.2 to 21.0
MW-3B	Sand-Gravel	28-Jun-93	4415.6	2496.3	137.80	140.57	63.5	10	2	45.0 to 55.0	42.0 to 56.0	36.8 to 42.0
MW-4A	Silt-Clay	25-May-93	4798.0	2238.7	139.46	142.31	36.0	8	2	26.0 to 36.0	22.5 to 36.0	2.0 to 22.5
MW-4B	Sand-Gravel	10-Jun-93	4805.5	2239.4	139.24	141.81	72.0	10	2	52.0 to 62.0	49.0 to 63.0	47.0 to 49.0
MW-6A	Silt-Clay	24-May-93	6043.5	2437.7	127.00	128.29[b]	22.5	8	2	11.5 to 21.5	8.5 to 22.5	2.0 to 8.5
MW-6B	Sand-Gravel	9-Jun-93	6054.4	2443.0	127.00	128.59	56.0	8	2	36.0 to 46.0	34.2 to 47.0	2.5 to 34.2
P-01	Silt-Clay	21-Dec-92	5482.1	2038.3	123.20	126.02[b]	19.0	8	2	8.0 to 18.0	5.9 to 19.0	2.0 to 5.9
P-02	Silt-Clay	22-Dec-92	5498.5	1994.0	121.10	124.02[b]	18.0	8	2	6.8 to 16.8	5.0 to 18.0	1.0 to 5.0
P-03	Silt-Clay	23-Jun-93	5601.9	1754.2	120.90	123.89[b]	19.5	8	2	9.0 to 19.0	7.3 to 19.5	2.0 to 9.3
P-05A	Silt-Clay	13-Oct-05	3612.4	2875.1	138.60	140.74	20.0	3.5	1	9.7 to 19.5	7.5 to 20.0	0.5 to 7.5
P-06A	Silt-Clay	13-Oct-05	3363.7	2566.2	129.30	131.58	20.0	3.5	1	9.7 to 19.5	7.5 to 20.0	0.5 to 7.5
P-07A	Silt-Clay	3-Feb-12	3804.2	2168.8	145.70	147.90	31.0	10	2	16.0 to 26.0	14.0 to 26.5	2.0 to 14.0
GT10-1	Silt-Clay	10-Sep-10	3444.2	3211.7	143.80	145.56	66.5	5.9	2	15.0 to 25.0	13.0 to 30.0	2.0 to 13.0/ 30.0 to 65.0
GT10-11	Silt-Clay	9-Sep-10	2518.1	1781.3	149.30	150.08	61.0	5.9	2	15.0 to 25.0	13.0 to 30.0	2.0 to 13.0 / 30.0 to 60.0
GT10-12	Silt-Clay	14-Sep-10	1736.5	1971.4	150.60	152.41	55.0	5.9	2	15.0 to 25.0	13.0 to 30.0	2.0 to 13.0/ 30.0 to 65.0

Table 3-1
Groundwater Monitoring Network Construction Information
Riverbend Landfill

Well Designation	Hydro-stratigraphic Unit Screened	Date Installation Completed	Eastings[a]	Northings[a]	Ground Elevation[a] (ft-msl)	TOC Elevation[a] (ft-msl)	Boring Depth (ft-bgs)	Boring Diameter (inches)	Well Diameter (inches)	Well Screen Interval (ft-bgs)	Sand Pack Interval (ft-bgs)	Well Seal Interval (ft-bgs)
Piezometers (Continued)												
SA-BH-1	Silt-Clay	24-Aug-10	716.6	3175.5	152.80	155.21	23.0	10	2	12.0 to 22.0	10.0 to 23.0	2.0 to 10.0
SA-BH-3	Silt-Clay	24-Aug-10	813.1	1679.7	152.80	155.07	26.5	10	2	12.0 to 22.0	10.0 to 23.5	2.0 to 10/ 23.5 to 25.0
SA-BH-5	Silt-Clay	23-Aug-10	1773.0	586.9	148.60	151.01	28.5	10	2	18.0 to 28.0	15.5 to 28.5	2.0 to 15.5
SA-BH-6	Silt-Clay	29-Sep-10	2895.0	597.7	123.80	125.93	25.0	10	2	14.0 to 24.0	12.0 to 25.0	2.0 to 12.0
Decommissioned Monitoring Wells and Piezometers												
MW-2[c]	Silt-Clay	26-Jan-81	5123.7	4126.2	146.30	148.30	40.0	NA	2	NA	NA	NA
MW-7A[d]	Silt-Clay	26-May-93	4359.8	3103.9	146.70	149.56	32.5	8	2	16.0 to 26.0	13.0 to 27.0	2.5 to 13.0
MW-7B[d]	Sand-Gravel	17-Jun-93	4369.0	3105.4	146.50	149.34	82.6	8	2	49.0 to 59.0	47.2 to 60.0	2.0 to 47.2
MW-8A[e]	Silt-Clay	20-Oct-93	6779.1	2982.3	124.10	126.01	24.5	8	2	13.3 to 22.8	10.2 to 23.5	3.0 to 10.2
MW-8B[e]	Sand-Gravel	25-Oct-93	6770.7	2979.2	124.30	126.81	49.5	8	2	29.3 to 38.8	27.0 to 40.0	2.0 to 27.0
MW-11A[f]	Silt-Clay	21-Oct-93	5340.9	3362.8	143.10	146.33	29.0	8	2	16.3 to 25.8	13.0 to 27.0	2.0 to 13.0
MW-11B[f]	Sand-Gravel	2-Nov-93	5330.6	3357.7	143.10	146.25	73.8	10	2	41.3 to 50.8	38.1 to 51.7	2.0 to 38.1
MW-13A[g]	Silt-Clay	17-Oct-96	4341.2	2093.9	146.60	149.66	44.0	10	2	33.7 to 43.2	31.5 to 44.0	2.0 to 31.5
MW-13B[g]	Sand-Gravel	17-Oct-96	4348.6	2089.7	146.50	149.45	65.5	10	2	55.2 to 64.7	52.1 to 65.5	2.0 to 52.1
P-04A[h]	Silt-Clay	28-Oct-93	4067.0	2530.1	139.00	141.15	32.5	8	2	19.3 to 28.8	15.9 to 29.8	2.0 to 15.9
P-04B[h]	Sand-Gravel	10-Nov-93	4078.5	2531.9	139.00	141.65	75.8	10	2	42.3 to 51.8	39.0 to 52.4	2.0 to 39.0

NOTE:
NA = not available; TOC = top of casing; ft-msl = feet mean sea level; ft-bgs = feet below ground surface.

[a] All monitoring wells and piezometers were re-surveyed in July 2013.

[b] MW-12A, MW-12B, MW-6A, P-01, P-02, and P-03 were re-surveyed in July 2017.

[c] MW-2 was decommissioned in July 2016 to accommodate construction of planned stormwater retention pond.

[d] MW-7A and MW-7B were decommissioned in June 2009 to accommodate construction of landfill Module 8D.

[e] MW-8A and MW-8B were decommissioned between May 1996 (when these wells were last sampled) and March 1997 to accommodate construction of Modules 6 and 7.

[f] MW-11A and MW-11B were decommissioned in May 2012 to accommodate construction of landfill Module 8A.

[g] MW-13A and MW-13B were decommissioned in May 2001 to accommodate construction of the leachate pond.

[h] P-04A and P-04B were decommissioned in June 2013 to accommodate construction of the mechanically stabilized earthen (MSE) berm.

Table 3-2
2021 Groundwater, Surface Water, and
Leachate Management Systems
Routine Semiannual and Annual Monitoring Schedule
Riverbend Landfill

Monitoring Location	Monitoring Function	Spring 2021 Semiannual [a]	Fall 2021 Semiannual [b]
Groundwater			
MW-12A	Compliance	X	X
MW-12B	Compliance	X + DUP4	X
MW-14A	Compliance	X	X
MW-14B	Compliance	X	X + DUP3
MW-15A	Compliance	X + DUP3	X
MW-15B	Compliance	X	X
MW-16A	Compliance	X	X
MW-16B	Compliance	X + DUP2	X + DUP2
MW-21A	Compliance	X	X
MW-21B	Compliance	X	X
MW-5A	Detection	X	X
MW-5B	Detection	X	---
MW-19A	Detection	X	X + DUP4
MW-20A	Detection	X + DUP1	X
MW-20B	Detection	X	---
MW-22A	Detection	X[c]	X +DUP1
P-05A	Detection	X	---
P-06A	Detection	X	---
P-07A	Detection	X	---
South Yamhill River Surface Water Samples			
SYR SW-1 (Upstream)	Informational	X	---
SYR SW-2 (Downstream)	Informational	X	---
SYR MW-12A	Informational	X	---
Leachate Management System Samples			
1/5 P	Detection	X	---
4/5 S	Detection	X	---
6/7 P	Detection	X	---
6/7 S	Detection	X	---
8 P	Detection	X	---
8 S	Detection	X	---
9 P	Detection	X	---
9 S	Detection	X	---
Leachate Pond	Detection	X	X
Leachate Pond Secondary	Detection	X	X

NOTES:

X = sampled

--- = not required to be sampled by the approved environmental monitoring plan

P = primary leachate collection system; S = secondary leak detection system.

[a] Sampling performed from April 12 through April 16, 2021.

[b] Sampling performed from November 15 through November 19, 2021.

[C] MW-22A could not be sampled in spring 2021 due to insufficient water in well.

Table 5-1
Groundwater Monitoring
Schedule and Analytical Parameters
Riverbend Landfill

	Spring		Fall	
Well	**VOCs**	**Indicators, Cations, Anions**	**VOCs**	**Indicators, Cations, Anions**
Compliance Wells				
MW-12A	X	X	X	X
MW-12B	X	X	X	X
MW-14A	X	X	X	X
MW-14B	X	X	X	X
MW-15A	X	X	X	X
MW-15B	X	X	X	X
MW-16A	X	X	X	X
MW-16B	X	X	X	X
MW-21A	X	X	X	X
MW-21B	X	X	X	X
Detection Wells				
MW-5A	X	---	X	---
MW-5B	X	---	---	---
MW-19A	X	X	X	X
MW-20A	X	X	X	X
MW-20B	X	X	---	---
MW-22A[1]	---	---	X	X
Piezometers				
P-05A	---	X	---	---
P-06A	---	X	---	---
P-07A	---	X	---	---

Notes:

[1]Detection well MW-22A was not sampled in the Spring event due to insufficient water. This well was sampled in Fall 2021 when there was sufficient water in the well.

--- = not required based on the current permit for the site.

Table 5-2
2021 Analytical Parameter Schedule for the
South Yamhill River Surface Water Monitoring
Riverbend Landfill

Parameter	Annual Monitoring[a]		
	SYR MW- 12A (Midstream)	SYR SW-1 (Upstream)	SYR SW-2 (Downstream)
Group 1a: Field Indicators[b]	X	X	X
Group 1b: Laboratory and Supplemental Indicators			
Total Alkalinity	X	X	X
Total Hardness (as $CaCO_3$)	X	X	X
Laboratory pH	X	X	X
Specific Conductance	X	X	X
Chemical Oxygen Demand	X	X	X
Biological Oxygen Demand	X	X	X
Fecal Coliform	X	X	X
E. coli	X	X	X
Total Kjeldahl Nitrogen	X	X	X
Total Organic Halogens	X	X	X
Total Phosphorus	X	X	X
Orthophosphate	X	X	X
Total Organic Carbon	X	X	X
Total Dissolved Solids	X	X	X
Total Suspended Solids	X	X	X
Group 2a: Anions			
Ammonia	X	X	X
Bicarbonate	X	X	X
Carbonate	X	X	X
Chloride	X	X	X
Nitrate+Nitrite	X	X	X
Silicon	X	X	X
Sulfate	X	X	X
Group 2a: Cations			
Calcium	X	X	X
Iron	X	X	X
Magnesium	X	X	X
Manganese	X	X	X
Potassium	X	X	X
Sodium	X	X	X
Group 3: Volatile Organic Compounds (VOCs)[c]			
VOCs	X	X	X

NOTE:
SYR = South Yamhill River; X = parameter analyzed.

[a] Annual monitoring was performed in the second quarter (Spring) on April 14, 2021.

[b] Field indicators include: pH, temperature, specific conductance, dissolved oxygen, and oxidation-reduction potential.

[c] All VOCs include a library search to identify any unknown compounds.

Table 5-3
2021 Analytical Parameter Schedule for
Leachate Management Systems Monitoring
Riverbend Landfill

Parameter	Annual and Semiannual Monitoring[a]	
	Semiannual Leachate Pond and LPS	Annual LCRS and Secondary Sumps[b]
Group 1a: Field Indicators [c]	X	X
Group 1b: Laboratory Indicators		
Total Alkalinity	X	X
Total Hardness (as $CaCO_3$)	X	X
Laboratory pH	X	X
Specific Conductance	X	X
Chemical Oxygen Demand	X	X
Total Kjeldahl Nitrogen	X	---
Total Organic Carbon	X	X
Total Dissolved Solids	X	X
Total Suspended Solids	X	X
Group 2a: Anions		
Ammonia	X	X
Bicarbonate	X	X
Carbonate	X	X
Chloride	X	X
Nitrate+Nitrite	X	X
Silicon	X	X
Sulfate	X	X
Group 2a: Cations		
Calcium	X	X
Iron	X	X
Magnesium	X	X
Manganese	X	X
Potassium	X	X
Sodium	X	X
Group 2b: Trace Metals (Total)	X	X
Group 3: Volatile Organic Compounds (VOCs) [e]		
VOCs	X	X

NOTE:
LPS = leachate pond secondary; LCRS = leachate collection and removal system;
X = parameter analyzed; --- parameter not required.

[a] Semiannual monitoring events were performed in the second quarter (Spring) and in the fourth quarter (Fall).

[b] Annual sump monitoring locations include: 1/5 P, 4/5 S, 6/7 P, 6/7 S, 8 P, 8 S, 9 P, and 9 S.

[c] Field indicators include: pH, temperature, specific conductance, dissolved oxygen, and oxidation-reduction potential.

[d] Group 2b trace metals include: antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, nickel, selenium, silver, thallium, vanadium, and zinc.

[e] All VOCs include a library search to identify any unknown compounds.

Table 5-4
Cation-Anion Balances for
2021 Laboratory Analytical Data
Riverbend Landfill

Monitoring Location	Spring 2021 Event (%)	Fall 2021 Event (%)
Groundwater		
MW-12A	-2.2	-6.1
MW-12B	0.79 /-0.5	-5.8
MW-14A	0.98	-1.8
MW-14B	3.4	2.6 / 2.6
MW-15A	-5 / -4	-8.9
MW-15B	-0.44	-4.2
MW-16A	4.4	-3.9
MW-16B	4.2 / 1.3	-0.7 / -3.1
MW-19A	-3.4	-4.9 / -19
MW-20A	0.077 / -1.5	-6.2
MW-20B	0.22	---
MW-21A	0.27	-3.7
MW-21B	2.2	-0.98
MW-22A	NS	-4.7 / -7.8
Surface Water Samples		
SYR MW-12A	-1.9	---
SYR SW-1 (Upstream)	0.16	---
SYR SW-2 (Downstream)	-3.2	---
Leachate Management System Liquid Samples		
1/5 P	4.3	---
4/5 S	-1.5	---
6/7 P	17	---
6/7 S	1.4	---
8 P	8.6	---
8 S	0.69	---
9 P	6.7	---
9 S	-1.4	---
Leachate Pond	5.1	4.6
Leachate Pond Secondary	13	3.3

NOTE:
--- = not required to be sampled during monitoring event.
NS = not sampled.
Cation/anion balance data included in laboratory reports (see attached compact disc).

Table 6-1
Comparison of 2021 Groundwater Elevations
in Monitoring Well Pairs
(Shallow and Deep Water Bearing Zones)
Riverbend Landfill

Sample Location	Date	Groundwater Elevation (feet-msl)	Difference in Elevation and direction of flow (feet)
MW-1B (Shallow)	12-Apr-21	147.98	14.05
MW-1A (Deep)	12-Apr-21	133.93	(Downward)
MW-1B (Shallow)	15-Nov-21	148.63	19.20
MW-1A (Deep)	15-Nov-21	129.43	(Downward)
MW-3A (Shallow)	12-Apr-21	123.79	1.43
MW-3B (Deep)	12-Apr-21	122.36	(Downward)
MW-3A (Shallow)	15-Nov-21	123.18	2.08
MW-3B (Deep)	15-Nov-21	121.10	(Downward)
MW-4A (Shallow)	12-Apr-21	116.99	1.85
MW-4B (Deep)	12-Apr-21	115.14	(Downward)
MW-4A (Shallow)	15-Nov-21	120.61	1.59
MW-4B (Deep)	15-Nov-21	119.02	(Downward)
MW-5A (Shallow)	12-Apr-21	117.58	8.08
MW-5B (Deep)	12-Apr-21	109.50	(Downward)
MW-5A (Shallow)	15-Nov-21	123.15	3.66
MW-5B (Deep)	15-Nov-21	119.49	(Downward)
MW-6A (Shallow)	12-Apr-21	120.52	6.53
MW-6B (Deep)	12-Apr-21	113.99	(Downward)
MW-6A (Shallow)	15-Nov-21	121.92	7.69
MW-6B (Deep)	15-Nov-21	114.23	(Downward)
MW-9A (Shallow)	12-Apr-21	118.87	-7.44
MW-9BR (Deep)	12-Apr-21	126.31	(Upward)
MW-9A (Shallow)	15-Nov-21	114.69	-7.89
MW-9BR (Deep)	15-Nov-21	122.58	(Upward)
MW-10A (Shallow)	12-Apr-21	147.16	1.05
MW-10B (Deep)	12-Apr-21	146.11	(Downward)
MW-10A (Shallow)	15-Nov-21	138.69	8.38
MW-10B (Deep)	15-Nov-21	130.31	(Downward)
MW-12A (Shallow)	12-Apr-21	113.17	5.95
MW-12B (Deep)	12-Apr-21	107.22	(Downward)
MW-12A (Shallow)	15-Nov-21	121.21	2.97
MW-12B (Deep)	15-Nov-21	118.24	(Downward)
MW-14A (Shallow)	12-Apr-21	105.10	-1.01
MW-14B (Deep)	12-Apr-21	106.11	(Upward)
MW-14A (Shallow)	15-Nov-21	119.51	-0.13
MW-14B (Deep)	15-Nov-21	119.64	(Upward)
MW-15A (Shallow)	12-Apr-21	120.57	7.95
MW-15B (Deep)	12-Apr-21	112.62	(Downward)
MW-15A (Shallow)	15-Nov-21	122.81	7.68
MW-15B (Deep)	15-Nov-21	115.13	(Downward)
MW-16A (Shallow)	12-Apr-21	113.13	0.25
MW-16B (Deep)	12-Apr-21	112.88	(Downward)
MW-16A (Shallow)	15-Nov-21	113.33	1.94
MW-16B (Deep)	15-Nov-21	111.39	Downward

Table 6-1
Comparison of 2021 Groundwater Elevations
in Monitoring Well Pairs
(Shallow and Deep Water Bearing Zones)
Riverbend Landfill

Sample Location	Date	Groundwater Elevation (feet-msl)	Difference in Elevation and direction of flow (feet)
MW-18A (Shallow)	12-Apr-21	135.56	0.70
MW-18B (Deep)	12-Apr-21	134.86	(Downward)
MW-18A (Shallow)	15-Nov-21	136.26	8.00
MW-18B (Deep)	15-Nov-21	128.26	(Downward)
MW-20A (Shallow)	12-Apr-21	126.07	-1.12
MW-20B (Deep)	12-Apr-21	127.19	(Upward)
MW-20A (Shallow)	15-Nov-21	124.80	1.92
MW-20B (Deep)	15-Nov-21	122.88	(Downward)
MW-21A (Shallow)	12-Apr-21	109.90	9.85
MW-21B (Deep)	12-Apr-21	100.05	(Downward)
MW-21A (Shallow)	15-Nov-21	117.11	-1.99
MW-21B (Deep)	15-Nov-21	119.10	Upward
MW-22A (Shallow)	12-Apr-21	105.90	0.94
MW-22B (Deep)	12-Apr-21	104.96	(Downward)
MW-22A (Shallow)	15-Nov-21	122.18	1.53
MW-22B (Deep)	15-Nov-21	120.65	(Downward)
MW-23A (Shallow)	12-Apr-21	114.69	4.50
MW-23B (Deep)	12-Apr-21	110.19	(Downward)
MW-23A (Shallow)	15-Nov-21	122.97	2.40
MW-23B (Deep)	15-Nov-21	120.57	(Downward)
MW-25A (Shallow)	12-Apr-21	146.66	13.85
MW-25B (Deep)	12-Apr-21	132.81	(Downward)
MW-25A (Shallow)	15-Nov-21	148.18	19.99
MW-25B (Deep)	15-Nov-21	128.19	(Downward)

NOTE:
feet-msl = feet mean sea level.

Table 6-2
Comparison of the 2021 Compliance Well Groundwater Analytical Results
and Approved Statistically Derived and Permit Specific Groundwater Concentration Limits
Riverbend Landfill

Monitoring Well	PSCL	AL	SSLs							
	Vinyl Chloride[a] (mg/L)	VOCs[b]	Bicarbonate Alkalinity (mg/L)	Chloride (mg/L)	Magnesium Dissolved (mg/L)	Potassium Dissolved (mg/L)	Sodium Dissolved (mg/L)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-12A Concentration Limits	*0.002*	*(see Note 1)*	*81.3*	*63.4*	*11.5*	*1.20*	*21.8*	---	*240*	*3.2*
MW-12A April 2020 Results	0.001 U	No Detections	71	56	8.6	0.54	**28**	---	210	1.5
MW-12A November 2020 Results	0.001 U	No Detections	71	54	**12**	0.50 U	20	---	210	1.3
MW-12A April 2021 Results	0.001 U	No Detections	80	55	11	0.73	**28**	---	240	1.7
MW-12A November 2021 Results	0.001 U	No Detections	81	42	9.1	0.65	**27**	---	190	3.1
MW-12B Concentration Limits	*0.002*	*(see Note 1)*	*291*	---	*38.8*	*1.27*	*67.8*	*6.8*	*1,020*	*1.9*
MW-12B April 2020 Results	0.001 U	No Detections	260	**---**	24	0.54	36	1.9	480	1.3
MW-12B April 2020 Results (DUP)	0.001 U	No Detections	240	**---**	23	0.50 U	36	1.9	450	1.2
MW-12B November 2020 Results	0.001 U	No Detections	270	**---**	25	0.61	42	1.5	570	1.2
MW-12B November 2020 Results (DUP)	0.001 U	No Detections	270	**---**	24	0.54	42	1.6	550	1.3
MW-12B April 2021 Results	0.001 U	No Detections	210	**---**	24	0.69	32	1.0 U	470	1.8
MW-12B April 2021 Results (DUP)	0.001 U	No Detections	220	**---**	24	0.68	32	1.0 U	460	1.4
MW-12B November 2021 Results	0.001 U	No Detections	210	**---**	17	0.50 U	21	1.0 U	340	1.9
MW-14A Concentration Limits	*0.002*	*(see Note 1)*	*148*	*33.4*	*16.5*	*0.85*	*15.6*	---	*282*	*3.1*
MW-14A April 2020 Results	0.001 U	No Detections	**170**	13	16	0.50 U	12.0	---	240	1.0 U
MW-14A January 2021 Results [c]	0.001 U	No Detections	120	8.4	12	0.50 U	9.7	---	190	1.0 U
MW-14A January 2021 Results (DUP) [c]	0.001 U	No Detections	120	8.4	12	0.50 U	9.6	---	180	1.1
MW-14A April 2021 Results	0.001 U	No Detections	140	11	15	0.50 U	11.0	---	210	1.1
MW-14A November 2021 Results	0.001 U	No Detections	110	6.9	11	0.50 U	10.0	---	170	1.7

Table 6-2
Comparison of the 2021 Compliance Well Groundwater Analytical Results
and Approved Statistically Derived and Permit Specific Groundwater Concentration Limits
Riverbend Landfill

	PSCL	AL	SSLs							
Monitoring Well	Vinyl Chloride[a] (mg/L)	VOCs[b]	Bicarbonate Alkalinity (mg/L)	Chloride (mg/L)	Magnesium Dissolved (mg/L)	Potassium Dissolved (mg/L)	Sodium Dissolved (mg/L)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-14B Concentration Limits	*0.002*	*(see Note 1)*	*230*	---	*16.1*	*0.85*	*43.0*	*16.8*	*329*	*3.2*
MW-14B April 2020 Results	0.001 U	No Detections	200	**---**	14	0.50 U	20	2.9	260	1.8
MW-14B November 2020 Results	0.001 U	No Detections	220	**---**	14	0.50 U	34	4.6	310	1.4
MW-14B November 2020 Results (DUP)	0.001 U	No Detections	210	**---**	14	0.50 U	35	4.6	320	1.3
MW-14B April 2021 Results	0.001 U	No Detections	170	**---**	13	0.56	19	3.2	220	1.8
MW-14B November 2021 Results	0.001 U	No Detections	210	**---**	15	0.64	29	2.9	280	2.1
MW-14B November 2021 Results (DUP)	0.001 U	No Detections	210	**---**	15	0.57	29	2.9	270	2.1
MW-15A Concentration Limits	*0.002*	*(see Note 1)*	*135*	*19.5*	*12.7*	*1.00*	*29.50*	---	*349*	*2.2*
MW-15A April 2020 Results	0.001 U	No Detections	48	1.8	2.7	0.50 U	23	---	**640**	1.3
MW-15A January 2021 Results[c]	0.001 U	No Detections	39	3.1	2.4	0.50 U	20	---	**350**	1.7
MW-15A April 2021 Results	0.001 U	No Detections	47	2.8	2.7	0.50 U	21	---	280	2.2
MW-15A April 2021 Results (DUP)	0.001 U	No Detections	40	2.8	2.6	0.50 U	19	---	270	1.6
MW-15A November 2021 Results	0.001 U	No Detections	53	3.1	2.2	0.50 U	19	---	**360 H**	**2.4**
MW-15B Concentration Limits	*0.002*	*(see Note 1)*	*372*	---	*36.3*	*0.68*	*42.2*	*10.7*	*543*	*2.1*
MW-15B April 2020 Results	0.001 U	No Detections	350	**---**	30	0.50 U	37	4.4	310	1.0 U
MW-15B April 2020 Results	0.001 U	No Detections	340	**---**	30	0.50 U	37	3.5	390	1.0 U
MW-15B November 2020 Results	0.001 U	No Detections	340	**---**	30	0.50 U	26	1.4	340	1.0
MW-15B April 2021 Results	0.001 U	No Detections	300	**---**	28	0.50 U	32	2.2	350	1.2
MW-15B November 2021 Results	0.001 U	No Detections	**380**	**---**	31	0.50 U	37	1.8	410 H	1.4

Table 6-2
Comparison of the 2021 Compliance Well Groundwater Analytical Results
and Approved Statistically Derived and Permit Specific Groundwater Concentration Limits
Riverbend Landfill

	PSCL	AL	SSLs							
Monitoring Well	Vinyl Chloride[a] (mg/L)	VOCs[b]	Bicarbonate Alkalinity (mg/L)	Chloride (mg/L)	Magnesium Dissolved (mg/L)	Potassium Dissolved (mg/L)	Sodium Dissolved (mg/L)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-16A Concentration Limits	*0.002*	*(see Note 1)*	*460*	*14.8*	*32.0*	*0.88*	*59.6*	---	*505*	*5.2*
MW-16A April 2020 Results	0.001 U	No Detections	120	9.2	9.3	0.50 U	31	**---**	180	1.8
MW-16A January 2021 Results [c]	0.001 U	No Detections	130	11	10	0.50 U	28	**---**	210	1.6
MW-16A April 2021 Results	0.001 U	No Detections	150	11	14	0.50 U	32	**---**	220	1.6
MW-16A November 2021 Results	0.001 U	No Detections	210	11	16	0.50 U	33	**----**	270	2.1
MW-16B Concentration Limits	*0.002*	*(see Note 1)*	*388*	---	*44.2*	*0.93*	*81.6*	*8.6*	*771*	*2.8*
MW-16B April 2020 Results	0.001 U	No Detections	**400**	---	34	0.50 U	63	5.9	580	1.5
MW-16B April 2020 Results (DUP)	0.001 U	No Detections	**410**	---	34	0.50 U	63	5.8	570 H	1.4
MW-16B November 2020 Results	0.001 U	No Detections	**390**	---	34	0.50	64	5.0	630	1.5
MW-16B April 2021 Results	0.001 U	No Detections	280	---	31	0.61	55	3.9	480	1.8
MW-16B April 2021 Results (DUP)	0.001 U	No Detections	290	---	30	0.62	53	3.9	480	1.8
MW-16B November 2021 Results	0.001 U	No Detections	360	---	36	0.60	70	4.6	580	1.9
MW-16B November 2021 Results (DUP)	0.001 U	No Detections	**390**	---	37	0.58	69	4.5	590	1.9
MW-21A Concentration Limits	*0.002*	*(see Note 1)*	*211*	*16.0*	*19.9*	*0.91*	*60.9*	---	*446*	*4.7*
MW-21A April 2020 Results	0.001 U	No Detections	120	5.0	10	0.50 U	15	**---**	180	1.5
MW-21A January 2021 Results [c]	0.001 U	No Detections	120	4.9	10	0.50 U	14	**---**	190	1.7
MW-21A April 2021 Results	0.001 U	No Detections	130	5.3	12	0.50 U	14	**---**	180	1.4
MW-21A November 2021 Results	0.001 U	No Detections	110	5.2	9.4	0.50 U	13	**---**	170	2.3

Table 6-2
Comparison of the 2021 Compliance Well Groundwater Analytical Results
and Approved Statistically Derived and Permit Specific Groundwater Concentration Limits
Riverbend Landfill

Monitoring Well	PSCL	AL	SSLs							
	Vinyl Chloride[a] (mg/L)	VOCs[b]	Bicarbonate Alkalinity (mg/L)	Chloride (mg/L)	Magnesium Dissolved (mg/L)	Potassium Dissolved (mg/L)	Sodium Dissolved (mg/L)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-21B Concentration Limits	*0.002*	*(see Note 1)*	*325*	---	*26.4*	*1.40*	*46.6*	*21.7*	*372*	*5.9*
MW-21B April 2020 Results	0.001 U	No Detections	250	**---**	17	0.84	33	4.0	270	2.6
MW-21B November 2020 Results	0.001 U	No Detections	220	**---**	15	0.78	37	1.1	280	2.0
MW-21B April 2021 Results	0.001 U	No Detections	220	**---**	18	1.1	27	1.9	260	3.1
MW-21B November 2021 Results	0.001 U	No Detections	260	**---**	20	0.99	29	1.0 U	300	3.0

NOTES:

mg/L = milligrams per liter; --- = not applicable; Re = resample; Dup = field duplicate sample.; --- not applicable; U = not detected at or above the practical quantitation limit (PQL);

NS = parameter not required to be sampled and analyzed during the event. H = Parameter was analyzed outside of the specified hold time.

Bold denotes results above a concentration limit.

Note 1: Detection of a volatile organic compound (VOC) above the laboratory derived PQL.

PSCL: Permit-Specific Concentration Limit; concentration above a single PSCL not previously reported and explained to the DEQ will trigger verification resampling. Verification of a concentration above a PSCL would require follow-up actions, consistent with Section 11.5.3 of the Environmental Monitoring Plan (EMP).

AL: Action Limit; a concentration above a single AL not previously reported and explained to the DEQ will trigger verification resampling. Verification of a concentration above an AL would require follow-up actions, consistent with Section 11.5.3 of the EMP.

SSL: Site-Specific Limit (statistically-derived); detection above the limit of three or more SSLs in a single compliance monitoring well during a monitoring event not previously reported and explained to the DEQ will trigger verification resampling. Verification of concentrations above three or more SSLs would require follow-up actions consistent with Section 11.5.3 of the EMP.

[a] PSCL for vinyl chloride in all compliance wells established at the numerical groundwater quality reference level (NGWQRL) of 0.002 mg/L (specified in Table 2 of the OAR 340-40).

[b] VOCs by U.S. Environmental Protection Agency (EPA) Method 8260B and 8011 except for vinyl chloride which was defined as a PSCL.

[c] Wells MW-14A, MW-15A, MW-16A, and MW-21A were "dry" at the time that the monitoring event was performed in November 2020. Consequently, MW-14A, MW-15A, MW-16A, and MW-21A were sampled in January 2021. (Wells were flooded in December 2020 and not accessible.)

Table 6-3
Statistical Trend Analysis Results Based on 2021 and Historical Groundwater Analytical Results
Riverbend Landfill

Sampling Location	Bicarbonate Alkalinity	Ammonia as Nitrogen	Dissolved Calcium	Chloride	Dissolved Iron	Dissolved Magnesium	Dissolved Manganese	Nitrate+ Nitrite	Dissolved Potassium	Dissolved Sodium	Sulfate	Total Dissolved Solids	Total Organic Carbon
Compliance Wells													
MW-12A	Increasing	---	Increasing	Increasing	---	Increasing	---	Increasing	---	Increasing	Increasing	Increasing	---
MW-12B	---	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	---	---	Decreasing	---	Decreasing	---
MW-14A	Increasing	---	---	---	---	---	---	---	---	---	Decreasing	---	---
MW-14B	Increasing	---	Increasing	Increasing	---	Increasing	---	---	---	Increasing	---	Increasing	---
MW-15A	---	---	Decreasing	Decreasing	---	Decreasing	Decreasing	---	---	---	---	Increasing	---
MW-15B	---	---	Decreasing	Decreasing	---	Decreasing	---	---	---	---	---	Decreasing	---
MW-16A	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	---	---	Decreasing	Increasing	Decreasing	Decreasing
MW-16B	Increasing	---	Decreasing	Decreasing	---	---	---	---	---	Decreasing	Decreasing	Decreasing	---
MW-21A	---	---	Decreasing	Decreasing	---	Decreasing	---	---	---	Decreasing	Decreasing	Decreasing	---
MW-21B	---	---	Decreasing	---	Decreasing	Decreasing	---	---	---	---	Decreasing	---	---
Detection Wells and Piezometers													
MW-19A	---	---	Increasing	Increasing	Decreasing	Increasing	Decreasing	---	---	Increasing	Decreasing	Increasing	---
MW-20A	---	---	Increasing	Increasing	Increasing	Increasing	Increasing	---	---	Increasing	---	Increasing	Increasing
MW-20B	---	---	Increasing	Increasing	---	Increasing	---	---	---	Increasing	---	---	---
MW-22A	---	---	---	---	---	---	---	---	---	---	---	---	---
P-05A	Increasing	---	Increasing	Increasing	---	Increasing	---	Decreasing	---	Increasing	---	Increasing	---
P-06A	---	---	Increasing	---	---	---	---	---	---	---	---	---	---
P-07A	---	---	---	Decreasing	---	---	---	---	---	---	---	---	---

NOTE:
--- = no statistically significant trend identified by DUMPStat.
Indicates change in trend either decreasing, increasing or no trend identified in 2021 compared to 2020 and historical data.

Table 6-4
Volatile Organic Compounds Detected in Groundwater Samples Collected from MW-5A (µg/L)
Riverbend Landfill

Sample Location	Sample Date	Benzene	Chloro-benzene	Chloro-ethane	1,1-Di-chloro-ethane	Methylene Chloride	Tetra-chloro-ethene	Toluene	Tri-chloro-ethene	Vinyl chloride	Total Xylenes	1,4-Di-chloro-benzene	cis-1,2-Dichloro-ethene	Dichloro-difluoro-methane	trans-1,2-Dichloro-ethene	1,2-Di-chloro-benzene
MW-5A	17-Mar-94	**3.6**	0.5 U	**5.4**	**51**	1.0 U	**14**	0.5 U	**40**	**28**	**0.8**	0.5 U	**200**	**2.6**	**1.6**	0.5 U
MW-5A (Dup)	17-Mar-94	**3.8**	0.5 U	**5.6**	**47**	1.0 U	**14**	0.5 U	**38**	**28**	**0.8**	0.5 U	**190**	**2.6**	**1.9**	0.5 U
MW-5A	15-Jun-94	**3.0**	0.5 U	**5.2**	**63**	1.0 U	**8.2**	0.5 U	**50**	**16**	0.5 U	0.5 U	**230**	**0.6**	**1.2**	0.5 U
MW-5A (Dup)	15-Jun-94	**3.1**	0.5 U	**5.4**	**43**	1.0 U	**9.6**	0.5 U	**35**	**18**	**0.5**	0.5 U	**160**	**0.7**	**1.3**	0.5 U
MW-5A	22-Sep-94	**2.2**	0.5 U	**6.3**	**38 D**	1.0 U	**2.8**	0.5 U	**26**	**13**	0.5 U	0.5 U	**120 D**	**0.6**	**1.5**	0.5 U
MW-5A (Dup)	22-Sep-94	**2.1**	0.5 U	**6.4**	**39 D**	1.0 U	**2.5**	0.5 U	**25**	**13**	0.5 U	0.5 U	**130 D**	**0.7**	**0.9**	0.5 U
MW-5A	9-Dec-94	**2.2**	0.5 U	**2.1**	**35**	1.0 U	**2.4**	0.5 U	**13**	**13**	**0.5**	0.5 U	**170 D**	0.5 U	**0.9**	0.5 U
MW-5A (Dup)	9-Dec-94	**2.3**	0.5 U	**2.3**	**34**	1.0 U	**2.3**	0.5 U	**13**	**13**	**0.6**	0.5 U	**170 D**	0.5 U	**0.9**	0.5 U
MW-5A	28-Mar-95	**1.9**	0.5 U	**2.0**	**31**	1.0 U	**1.0**	0.5 U	**10**	**9.8**	0.5 U	0.5 U	**150 D**	0.5 U	**0.9**	0.5 U
MW-5A (Dup)	28-Mar-95	**1.8**	0.5 U	**2.2**	**31**	1.0 U	**1.2**	0.5 U	**11**	**9.5**	0.5 U	0.5 U	**150 D**	0.5 U	**1.3**	0.5 U
MW-5A	13-Sep-95	**2.2**	0.5 U	**4.0**	**36**	1.0 U	**0.5**	0.5 U	**9.9**	**12**	0.5 U	0.5 U	**210 D**	0.5 U	**1.1**	0.5 U
MW-5A	24-May-96	**1.9**	1.0 U	**2.3**	**26**	1.0 U	1.0 U	1.0 U	**4.2**	**10**	1.0 U	1.0 U	**230 E**	1.0 U	**2.5**	0.5 U
MW-5A (Dup)	24-May-96	**1.9**	1.0 U	**1.7**	**24**	1.0 U	**1.2**	1.0 U	**10**	**9.3**	1.0 U	1.0 U	**200 E**	1.0 U	**3.7**	0.5 U
MW-5A	18-Dec-96	3.1 U	2.5 U	5.9 U	**20**	16 U	10 U	2.5 U	**5.0**	**5.7**	10 U	4.3 U	**100**	6.5 U	4.5 U	0.5 U
MW-5A (Dup)	18-Dec-96	3.1 U	2.5 U	5.9 U	**19**	16 U	10 U	2.5 U	**5.1**	**6.4**	10 U	4.3 U	**110**	6.5 U	4.5 U	0.5 U
MW-5A	2-Apr-97	**2.4**	1.0 U	1.0 U	**18**	**3.3**	1.0 U	1.0 U	**3.8**	**10.0**	1.0 U	**4.9**	**140**	1.0 U	1.0 U	0.5 U
MW-5A (Dup)	2-Apr-97	**1.7**	1.0 U	1.0 U	**19**	1.0 U	1.0 U	1.0 U	**3.1**	**8.1**	1.0 U	**3.8**	**140**	1.0 U	1.0 U	0.5 U
MW-5A	21-May-97	3.1 U	2.5 U	5.9 U	**15**	4.1 U	1.2 U	2.5 U	**4.0**	**6.7**	10 U	4.3 U	**130**	6.5 U	4.5 U	0.5 U
MW-5A	10-Sep-97	1.0 U	1.0 U	1.0 U	1.0 U	**2.9**	1.0 U	1.0 U	**1.9**	**5.1**	1.0 U	1.0 U	**110**	1.0 U	1.0 U	0.5 U
MW-5A	22-Dec-97	**1.2**	1.0 U	1.0 U	**10**	1.0 U	1.0 U	1.0 U	**2.7**	**3.5**	1.0 U	**1.8**	**77**	1.0 U	1.0 U	0.5 U
MW-5A (Dup)	12-Jun-98	**1.1**	1.0 U	1.0 U	**11**	1.0 U	**1.0**	1.0 U	**4.5**	**2.2**	1.0 U	**2.3**	**68**	1.0 U	1.0 U	0.5 U
MW-5A	12-Jun-98	**1.2**	1.0 U	1.0 U	**10**	1.0 U	1.0 U	1.0 U	**4.1**	**2.4**	1.0 U	**2.7**	**69**	1.0 U	1.0 U	0.5 U
MW-5A	8-Jan-99	**1.1**	**0.5 J**	**0.8**	**8.3**	1.0 U	**1.1**	0.5 U	**1.6**	**2.1**	NT	**2.4**	**38**	0.5 U	**0.5**	0.5 U
MW-5A	18-Jun-99	**2.1**	**0.98**	**1.0**	**7.5**	**1.1 B**	0.5 U	0.5 U	0.5 U	**3.6**	0.5 U	**7.8**	**49**	0.5 U	0.5 U	0.5 U
MW-5A	16-Dec-99	**1.7**	**0.77**	**0.56**	**5.1**	0.5 U	0.5 U	0.5 U	0.5 U	**2.6**	0.5 U	**5.3**	**38**	0.5 U	0.5 U	0.5 U
MW-5A (Dup)	16-Dec-99	**1.8**	**0.8**	**0.66**	**5.4**	0.5 U	0.5 U	0.5 U	0.5 U	**2.8**	0.5 U	**5.8**	**40 E**	0.5 U	0.5 U	0.5 U
MW-5A	26-May-00	**1.6**	**0.68**	0.5 U	**6.3**	0.5 U	**0.92**	0.5 U	**2.4**	**1.2**	0.5 U	**5.4**	**33**	0.5 U	0.5 U	0.5 U
MW-5A	9-Nov-00	**1.2**	**0.93**	0.5 U	**3.6**	0.5 U	0.5 U	0.5 U	0.5 U	**1.4**	0.5 U	**7.6**	**21**	0.5 U	0.5 U	0.5 U
MW-5A	25-Apr-01	**1.2**	**0.59**	0.5 U	**3.3**	0.5 U	**0.73**	0.5 U	**1.1**	**0.96**	0.5 U	**5.7**	**20**	0.5 U	0.5 U	0.5 U
MW-5A	7-Nov-01	**1.8**	**0.79**	**0.55**	**3.6**	0.5 U	0.5 U	**0.82**	**0.59**	**0.97**	0.5 U	**5.2**	**25**	0.5 U	0.5 U	0.5 U
MW-5A	15-Apr-02	**1.7**	**0.96**	0.5 U	**2.8**	0.5 U	**0.57**	0.5 U	**0.66**	**0.62**	0.5 U	**7.4**	**18**	0.5 U	0.5 U	0.5 U
MW-5A	10-Oct-02	**1.4**	0.5 U	**0.55**	**2.7**	1.0 U	0.5 U	0.5 U	0.5 U	**0.87**	1.0 U	**5.6**	**17**	0.5 U	0.5 U	0.5 U
MW-5A	14-May-03	**1.5**	**0.95**	0.5 U	**1.7**	1.0 U	0.5 U	0.5 U	0.5 U	**0.94**	1.0 U	**8.0**	**11**	0.5 U	0.5 U	0.5 U
MW-5A	20-Nov-03	**1.7**	**1.2**	0.5 U	**2.1**	1.0 U	0.5 U	0.5 U	0.5 U	**1.4**	1.0 U	**7.7**	**13**	0.5 U	0.5 U	0.5 U
MW-5A	21-Apr-04	**1.2**	**1.0**	0.5 U	**1.6**	1.0 U	0.5 U	0.05 U	0.5 U	**0.77**	1.0 U	0.5 U	**10**	0.5 U	0.5 U	0.5 U
MW-5A	11-Nov-04	**2.5**	**2.0**	0.5 U	**1.0**	1.0 U	0.5 U	0.5 U	0.5 U	**1.2**	1.0 U	**12**	**7.1**	0.5 U	0.5 U	0.5 U

Table 6-4
Volatile Organic Compounds Detected in Groundwater Samples Collected from MW-5A (µg/L)
Riverbend Landfill

Sample Location	Sample Date	Benzene	Chloro-benzene	Chloro-ethane	1,1-Di-chloro-ethane	Methylene Chloride	Tetra-chloro-ethene	Toluene	Tri-chloro-ethene	Vinyl chloride	Total Xylenes	1,4-Di-chloro-benzene	cis-1,2-Dichloro-ethene	Dichloro-difluoro-methane	trans-1,2-Dichloro-ethene	1,2-Di-chloro-benzene
MW-5A	27-May-05	**1.9**	**3.1**	0.5 U	**0.94**	0.5 U	0.5 U	0.5 U	0.5 U	**0.81**	1.0 U	**18**	**6.5**	0.5 U	0.5 U	**0.85**
MW-5A	26-Oct-05	**1.2**	**1.3**	0.5 U	**0.85**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	**6.1**	**6.4**	0.5 U	0.5 U	0.5 U
MW-5A	12-May-06	**1.0**	**1.6**	0.5 U	**0.6**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	**7.9**	**3.7**	0.5 U	0.5 U	0.5 U
MW-5A	9-Oct-06	**0.93**	**1.4**	0.5 U	**0.6**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	**6.0**	**4.1**	0.5 U	0.5 U	0.5 U
MW-5A	8-May-07	**1.3**	**2.9**	2.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	**9.2**	**3.5**	2.0 U	1.0 U	1.0 U
MW-5A	7-Nov-07	**1.3**	**2.7**	2.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	**7.1**	**4.0**	2.0 U	1.0 U	1.0 U
MW-5A	22-May-08	**1.2**	**3.0**	2.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	**7.3**	**3.9**	2.0 U	1.0 U	1.0 U
MW-5A	12-Nov-08	**2.5**	**6.8**	2.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	**11**	**4.7**	2.0 U	1.0 U	1.0 U
MW-5A	6-May-09	**2.7**	**8.4**	2.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	**13**	**3.6**	2.0 U	1.0 U	1.0 U
MW-5A	18-Nov-09	**1.5**	**4.8**	2.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	**10**	**3.2**	2.0 U	1.0 U	1.0 U
MW-5A	21-Apr-10	**1.0**	**4.5**	2.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	**8.2**	**2.3**	2.0 U	1.0 U	1.0 U
MW-5A	6-Oct-10	**1.1**	**3.3**	2.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	**6.0**	**2.5**	2.0 U	1.0 U	1.0 U
MW-5A	15-Apr-11	1.0 U	**3.1**	2.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	**6.6**	**2.2**	2.0 U	1.0 U	1.0 U
MW-5A	2-Nov-11	1.0 U	**2.8**	2.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	**5.3**	**2.4**	2.0 U	1.0 U	1.0 U
MW-5A	1-May-12	1.0 U	**2.5**	2.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	**5.3**	**1.8**	2.0 U	1.0 U	1.0 U
MW-5A	15-Nov-12	1.0 U	**2.4**	2.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	**5.1**	**1.5**	2.0 U	1.0 U	1.0 U
MW-5A (Dup)	15-Nov-12	1.0 U	**2.4**	2.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	**5.2**	**1.5**	2.0 U	1.0 U	1.0 U
MW-5A	10-Apr-13	1.0 U	**2.8**	2.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**6.4**	**1.7**	2.0 U	1.0 U	1.0 U
MW-5A	20-Nov-13	1.0 U	**1.8**	2.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**4.5**	**1.3**	2.0 U	1.0 U	1.0 U
MW-5A	30-Apr-14	1.0 U	**1.6**	2.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	**3.5**	**1.1**	2.0 U	1.0 U	1.0 U
MW-5A	18-Nov-14	1.0 U	**2.0**	2.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	**3.6**	**1.2**	2.0 U	1.0 U	1.0 U
MW-5A	6-May-15	1.0 U	**2.1**	2.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	**4.8**	**1.3**	2.0 U	1.0 U	1.0 U
MW-5A	11-Nov-15	1.0 U	**3.2**	2.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	**8.5**	**1.5**	2.0 U	1.0 U	1.0 U
MW-5A	4-May-16	1.0 U	**1.9**	2.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	**3.6**	**1.1**	2.0 U	1.0 U	1.0 U
MW-5A	16-Nov-16	1.0 U	**2.8**	2.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	**5.8**	**1.3**	2.0 U	1.0 U	1.0 U
MW-5A	18-Apr-17	**1.1**	**3.1**	2.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	**6.0**	**1.8**	2.0 U	1.0 U	1.0 U
MW-5A	8-Nov-17	1.0 U	**3.3**	2.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	**6.9**	**1.3**	2.0 U	1.0 U	1.0 U
MW-5A	2-May-18	1.0 U	**2.7**	2.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	**4.0**	**1.2**	2.0 U	1.0 U	1.0 U
MW-5A	6-Nov-18	1.0 U	**3.7**	2.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	**7.0**	**2.0**	2.0 U	1.0 U	1.0 U
MW-5A	25-Apr-19	1.0 U	**3.2**	2.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	**5.7**	**1.1**	2.0 U	1.0 U	1.0 U
MW-5A	19-Nov-19	2.0 U	**3.2**	3.0 U	2.0 U	6.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U	**5.2**	**1.4**	3.0 U	2.0 U	2.0 U
MW-5A	23-Apr-20	1.0 U	**2.6**	2.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	**3.9**	1.0 U	2.0 U	1.0 U	1.0 U
MW-5A	10-Nov-20	1.0 U	**4.0**	2.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	**6.3**	**1.7**	2.0 U	1.0 U	1.0 U
MW-5A	15-Apr-21	**1.0**	**3.8**	2.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	**5.6**	**1.3**	2.0 U	1.0 U	1.0 U
MW-5A	16-Nov-21	**1.3**	**5.2**	2.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	**7.7**	**1.5**	2.0 U	1.0 U	1.0 U

NOTE:
D = compound identified in analysis at secondary dilution; E = estimated value; J = reported values above instrument detection limit and below reporting limit;
U = not detected at or above the reporting limit.

Table 6-5
Field Parameters in Surface Water Samples
Riverbend Landfill

Sample Location	Date Collected	pH (S.U.)	ORP (mV)	Specific Conductance (µS/cm)	Temperature (°C)	Dissolved Oxygen (mg/L)
SYR MW-12A	22-Dec-16	7.31	169.6	92	4.3	11.45
SYR MW-12A	8-Feb-18	7.11	219.4	87	9.3	7.42
SYR MW-12A	3-May-18	7.08	61.9	96	19.8	7.75
SYR MW-12A	23-Apr-19	7.13	102.5	101	16.0	10.56
SYR MW-12A	23-Apr-20	7.54	146.4	102	17.0	7.18
SYR MW-12A	14-Apr-21	7.15	72.6	115	11.8	12.64
SYR SW-1 (Upstream)	3-May-12	6.46	94.8	82	11.1	11.28
SYR SW-1 (Upstream)	17-Apr-13	6.17	153.0	96	8.7	12.13
SYR SW-1 (Upstream)	23-May-13	6.96	-70.9	106	14.8	8.81
SYR SW-1 (Upstream)	1-May-14	6.74	113.4	90	14.3	9.76
SYR SW-1 (Upstream)	11-May-15	7.42	92.3	91	16.5	8.37
SYR SW-1 (Upstream)	2-May-16	8.02	15.9	103	18.3	11.06
SYR SW-1 (Upstream)	19-Apr-17	5.83	125.7	89	11.6	11.43
SYR SW-1 (Upstream)	3-May-18	6.88	67.4	97	14.8	8.07
SYR SW-1 (Upstream)	23-Apr-19	6.76	116.3	101	14.9	10.50
SYR SW-1 (Upstream)	23-Apr-20	7.53	151.0	99.1	13.8	9.41
SYR SW-1 (Upstream)	12-Apr-21	6.73	109.8	105	12.8	8.45
SYR SW-2 (Downstream)	3-May-12	7.04	65.2	82	11.1	11.28
SYR SW-2 (Downstream)	17-Apr-13	5.72	183.8	96	8.2	11.30
SYR SW-2 (Downstream)	23-May-13	6.35	-16.0	106	13.8	9.07
SYR SW-2 (Downstream)	1-May-14	5.82	160.5	90	14.0	8.98
SYR SW-2 (Downstream)	11-May-15	7.58	95.8	85	17.6	7.46
SYR SW-2 (Downstream)	2-May-16	7.94	-3.7	108	18.4	8.86
SYR SW-2 (Downstream)	19-Apr-17	6.55	115.1	79	10.6	10.71
SYR SW-2 (Downstream)	3-May-18	7.08	94.0	96	17.7	9.00
SYR SW-2 (Downstream)	23-Apr-19	6.83	105.0	99	14.5	10.91
SYR SW-2 (Downstream)	23-Apr-20	7.23	132.8	95.7	14.8	8.50
SYR SW-2 (Downstream)	12-Apr-21	7.22	75.5	131.8	13.6	11.50

NOTE:
S.U. = standard pH units; mV = millivolts; µS/cm = microSiemens per centimeter;
°C = degrees Celsius; mg/L = milligrams per liter.

Table 6-6
Anions and Cations in Surface Water Samples (mg/L)
Riverbend Landfill

Sample Location	Date Collected	Anions						Cations					
		Ammonia	Nitrate+ Nitrite	Carbonate	Bicarb-onate	Sulfate	Chloride	Calcium	Iron	Magnesium	Manganese	Potassium	Sodium
SYR MW-12A	3-May-18	0.072	0.25	5.0 U	35	4.2	4.3	9.1	4.9	3.5	0.086	0.77	5.9
SYR MW-12A (Dup)	3-May-18	0.050 U	0.26	6.0 U	35	4.4	4.60	9.0	2.9	3.3	0.071	0.59	5.8
SYR MW-12A	23-Apr-19	0.087	0.62	10 U	32	5.6	5.0	12.0	16	6.7	0.420	0.96	6.3
SYR MW-12A	23-Apr-20	0.051	0.26	10 U	40	5.5	5.1	9.9	4.6	4.0	0.087	0.69	7.2
SYR MW-12A	14-Apr-21	0.050 U	0.44	10 U	35	7.4	5.9	9.3	0.44	3.0	0.025	0.62	6.0
SYR SW-1 (Upstream)[a]	3-May-12	0.058	0.20	5.0 U	29	4.4	4.8	6.8	0.056	2.5	0.0140	0.50 U	5.3
SYR SW-1 (Upstream)[a]	17-Apr-13	0.050 U	0.28	5.0 U	27	4.8	5.1	6.9	0.037	2.4	0.0096	0.58	5.3
SYR SW-1 (Upstream)	1-May-14	0.050 U	0.36	5.0 U	28	6.2	5.2	6.8	1.100	2.7	0.022	0.56	5.4
SYR SW-1 (Upstream)	11-May-15	0.050 U	0.17	5.0 U	35	4.3	5.4	8.5	0.440	2.8	0.018	0.50	6.6
SYR SW-1 (Upstream)	2-May-16	0.050 U	0.19	5.0 U	33	4.5	4.4	8.1	0.520	2.8	0.019	0.50 U	6.0
SYR SW-1 (Upstream)	19-Apr-17	0.050 U	0.34	5.0 U	26	4.5	4.4	6.7	1.100	2.3	0.022	0.50 U	5.0
SYR SW-1 (Upstream)	3-May-18	0.053	0.30	6.0 U	35	4.3	4.3	8.2	0.600	2.7	0.022	0.54	5.7
SYR SW-1 (Upstream)	23-Apr-19	0.050 U	0.63	10 U	32	5.0	5.0	8.4	1.300	2.9	0.026	0.50	6.0
SYR SW-1 (Upstream)	23-Apr-20	0.050 U	0.26	10 U	39	5.2	5.0	8.9	0.500	3.0	0.017	0.50 U	6.9
SYR SW-1 (Upstream)	14-Apr-21	0.050 U	0.39	10 U	32	5.0	5.3	8.2	0.490	2.7	0.018	0.54	5.8
SYR SW-2 (Downstream)[a]	3-May-12	0.050 U	0.23	5.0 U	28	4.6	4.8	6.7	0.038	2.4	0.0120	0.50 U	5.0
SYR SW-2 (Downstream)[a]	17-Apr-13	0.053	0.30	5.0 U	27	4.8	4.9	6.9	0.035	2.4	0.0094	0.51	5.3
SYR SW-2 (Downstream)	1-May-14	0.120	0.43	5.0 U	26	5.1	4.6	6.7	1.2	2.6	0.024	0.56	5.5
SYR SW-2 (Downstream)	11-May-15	0.050 U	0.17	5.0 U	36	4.3	5.5	8.6	0.54	2.8	0.022	0.51	6.6
SYR SW-2 (Downstream)	2-May-16	0.050 U	0.05 U	5.0 U	33	4.6	4.5	8.2	0.44	2.8	0.018	0.52	6.0
SYR SW-2 (Downstream)	19-Apr-17	0.050 U	0.33	5.0 U	26	4.3	3.6	6.4	1.2	2.2	0.023	0.50 U	4.8
SYR SW-2 (Downstream)	3-May-18	0.059	0.29	6.0 U	35	4.2	4.1	8.9	2.6	3.2	0.068	0.59	5.7
SYR SW-2 (Downstream)	23-Apr-19	0.051	0.63	10 U	32	5.0	5.0	8.1	1.1	2.7	0.023	0.50 U	5.7
SYR SW-2 (Downstream)	23-Apr-20	0.050 U	0.19	10 U	39	5.2	5.0	9.0	1.3	3.1	0.026	0.50 U	6.9
SYR SW-2 (Downstream)	14-Apr-21	0.050 U	0.24	10 U	38	5.1	5.3	8.1	1.4	2.8	0.031	0.58	5.6

NOTE:

[a] Consistent with the site's updated environmental monitoring plan, laboratory analysis of dissolved-phase cations were replaced with total in 2014.

mg/L = milligrams per liter; U = not detected at or above the method reporting limit listed; Dup = duplicate sample.

Table 6-7
Laboratory Indicator Parameters in Surface Water Samples
Riverbend Landfill

Sample Location	Date Collected	Laboratory pH (S.U.)	Laboratory Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Total Suspended Solids (mg/L)	Chemical Oxygen Demand (mg/L)	Total Organic Carbon (mg/L)	Hardness (Dissolved) (as $CaCO_3$) (mg/L)	Total Alkalinity (mg/L)
SYR MW-12A	3-May-18	7.6	110	51	180	10 U	1.4	43	35
SYR MW-12A (Dup)	3-May-18	7.7	100	51	230	10 U	1.2	46	35
SYR MW-12A	23-Apr-19	7.5	96	69	240	10 U	1.0	39	32
SYR MW-12A	23-Apr-20	7.4	100	66	44	20 U	1.2	38	40
SYR MW-12A	14-Apr-21	7.6	110	57	10	20 U	1.2	35	35
SYR SW-1 (Upstream)	3-May-12	7.71	80	73	22	10 U	1.3	27	29
SYR SW-1 (Upstream)	17-Apr-13	7.49	84	33	9.2	10 U	1.5	34 B	27
SYR SW-1 (Upstream)	1-May-14	7.38	86	43	16	11	1.0 U	43	28
SYR SW-1 (Upstream)	11-May-15	7.56	120	59	6.8 H	10 U	1.0	53	35
SYR SW-1 (Upstream)	2-May-16	7.57	75	63	6.8	10 U	1.3	38	33
SYR SW-1 (Upstream)	19-Apr-17	7.6	78	71	16	10 U	1.2	22	26
SYR SW-1 (Upstream)	3-May-18	7.7	110	52	8.4	10 U	1.2	38	35
SYR SW-1 (Upstream)	23-Apr-19	7.4	94	74	15	10 U	1.1	27	32
SYR SW-1 (Upstream)	23-Apr-20	7.9	100	64	7.2	20 U	1.2	45	39
SYR SW-1 (Upstream)	14-Apr-21	7.6	95	61	8.8	20 U	1.2	33	32
SYR SW-2 (Downstream)	3-May-12	7.65	82	68	31	10 U	1.5	27	28
SYR SW-2 (Downstream)	17-Apr-13	7.55	83	35	11	10 U	1.5	30 B	27
SYR SW-2 (Downstream)	1-May-14	7.36	85	50	18	14	1.0 U	41	26
SYR SW-2 (Downstream)	11-May-15	7.67	110	60	17 H	10 U	1.2	56	36
SYR SW-2 (Downstream)	2-May-16	7.54	72	73	7.2	10 U	1.3	34	33
SYR SW-2 (Downstream)	19-Apr-17	7.7	78	69	15	10 U	1.2	34	26
SYR SW-2 (Downstream)	3-May-18	7.7	110	58	24	10 U	1.1	39	35
SYR SW-2 (Downstream)	23-Apr-19	7.5	95	68	10	10 U	1.2	34	32
SYR SW-2 (Downstream)	23-Apr-20	6.7	100	61	42	20 U	1.2	43	39
SYR SW-2 (Downstream)	14-Apr-21	7.8	97	63	13	20 U	1.1	40	38

NOTE:
S.U. = standard pH units; µmhos/cm = micromhos per centimeter; mg/L = milligrams per liter;
U = not detected at or above the method reporting limit listed; H = sample was prepped or analyzed past the analytical holding time;
Dup = duplicate sample; B = compound was detected in the associated laboratory method blank sample.

Table 6-8
Supplemental Parameters in Surface Water Samples
Riverbend Landfill

Sample Location	Date Collected	Fecal Coliform (MPN/100mL)	E. coli (MPN/100mL)	Biochemical Oxygen Demand (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Ortho-phosphate (mg/L)	Total Phosphorus (mg/L)	Total Organic Halogens (ug/L)
SYR MW-12A	3-May-18	6	14	2.0 U	0.50 U	0.020 U	0.010	39 U
SYR MW-12A (Dup)	3-May-18	6	15	2.0 U	0.50 U	0.020 U	0.048	39 U
SYR MW-12A	23-Apr-19	24	60	2.0 U	1.0 U	0.020 U	0.050 U	39 U
SYR MW-12A	23-Apr-20	36	60	2.0 U	1.0 U	0.066	0.050 U	15 U
SYR MW-12A	14-Apr-21	10	14	3.8 b	1.0 U	0.020 U	0.050 U	25
SYR SW-1 (Upstream)	3-May-12	300	460	2.4	0.89	0.020 U	0.028	15 U
SYR SW-1 (Upstream)	17-Apr-13	NS	NS	2.0 U	0.50 U	0.020 U	0.020 U	15 U
SYR SW-1 (Upstream)	23-May-13	365	1,046	NS	NS	NS	NS	NS
SYR SW-1 (Upstream)	1-May-14	23	41	2.0 U	0.50 U	0.020 U	0.021	15 U
SYR SW-1 (Upstream)	11-May-15	18	99	2.0 U	0.50 U	0.020 U	0.020 U	17
SYR SW-1 (Upstream)	2-May-16	11	23	2.0 U	2.6	0.020 U	0.020 U	15 U
SYR SW-1 (Upstream)	19-Apr-17	23	28	2.0 U	0.5 U	0.020 U	0.030	15 U
SYR SW-1 (Upstream)	3-May-18	10	16	2.0 U	0.5 U	0.020 U	0.020 U	39 U
SYR SW-1 (Upstream)	23-Apr-19	16	43	2.0 U	1.0 U	0.020 U	0.050 U	39 U
SYR SW-1 (Upstream)	23-Apr-20	20	67	2.0 U	0.3 U	0.020 U	0.050 U	15 U
SYR SW-1 (Upstream)	14-Apr-21	4	8	3.8 b	1.0 U	0.020 U	0.050 U	15 U
SYR SW-2 (Downstream)	3-May-12	900	260	2.9	0.50 U	0.020 U	0.040	16
SYR SW-2 (Downstream)	17-Apr-13	NS	NS	2.0 U	0.50 U	0.020 U, H	0.020 U	15 U
SYR SW-2 (Downstream)	23-May-13	127	435	NS	NS	NS	NS	NS
SYR SW-2 (Downstream)	1-May-14	33	42	2.0 U	0.50 U	0.020 U	0.021	15 U
SYR SW-2 (Downstream)	11-May-15	11	40	2.0 U	0.50 U	0.020 U	0.020 U	15 U
SYR SW-2 (Downstream)	2-May-16	8.0	22	2.0 U	0.50 U	0.020 U	0.020 U	15 U
SYR SW-2 (Downstream)	19-Apr-17	24.0	27	2.0 U	0.50 U	0.020 U	0.032	15 U
SYR SW-2 (Downstream)	3-May-18	7	23	2.0 U	0.50 U	0.020 U	0.023	39 U
SYR SW-2 (Downstream)	23-Apr-19	14	20	2.0 U	1.0 U	0.020 U	0.050 U	39 U
SYR SW-2 (Downstream)	23-Apr-20	36	69	2.0 U	0.3 U	0.020 U	0.050 U	15 U
SYR SW-2 (Downstream)	14-Apr-21	3	6	2.5 b	1.0 U	0.020 U	0.050 U	15 U

NOTE:
MPN/100mL = most probable number per 100 milliliters; mg/L = milligrams per liter; ug/L = micrograms per liter;
b = Result detected in the laboratory blank;
U = not detected at or above the method reporting limit listed; Dup = duplicate sample;
NS = not sampled for or analyzed; H = sample was prepped or analyzed past the analytical holding time.

Table 6-9
Summary of Landfill Gas Monitoring Data
Riverbend Landfill

Sample Location	Date Measured	Methane (Percent)
Compliance Boundary Landfill Gas Probes		
CGP-09R	10-Jan-11	0.0
CGP-09R	17-Feb-11	0.0
CGP-09R	10-Mar-11	0.0
CGP-09R	30-Mar-11	0.0
CGP-09R	21-Apr-11	0.0
CGP-09R	4-May-11	0.0
CGP-09R	11-May-11	0.0
CGP-09R	9-Jun-11	0.0
CGP-09R	8-Jul-11	0.0
CGP-09R	28-Jul-11	0.0
CGP-09R	10-Aug-11	0.0
CGP-09R	9-Sep-11	0.0
CGP-09R	14-Oct-11	0.0
CGP-09R	3-Nov-11	0.0
CGP-09R	9-Nov-11	0.0
CGP-09R	13-Dec-11	0.0
CGP-09R	12-Jan-12	0.0
CGP-09R	17-Jan-12	0.0
CGP-09R	13-Feb-12	0.0
CGP-09R	9-Mar-12	0.0
CGP-09R	24-Apr-12	0.0
CGP-09R	4-May-12	0.0
CGP-09R	9-May-12	0.0
CGP-09R	18-Jun-12	0.0
CGP-09R	18-Jul-12	0.0
CGP-09R	23-Aug-12	0.0
CGP-09R	15-Nov-12	0.0
CGP-09R	21-Mar-13	0.0
CGP-09R	12-Apr-13	0.0
CGP-09R	12-Jul-13	0.0
CGP-09R	25-Oct-13	0.0
CGP-09R	13-Mar-14	0.0
CGP-09R	2-Jun-14	0.0
CGP-09R	31-Jul-14	0.0
CGP-09R	15-Dec-14	0.0
CGP-09R	4-Mar-15	0.0
CGP-09R	14-May-15	0.0
CGP-09R	16-Jul-15	0.0
CGP-09R	12-Nov-15	0.0
CGP-09R	22-Mar-16	0.0
CGP-09R	7-Apr-16	0.0
CGP-09R	9-Sep-16	0.0
CGP-09R	15-Nov-16	0.0
CGP-09R	1-Mar-17	0.0
CGP-09R	17-Apr-17	0.0
CGP-09R	13-Sep-17	0.0
CGP-09R	8-Nov-17	0.0
CGP-09R	14-Mar-18	0.0

Table 6-9
Summary of Landfill Gas Monitoring Data
Riverbend Landfill

Sample Location	Date Measured	Methane (Percent)
CGP-09R	24-Apr-18	0.0
CGP-09R	2-Aug-18	0.0
CGP-09R	5-Nov-18	0.0
CGP-09R	25-Jan-19	0.2
CGP-09R	29-Apr-19	0.0
CGP-09R	1-Aug-19	0.0
CGP-09R	21-Nov-19	2.6
CGP-09R	19-Feb-20	1.2
CGP-09R	29-May-20	0.5
CGP-09R	21-Sep-20	0.0
CGP-09R	9-Nov-20	0.0
CGP-09R	18-Mar-21	0.0
CGP-09R	12-Apr-21	0.0
CGP-09R	22-Jul-21	0.0
CGP-09R	16-Nov-21	0.0
CGP-10R	17-Feb-11	0.0
CGP-10R	10-Mar-11	0.0
CGP-10R	30-Mar-11	0.0
CGP-10R	21-Apr-11	0.0
CGP-10R	4-May-11	0.0
CGP-10R	11-May-11	0.0
CGP-10R	9-Jun-11	0.0
CGP-10R	8-Jul-11	0.0
CGP-10R	28-Jul-11	0.0
CGP-10R	10-Aug-11	0.0
CGP-10R	9-Sep-11	0.0
CGP-10R	14-Oct-11	0.0
CGP-10R	3-Nov-11	0.0
CGP-10R	9-Nov-11	0.0
CGP-10R	13-Dec-11	0.0
CGP-10R	12-Jan-12	0.0
CGP-10R	4-May-12	0.0
CGP-10R	23-Aug-12	0.0
CGP-10R	15-Nov-12	0.0
CGP-10R	21-Mar-13	0.0
CGP-10R	12-Apr-13	0.0
CGP-10R	12-Jul-13	0.0
CGP-10R	25-Oct-13	0.0
CGP-10R	13-Mar-14	0.0
CGP-10R	2-Jun-14	0.0
CGP-10R	31-Jul-14	0.0
CGP-10R	15-Dec-14	0.0
CGP-10R	4-Mar-15	0.0
CGP-10R	14-May-15	0.0
CGP-10R	16-Jul-15	0.0
CGP-10R	12-Nov-15	0.0
CGP-10R	22-Mar-16	0.0
CGP-10R	7-Apr-16	0.0

Table 6-9
Summary of Landfill Gas Monitoring Data
Riverbend Landfill

Sample Location	Date Measured	Methane (Percent)
CGP-10R	9-Sep-16	0.0
CGP-10R	15-Nov-16	0.0
CGP-10R	1-Mar-17	0.0
CGP-10R	17-Apr-17	0.0
CGP-10R	13-Sep-17	0.0
CGP-10R	8-Nov-17	0.0
CGP-10R	14-Mar-18	0.0
CGP-10R	24-Apr-18	0.0
CGP-10R	2-Aug-18	0.0
CGP-10R	5-Nov-18	0.0
CGP-10R	25-Jan-19	0.0
CGP-10R	29-Apr-19	0.0
CGP-10R	1-Aug-19	0.0
CGP-10R	21-Nov-19	0.0
CGP-10R	19-Feb-20	0.0
CGP-10R	29-May-20	0.0
CGP-10R	21-Sep-20	0.0
CGP-10R	9-Nov-20	0.0
CGP-10R	18-Mar-21	0.0
CGP-10R	12-Apr-21	0.0
CGP-10R	22-Jul-21	0.0
CGP-10R	16-Nov-21	0.0
CGP-11	10-Jan-11	0.0
CGP-11	17-Feb-11	0.0
CGP-11	10-Mar-11	0.0
CGP-11	30-Mar-11	0.0
CGP-11	21-Apr-11	0.0
CGP-11	4-May-11	0.0
CGP-11	11-May-11	0.0
CGP-11	9-Jun-11	0.0
CGP-11	8-Jul-11	0.0
CGP-11	28-Jul-11	0.0
CGP-11	10-Aug-11	0.0
CGP-11	9-Sep-11	0.0
CGP-11	14-Oct-11	0.0
CGP-11	3-Nov-11	0.0
CGP-11	10-Nov-11	0.0
CGP-11	13-Dec-11	0.0
CGP-11	12-Jan-12	0.0
CGP-11	4-May-12	0.0
CGP-11	23-Aug-12	0.0
CGP-11	15-Nov-12	0.0
CGP-11	21-Mar-13	0.0
CGP-11	12-Apr-13	0.0
CGP-11	12-Jul-13	0.0
CGP-11	25-Oct-13	0.0
CGP-11	13-Mar-14	0.0
CGP-11	2-Jun-14	0.0

Table 6-9
Summary of Landfill Gas Monitoring Data
Riverbend Landfill

Sample Location	Date Measured	Methane (Percent)
CGP-11	31-Jul-14	0.0
CGP-11	15-Dec-14	0.0
CGP-11	4-Mar-15	0.0
CGP-11	14-May-15	0.0
CGP-11	16-Jul-15	0.0
CGP-11	12-Nov-15	0.0
CGP-11	22-Mar-16	0.0
CGP-11	7-Apr-16	0.0
CGP-11	9-Sep-16	0.0
CGP-11	15-Nov-16	0.0
CGP-11	1-Mar-17	0.0
CGP-11	17-Apr-17	0.0
CGP-11	13-Sep-17	0.0
CGP-11	8-Nov-17	0.0
CGP-11	14-Mar-18	0.0
CGP-11	24-Apr-18	0.0
CGP-11	2-Aug-18	0.0
CGP-11	5-Nov-18	0.0
CGP-11	25-Jan-19	0.0
CGP-11	29-Apr-19	0.0
CGP-11	1-Aug-19	0.0
CGP-11	21-Nov-19	0.0
CGP-11	19-Feb-20	0.0
CGP-11	29-May-20	0.0
CGP-11	21-Sep-20	0.0
CGP-11	9-Nov-20	0.0
CGP-11	18-Mar-21	0.0
CGP-11	12-Apr-21	0.0
CGP-11	22-Jul-21	0.0
CGP-11	16-Nov-21	0.0
CGP-12	10-Jan-11	0.0
CGP-12	17-Feb-11	0.0
CGP-12	10-Mar-11	0.0
CGP-12	30-Mar-11	0.0
CGP-12	21-Apr-11	0.0
CGP-12	4-May-11	0.0
CGP-12	11-May-11	0.0
CGP-12	9-Jun-11	0.0
CGP-12	8-Jul-11	0.0
CGP-12	28-Jul-11	0.0
CGP-12	10-Aug-11	0.0
CGP-12	9-Sep-11	0.0
CGP-12	14-Oct-11	0.0
CGP-12	3-Nov-11	0.0
CGP-12	10-Nov-11	0.0
CGP-12	13-Dec-11	0.0
CGP-12	12-Jan-12	0.0
CGP-12	4-May-12	0.0

Table 6-9
Summary of Landfill Gas Monitoring Data
Riverbend Landfill

Sample Location	Date Measured	Methane (Percent)
CGP-12	23-Aug-12	0.0
CGP-12	15-Nov-12	0.0
CGP-12	21-Mar-13	0.0
CGP-12	12-Apr-13	0.0
CGP-12	12-Jul-13	0.0
CGP-12	25-Oct-13	0.0
CGP-12	13-Mar-14	0.0
CGP-12	2-Jun-14	0.0
CGP-12	31-Jul-14	0.0
CGP-12	15-Dec-14	0.0
CGP-12	4-Mar-15	0.0
CGP-12	14-May-15	0.0
CGP-12	16-Jul-15	0.0
CGP-12	12-Nov-15	0.0
CGP-12	22-Mar-16	0.0
CGP-12	7-Apr-16	0.0
CGP-12	9-Sep-16	0.0
CGP-12	15-Nov-16	0.0
CGP-12	1-Mar-17	0.0
CGP-12	17-Apr-17	0.0
CGP-12	13-Sep-17	0.0
CGP-12	8-Nov-17	0.0
CGP-12	14-Mar-18	0.0
CGP-12	24-Apr-18	0.0
CGP-12	2-Aug-18	0.0
CGP-12	5-Nov-18	0.0
CGP-12	25-Jan-19	0.0
CGP-12	29-Apr-19	0.0
CGP-12	1-Aug-19	0.0
CGP-12	21-Nov-19	0.0
CGP-12	19-Feb-20	0.0
CGP-12	29-May-20	0.0
CGP-12	21-Sep-20	0.0
CGP-12	9-Nov-20	0.0
CGP-12	18-Mar-21	0.0
CGP-12	12-Apr-21	0.0
CGP-12	22-Jul-21	0.0
CGP-12	16-Nov-21	0.0
CGP-13	12-Jul-13	0.0
CGP-13	25-Oct-13	0.0
CGP-13	13-Mar-14	0.0
CGP-13	2-Jun-14	0.0
CGP-13	31-Jul-14	0.0
CGP-13	15-Dec-14	0.0
CGP-13	4-Mar-15	0.0
CGP-13	14-May-15	0.0
CGP-13	16-Jul-15	0.0
CGP-13	12-Nov-15	0.0

Table 6-9
Summary of Landfill Gas Monitoring Data
Riverbend Landfill

Sample Location	Date Measured	Methane (Percent)
CGP-13	22-Mar-16	0.0
CGP-13	7-Apr-16	0.0
CGP-13	9-Sep-16	0.0
CGP-13	15-Nov-16	0.0
CGP-13	1-Mar-17	0.0
CGP-13	17-Apr-17	0.0
CGP-13	13-Sep-17	0.0
CGP-13	8-Nov-17	0.0
CGP-13	14-Mar-18	0.0
CGP-13	24-Apr-18	0.0
CGP-13	2-Aug-18	0.0
CGP-13	5-Nov-18	0.0
CGP-13	25-Jan-19	0.0
CGP-13	29-Apr-19	0.0
CGP-13	1-Aug-19	0.0
CGP-13	21-Nov-19	0.0
CGP-13	19-Feb-20	0.0
CGP-13	29-May-20	0.0
CGP-13	21-Sep-20	0.0
CGP-13	9-Nov-20	0.0
CGP-13	18-Mar-21	0.0
CGP-13	12-Apr-21	0.0
CGP-13	22-Jul-21	0.0
CGP-13	16-Nov-21	0.0
CGP-14	13-Mar-14	0.0
CGP-14	2-Jun-14	0.0
CGP-14	31-Jul-14	0.0
CGP-14	15-Dec-14	0.0
CGP-14	4-Mar-15	0.0
CGP-14	14-May-15	0.0
CGP-14	16-Jul-15	0.0
CGP-14	12-Nov-15	0.0
CGP-14	22-Mar-16	0.0
CGP-14	7-Apr-16	0.0
CGP-14	9-Sep-16	0.0
CGP-14	15-Nov-16	0.0
CGP-14	1-Mar-17	0.0
CGP-14	17-Apr-17	0.0
CGP-14	13-Sep-17	0.0
CGP-14	8-Nov-17	0.0
CGP-14	14-Mar-18	0.0
CGP-14	24-Apr-18	0.0
CGP-14	2-Aug-18	0.0
CGP-14	5-Nov-18	0.0
CGP-14	25-Jan-19	0.0
CGP-14	29-Apr-19	0.0
CGP-14	1-Aug-19	0.0
CGP-14	21-Nov-19	0.0

Table 6-9
Summary of Landfill Gas Monitoring Data
Riverbend Landfill

Sample Location	Date Measured	Methane (Percent)
CGP-14	19-Feb-20	0.0
CGP-14	29-May-20	0.0
CGP-14	21-Sep-20	0.0
CGP-14	9-Nov-20	0.0
CGP-14	18-Mar-21	0.0
CGP-14	12-Apr-21	0.0
CGP-14	22-Jul-21	0.0
CGP-14	16-Nov-21	0.0
Facility Structures		
Office	10-Jan-11	0.0
Office	17-Feb-11	0.0
Office	10-Mar-11	0.0
Office	30-Mar-11	0.0
Office	21-Apr-11	0.0
Office	4-May-11	0.0
Office	11-May-11	0.0
Office	9-Jun-11	0.0
Office	8-Jul-11	0.0
Office	28-Jul-11	0.0
Office	10-Aug-11	0.0
Office	9-Sep-11	0.0
Office	14-Oct-11	0.0
Office	3-Nov-11	0.0
Office	9-Nov-11	0.0
Office	13-Dec-11	0.0
Office	12-Jan-12	0.0
Office	4-May-12	0.0
Office	23-Aug-12	0.0
Office	15-Nov-12	0.0
Office	21-Mar-13	0.0
Office	12-Apr-13	0.0
Office	12-Jul-13	0.0
Office	25-Oct-13	0.0
Office	13-Mar-14	0.0
Office	2-Jun-14	0.0
Office	31-Jul-14	0.0
Office	15-Dec-14	0.0
Office	4-Mar-15	0.0
Office	14-May-15	0.0
Office	16-Jul-15	0.0
Office	12-Nov-15	0.0
Office	22-Mar-16	0.0
Office	7-Apr-16	0.0
Office	9-Sep-16	0.0
Office	15-Nov-16	0.0
Office	1-Mar-17	0.0
Office	17-Apr-17	0.0

Table 6-9
Summary of Landfill Gas Monitoring Data
Riverbend Landfill

Sample Location	Date Measured	Methane (Percent)
Office	13-Sep-17	0.0
Office	8-Nov-17	0.0
Office	14-Mar-18	0.0
Office	24-Apr-18	0.0
Office	2-Aug-18	0.0
Office	5-Nov-18	0.0
Office	25-Jan-19	0.0
Office	29-Apr-19	0.0
Office	1-Aug-19	0.0
Office	21-Nov-19	0.0
Office	19-Feb-20	0.0
Office	29-May-20	0.0
Office	21-Sep-20	0.0
Office	9-Nov-20	0.0
Office	18-Mar-21	0.0
Office	12-Apr-21	0.0
Office	22-Jul-21	0.0
Office	16-Nov-21	0.0
Scale House[a]	13-Mar-14	0.0
Scale House	2-Jun-14	0.0
Scale House	31-Jul-14	0.0
Scale House	15-Dec-14	0.0
Scale House	4-Mar-15	0.0
Scale House	14-May-15	0.0
Scale House	16-Jul-15	0.0
Scale House	12-Nov-15	0.0
Scale House	22-Mar-16	0.0
Scale House	7-Apr-16	0.0
Scale House	9-Sep-16	0.0
Scale House	15-Nov-16	0.0
Scale House	1-Mar-17	0.0
Scale House	17-Apr-17	0.0
Scale House	13-Sep-17	0.0
Scale House	8-Nov-17	0.0
Scale House	14-Mar-18	0.0
Scale House	24-Apr-18	0.0
Scale House	2-Aug-18	0.0
Scale House	5-Nov-18	0.0
Scale House	25-Jan-19	0.0
Scale House	29-Apr-19	0.0
Scale House	1-Aug-19	0.0
Scale House	21-Nov-19	0.0
Scale House	19-Feb-20	0.0
Scale House	29-May-20	0.0
Scale House	21-Sep-20	0.0
Scale House	9-Nov-20	0.0
Scale House	18-Mar-21	0.0

Table 6-9
Summary of Landfill Gas Monitoring Data
Riverbend Landfill

Sample Location	Date Measured	Methane (Percent)
Scale House	12-Apr-21	0.0
Scale House	22-Jul-21	0.0
Scale House	16-Nov-21	0.0
Maintenance Building[b]	21-Mar-13	0.0
Maintenance Building	12-Apr-13	0.0
Maintenance Building	12-Jul-13	0.0
Maintenance Building	25-Oct-13	0.0
Maintenance Building	13-Mar-14	0.0
Maintenance Building	2-Jun-14	0.0
Maintenance Building	31-Jul-14	0.0
Maintenance Building	15-Dec-14	0.0
Maintenance Building	4-Mar-15	0.0
Maintenance Building	14-May-15	0.0
Maintenance Building	16-Jul-15	0.0
Maintenance Building	12-Nov-15	0.0
Maintenance Building	22-Mar-16	0.0
Maintenance Building	7-Apr-16	0.0
Maintenance Building	9-Sep-16	0.0
Maintenance Building	15-Nov-16	0.0
Maintenance Building	1-Mar-17	0.0
Maintenance Building	17-Apr-17	0.0
Maintenance Building	13-Sep-17	0.0
Maintenance Building	8-Nov-17	0.0
Maintenance Building	14-Mar-18	0.0
Maintenance Building	24-Apr-18	0.0
Maintenance Building	2-Aug-18	0.0
Maintenance Building	5-Nov-18	0.0
Maintenance Building	25-Jan-19	0.0
Maintenance Building	29-Apr-19	0.0
Maintenance Building	1-Aug-19	0.0
Maintenance Building	21-Nov-19	0.0
Maintenance Building	19-Feb-20	0.0
Maintenance Building	29-May-20	0.0
Maintenance Building	21-Sep-20	0.0
Maintenance Building	9-Nov-20	0.0
Maintenance Building	18-Mar-21	0.0
Maintenance Building	12-Apr-21	0.0
Maintenance Building	22-Jul-21	0.0
Maintenance Building	16-Nov-21	0.0
LFGTE Plant Building	13-Mar-14	0.0
LFGTE Plant Building	2-Jun-14	0.0
LFGTE Plant Building	31-Jul-14	0.0
LFGTE Plant Building	15-Dec-14	0.0
LFGTE Plant Building	4-Mar-15	0.0
LFGTE Plant Building	14-May-15	0.0
LFGTE Plant Building	16-Jul-15	0.0
LFGTE Plant Building	12-Nov-15	0.0
LFGTE Plant Building	22-Mar-16	0.0

Table 6-9
Summary of Landfill Gas Monitoring Data
Riverbend Landfill

Sample Location	Date Measured	Methane (Percent)
LFGTE Plant Building	7-Apr-16	0.0
LFGTE Plant Building	9-Sep-16	0.0
LFGTE Plant Building	15-Nov-16	0.0
LFGTE Plant Building	1-Mar-17	0.0
LFGTE Plant Building	17-Apr-17	0.0
LFGTE Plant Building	13-Sep-17	0.0
LFGTE Plant Building	8-Nov-17	0.0
LFGTE Plant Building	14-Mar-18	0.0
LFGTE Plant Building	24-Apr-18	0.0
LFGTE Plant Building	2-Aug-18	0.0
LFGTE Plant Building	5-Nov-18	0.0
LFGTE Plant Building	25-Jan-19	0.0
LFGTE Plant Building	29-Apr-19	0.0
LFGTE Plant Building	1-Aug-19	0.0
LFGTE Plant Building	21-Nov-19	0.0
LFGTE Plant Building	19-Feb-20	0.0
LFGTE Plant Building	29-May-20	0.0
LFGTE Plant Building	21-Sep-20	0.0
LFGTE Plant Building	9-Nov-20	0.0
LFGTE Plant Building	18-Mar-21	0.0
LFGTE Plant Building	12-Apr-21	0.0
LFGTE Plant Building	22-Jul-21	0.0
LFGTE Plant Building	16-Nov-21	0.0
Operations Building	4-Mar-15	0.0
Operations Building	14-May-15	0.0
Operations Building	16-Jul-15	0.0
Operations Building	12-Nov-15	0.0
Operations Building	22-Mar-16	0.0
Operations Building	7-Apr-16	0.0
Operations Building	9-Sep-16	0.0
Operations Building	15-Nov-16	0.0
Operations Building	1-Mar-17	0.0
Operations Building	17-Apr-17	0.0
Operations Building	13-Sep-17	0.0
Operations Building	8-Nov-17	0.0
Operations Building	14-Mar-18	0.0
Operations Building	24-Apr-18	0.0
Operations Building	2-Aug-18	0.0
Operations Building	5-Nov-18	0.0
Operations Building	25-Jan-19	0.0
Operations Building	29-Apr-19	0.0
Operations Building	1-Aug-19	0.0
Operations Building	21-Nov-19	0.0
Operations Building	19-Feb-20	0.0
Operations Building	29-May-20	0.0
Operations Building	21-Sep-20	0.0
Operations Building	9-Nov-20	0.0
Operations Building	18-Mar-21	0.0

Table 6-9
Summary of Landfill Gas Monitoring Data
Riverbend Landfill

Sample Location	Date Measured	Methane (Percent)
Operations Building	12-Apr-21	0.0
Operations Building	22-Jul-21	0.0
Operations Building	16-Nov-21	0.0

NOTE:
LFGTE = landfill gas to energy.

[a] A new scale house was constructed in 2014 as part of front entrance site development activities.

[b] The former maintenance building (and the former gas collection and control system [GCCS] building) was demolished in 2013 to accommodate construction of Phase IA of the mechanically stabilized earthen (MSE) berm. A new maintenance building was constructed in 2013.

Where available, the last 10 years of data is presented in the table above. Earlier historic data is presented in previous annual reports.

Table 7-1
2021 Monthly Pumping and Disposal Volumes of Leachate and LDS Liquid
Riverbend Landfill

Monitoring Location	Landfill Module or Area	2021 Monthly Liquid Pumping and Disposal Volumes (Gallons)												2021 Liquid Volume Totals (Gallons)
		January 2021	February 2021	March 2021	April 2021	May 2021	June 2021	July 2021	August 2021	Septem-ber 2021	October 2021	Novem-ber 2021	Decem-ber 2021	
LCRS Pumping Volumes[a]														
1/5 P	Modules 1 through 5	307,592	249,592	176,328	129,112	111,816	96,596	120,580	134,384	123,692	313,880	836,580	927,912	**3,528,064**
6/7 P[b]	Modules 6 and 7	31,500	29,720	30,588	26,928	24,276	21,712	20,596	16,440	12,068	11,604	10,540	10,564	**246,536**
8 P[c]	Module 8	872,084	954,572	606,168	349,628	256,740	231,492	209,364	173,628	133,640	125,492	127,296	273,316	**4,313,420**
9 P	Module 9	644,466	566,946	189,372	76,242	55,590	76,452	41,070	42,114	55,656	116,982	209,940	318,666	**2,393,496**
Total Module Sump Volumes		**1,855,642**	**1,800,830**	**1,002,456**	**581,910**	**448,422**	**426,252**	**391,610**	**366,566**	**325,056**	**567,958**	**1,184,356**	**1,530,458**	**10,481,516**
LDS Liquid Pumping Volumes														
4/5 S	Modules 4 and 5	20,003	19,474	21,346	14,614	10,743	7,807	6,918	6,782	4,181	4,797	7,000	16,267	**139,932**
6/7 S	Modules 6 and 7	2,184	1,312	1,738	1,772	1,937	1,797	1,706	1,538	1,202	1,062	1,064	1,769	**19,081**
8 S	Module 8	7,516	4,237	2,488	2,391	2,377	2,203	2,349	2,222	2,281	1,792	2,424	6,299	**38,579**
9 S	Module 9	11	1,326	5	1,237	0	1,164	0	0	1,166	1	43	1,179	**6,132**
Total Module LDS Sump Volumes		**29,714**	**26,349**	**25,577**	**20,014**	**15,057**	**12,971**	**10,973**	**10,542**	**8,830**	**7,652**	**10,531**	**25,514**	**203,724**
Leachate Pond	LDS	780	102	0	120	0	0	102	0	0	0	306	0	**1,410**
GCCS Liquid Pumping Volumes[d]														
North Tanks	GCCS	575,082	623,245	338,030	205,223	166,228	125,926	121,038	119,433	143,099	185,134	475,743	655,468	**3,733,649**
Con. Sumps	GCCS	21,065	20,216	22,669	19,224	15,385	13,666	14,073	13,618	13,608	15,818	14,483	17,741	**201,566**
Total Volumes		**596,147**	**643,461**	**360,699**	**224,447**	**181,613**	**139,592**	**135,111**	**133,051**	**156,707**	**200,952**	**490,226**	**673,209**	**3,935,215**
Disposal Volumes[e]														
Leachate Pond	**Total Site Disposal Volumes**	**1,496,631**	**1,744,165**	**2,072,480**	**1,658,835**	**1,605,172**	**1,137,753**	**1,325,971**	**1,346,240**	**1,327,391**	**1,232,757**	**812,159**	**754,844**	**16,514,398**
Precipitation[f]	**NWS-McMinnville**	**8.34**	**4.88**	**1.76**	**0.52**	**0.74**	**1.65**	**0**	**0.01**	**2.05**	**3.57**	**7.96**	**8.5**	**39.98**

NOTES:

LCRS = leachate collection and removal system; LDS = secondary leak detection system; P = primary; S = secondary; GCCS = gas collection and control system; Con. = GCCS condensate.

[a] Volume of leachate pumped from each LCRS includes the volume of liquids pumped from its corresponding secondary leak detection sump.

[b] Volume of liquid pumped from the 6/7 P sump also includes liquid from the GCCS Con. Sump #2 that is conveyed to 6/7 P sump.

[c] Volume of liquid pumped from the 8 P sump also includes liquid from the GCCS Con. Sumps #1, 6, 7, and 8 that is conveyed to 8 P sump.

[d] Volume of liquid pumped from the GCCS directly to the leachate pond.

[e] Volume of leachate and liquid disposed of off-site at approved treatment facilities in the truck haul program.

[f] Precipitation information from National Weather Service, McMinnville station (KMMV) for 2021.

Table 7-2
VOCs Detected in Landfill Leachate and LDS Sump Liquid Samples (µg/L)
Riverbend Landfill

Sample Location	Sample Date	Acetone	Benzene	2-Butanone (MEK)	Carbon Disulfide	Chloroethane	Dibromochloromethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	Ethylbenzene	2-Hexanone	Methylene Chloride	Styrene	Tetrachloroethene	Toluene	1,1,1-Trichloroethane	Trichloroethene	Vinyl chloride	Total Xylenes	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	cis-1,2-Dichloroethene	Isopropylbenzene	4-Isopropyltoluene	n-Propylbenzene	Naphthalene	4-Methyl-2-pentanone
1/5 P	11-Apr-11	**390**	ND	**520**	ND	ND	ND	ND	ND	ND	**11**	ND	ND	ND	ND	**11**	ND	ND	ND	**27**	ND	ND	**6.0**	ND	ND	**3.8**	ND	ND	ND	ND	**7.1**	**30**
1/5 P	1-May-12	**1,300**	ND	**1,400**	ND	ND	ND	ND	ND	ND	**14**	ND	ND	ND	ND	**4.8**	ND	ND	ND	**28**	ND	ND	**6.5**	ND	ND	**3.5**	ND	ND	ND	ND	ND	**21**
1/5 P	10-Apr-13	**71**	**2.6**	**64**	ND	ND	ND	ND	ND	ND	**9.5**	ND	ND	ND	ND	**6.2**	ND	ND	ND	**21**	ND	ND	**5.1**	**2.5**	ND	**2.7**	ND	ND	**1.5**	ND	**6.2**	**11**
1/5 P	5-May-14	**370**	**2.0**	**220**	ND	ND	ND	ND	ND	ND	**9.9**	ND	ND	ND	ND	**5.6**	ND	ND	ND	**18**	ND	ND	**4.4**	**1.6**	ND	**4.2**	**1.4**	ND	**1.5**	ND	**8.4**	**20**
1/5 P	8-May-15	**740**	**2.8**	**370**	ND	ND	ND	ND	ND	ND	**12**	ND	ND	ND	ND	**7.0**	ND	ND	ND	**19**	ND	ND	**4.6**	**1.4**	ND	**4.9**	**1.4**	**1.8**	**1.6**	ND	**8.2**	**27**
1/5 P	6-May-16	**43**	**3.7**	ND	ND	ND	ND	ND	ND	ND	**13**	ND	ND	ND	ND	**7.3**	ND	ND	ND	**28**	ND	ND	**5.0**	**1.8**	ND	**3.5**	**1.4**	**1.3**	**3.1**	ND	**4.7**	ND
1/5 P (Dup)	6-May-16	**41**	**3.0**	ND	ND	ND	ND	ND	ND	ND	**9.7**	ND	ND	ND	ND	**7.0**	ND	ND	ND	**21**	ND	ND	**3.5**	**1.4**	ND	**2.0**	**1.7**	ND	**2.5**	ND	**4.3**	ND
1/5 P	18-Apr-17	**36**	**3.3**	**17**	ND	ND	ND	ND	ND	ND	**13**	ND	ND	ND	ND	**7.4**	ND	ND	ND	**26**	ND	ND	**4.9**	**18**	ND	**3.5**	**2.8**	**1.2**	**3.3**	ND	**5.9**	**6.2**
1/5 P	12-Sep-17	**52**	**3.1**	**13**	ND	ND	ND	ND	ND	ND	**11**	ND	ND	ND	ND	**9.3**	ND	ND	ND	**26**	ND	ND	**3.8**	**1.4**	ND	**3.0**	**1.7**	**1.2**	**2.3**	ND	**6.3**	7.7
1/5 P	9-Nov-17	**220**	**2.4**	**160**	ND	ND	ND	ND	ND	ND	**12**	ND	ND	ND	ND	**5.6**	ND	ND	ND	**28**	ND	ND	**6.0**	**2.0**	ND	**3.2**	ND	ND	**1.3**	ND	**4.0**	**8.9**
1/5 P	2-May-18	**41**	**2.4**	ND	ND	ND	ND	ND	ND	ND	**12**	ND	ND	ND	ND	**5.9**	ND	ND	ND	**27**	ND	ND	**6.2**	**2.4**	ND	**2.5**	ND	**1.2**	**2.3**	ND	**4.0**	ND
1/5 P	24-Apr-19	**34**	**2.1**	ND	ND	ND	ND	ND	ND	ND	**6.1**	ND	ND	ND	ND	**3.0**	ND	ND	ND	**12**	ND	ND	**2.4**	ND	ND	**2.3**	ND	ND	ND	ND	**2.7**	ND
1/5 P	22-Apr-20	**23**	**4.5**	**12**	ND	ND	ND	ND	ND	ND	**14**	ND	ND	ND	ND	**7.4**	ND	ND	ND	**25**	ND	ND	**5.0**	ND	ND	**3.3**	**1.3**	**1.3**	**2.2**	ND	**4.7**	**6.4**
1/5 P	15-Apr-21	**24**	**2.7**	ND	ND	ND	ND	ND	ND	ND	**9**	ND	ND	ND	ND	**5.5**	ND	ND	ND	**17**	ND	ND	**3.1**	ND	ND	**2.8**	**1.6**	ND	**1**	ND	**4.8**	**5.9**
4/5 S	11-Apr-11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4/5 S	1-May-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4/5 S	11-Apr-13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4/5 S	5-May-14	**13**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4/5 S	8-May-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4/5 S	6-May-16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4/5 S	18-Apr-17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4/5 S	12-Sep-17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4/5 S	9-Nov-17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4/5 S	3-May-18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4/5 S	24-Apr-19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4/5 S	22-Apr-20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4/5 S	15-Apr-21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6/7 P	11-Apr-11	**14,000**	ND	**21,000**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**180**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1,700**
6/7 P	1-May-12	**5,800**	ND	**8,600**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**17**	ND	ND	ND	**44**	ND	ND	**36**	ND	ND	ND	ND	ND	ND	ND	ND	**290**
6/7 P	10-Apr-13	**34,000**	ND	**26,000**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**69**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**690**
6/7 P (Dup)	10-Apr-13	**34,000**	ND	**27,000**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**75**	ND	ND	ND	**38**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**720**
6/7 P	5-May-14	**55**	**1.8**	**32**	ND	ND	ND	ND	ND	ND	**2.7**	ND	ND	ND	ND	**3.2**	ND	ND	ND	**8.4**	ND	ND	**1.5**	**1.3**	ND	**1.9**	ND	ND	**1.4**	ND	**4.2**	ND
6/7 P	8-May-15	**2,000**	ND	**1,100**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**4.3**	ND	ND	ND	**13**	ND	ND	**3.0**	ND	ND	ND	ND	ND	ND	ND	ND	ND
6/7 P	28-Apr-16	**960**	**1.7**	**370**	ND	ND	ND	ND	ND	ND	**6.7**	ND	ND	ND	ND	**4.4**	ND	ND	ND	**8.3**	ND	ND	**2.0**	ND	ND	**2.4**	ND	ND	ND	ND	**5.5**	**17**
6/7 P	18-Apr-17	**33**	**1.5**	**17**	ND	ND	ND	ND	ND	ND	**1.6**	ND	ND	ND	ND	ND	ND	ND	ND	**2.2**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**4.8**	ND
6/7 P	12-Sep-17	**310**	**2.4**	**150**	ND	ND	ND	ND	ND	ND	**7.2**	ND	ND	ND	ND	**2.6**	ND	ND	ND	**12**	ND	ND	**3.0**	ND	ND	**1.9**	ND	**1.4**	ND	ND	**11**	**5.8**
6/7 P	9-Nov-17	**1,100**	**1.9**	**870**	ND	ND	ND	ND	ND	ND	**3.6**	ND	**7.6**	ND	ND	**4.5**	ND	ND	ND	**4.8**	ND	ND	ND	ND	ND	**1.7**	ND	ND	ND	ND	**12**	**33**
6/7 P	1-May-18	**84**	**1.2**	**45**	ND	ND	ND	ND	ND	ND	**1.9**	ND	ND	ND	ND	ND	ND	ND	ND	**4.0**	ND	ND	**1.2**	ND	ND	ND	ND	ND	ND	ND	**8.0**	ND
6/7 P	24-Apr-19	**40**	ND	**8.6**	ND	ND	ND	ND	ND	ND	**1.2**	ND	ND	ND	ND	ND	ND	ND	ND	**2.0**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**6.7**	ND
6/7 P	22-Apr-20	**800**	**2.4**	**610**	ND	ND	ND	ND	ND	ND	**7.6**	ND	ND	ND	ND	**3.7**	ND	ND	ND	**11**	ND	ND	**3.9**	ND	ND	**1.7**	ND	**1.2**	**1.0**	ND	**27**	**26**
6/7 P	15-Apr-21	**2900**	**13**	**2600**	ND	ND	ND	ND	ND	ND	**16**	ND	ND	ND	ND	**24**	ND	ND	ND	**34**	ND	ND	**7.5**	ND	ND	**3.9**	ND	**ND**	**7.6**	ND	**34**	**150**
6/7 S	13-Apr-11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6/7 S	1-May-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6/7 S	10-Apr-13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6/7 S	5-May-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6/7 S	8-May-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6/7 S	28-Apr-16	**13**	**1.9**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1.6**	ND
6/7 S (Dup)	28-Apr-16	**14**	**1.9**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1.6**	ND
6/7 S	18-Apr-17	**15**	**2.6**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**4.9**	ND
6/7 S	12-Sep-17	ND	**1.5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**3.1**	ND
6/7 S	9-Nov-17	**15**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**2.3**	ND
6/7 S	1-May-18	**23**	**3.5**	**11**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**4.0**	ND
6/7 S	24-Apr-19	**26**	**1.2**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1.4**	ND
6/7 S	22-Apr-20	ND	**1.2**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**4.1**	ND
6/7 S	15-Apr-21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**3.9**	ND

Table 7-2
VOCs Detected in Landfill Leachate and LDS Sump Liquid Samples (µg/L)
Riverbend Landfill

Sample Location	Sample Date	Acetone	Benzene	2-Butanone (MEK)	Carbon Disulfide	Chloroethane	Dibromochloromethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	Ethylbenzene	2-Hexanone	Methylene Chloride	Styrene	Tetrachloroethene	Toluene	1,1,1-Trichloroethane	Trichloroethene	Vinyl chloride	Total Xylenes	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	cis-1,2-Dichloroethene	Isopropylbenzene	4-Isopropyltoluene	n-Propylbenzene	Naphthalene	4-Methyl-2-pentanone
8 P	11-Apr-11	**870**	ND	**830**	ND	ND	ND	ND	ND	ND	**6.1**	ND	ND	ND	ND	**6.4**	ND	ND	ND	**16**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
8 P	1-May-12	**5,100**	ND	**9,700**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**20**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**290**
8 P	10-Apr-13	**3,700**	ND	**2,600**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**19**	ND	ND	ND	**11**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**90**
8 P	5-May-14	**15,000**	ND	**6,700**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**37**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**26**	ND	ND	**160**
8 P	8-May-15	**2,700**	**25**	**1,600**	ND	ND	ND	ND	ND	ND	**10**	ND	ND	**5.0**	ND	**19**	ND	ND	ND	**12**	ND	ND	ND	ND	ND	ND	ND	ND	**4.8**	ND	**29**	**43**
8 P	28-Apr-16	**25,000**	ND	**1,800**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**86**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**470**
8 P	18-Apr-17	**14,000**	ND	**13,000**	ND	ND	ND	ND	ND	ND	**21**	ND	**40**	ND	ND	**64**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**20**	ND	ND	**360**
8 P	2-May-18	**12,000**	ND	**8,300**	ND	ND	ND	ND	ND	ND	**20**	ND	ND	ND	ND	**63**	ND	ND	ND	**55**	ND	ND	**15**	ND	ND	ND	ND	ND	**35**	ND	ND	**320**
8 P	24-Apr-19	**7,500**	ND	**6,700**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**39**	ND	**24**	ND	**23**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**200**
8 P	22-Apr-20	**11,000**	**13**	**8,500**	ND	ND	ND	ND	ND	ND	**23**	ND	ND	ND	ND	**55**	ND	**24**	ND	**60**	ND	ND	**10**	**6.1**	ND	**5.9**	ND	ND	**24**	ND	**12**	**280**
8 P	15-Apr-21	**1,400**	**3.3**	**1,300**	**6.5**	ND	ND	ND	ND	ND	**5.5**	ND	ND	ND	ND	**11**	ND	ND	ND	**12**	ND	ND	**1.9**	ND	ND	**1.8**	ND	ND	**4.2**	ND	**2.4**	**44**
8 S	11-Apr-11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
8 S (Dup)	11-Apr-11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
8 S	1-May-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
8 S	11-Apr-13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
8 S	5-May-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
8 S (Dup)	5-May-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
8 S	8-May-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
8 S (Dup)	8-May-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
8 S	28-Apr-16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
8 S	18-Apr-17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
8 S	3-May-18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
8 S	24-Apr-19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
8 S	22-Apr-20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
8 S	15-Apr-21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9 P	8-May-15	**3,900**	ND	**7,200**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**360**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**140**
9 P	6-May-16	**31**	ND	ND	ND	ND	ND	ND	ND	ND	**3.7**	ND	ND	ND	ND	**1.4**	ND	ND	ND	**11**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9 P	18-Apr-17	**7,600**	ND	**9,300**	ND	ND	ND	ND	ND	ND	ND	ND	**18**	ND	ND	**20**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**33**	ND	ND	**130**
9 P	2-May-18	**620**	ND	**1,000**	ND	ND	ND	ND	ND	ND	**1.7**	ND	ND	ND	ND	**30**	ND	ND	ND	**7.3**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**ND**
9 P	24-Apr-19	**250**	ND	**660**	ND	ND	ND	ND	ND	ND	**3.8**	ND	ND	ND	ND	**4.9**	ND	ND	ND	**10**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9 P	22-Apr-20	**28**	**2.7**	ND	ND	ND	ND	ND	ND	ND	**17**	ND	ND	ND	ND	**7.5**	ND	ND	**3.5**	**44**	ND	ND	**3.6**	**2.3**	ND	**3.2**	ND	ND	**10**	ND	ND	ND
9 P	15-Apr-21	**18**	**1.5**	ND	ND	ND	ND	ND	ND	ND	**4.1**	ND	ND	ND	ND	**6.2**	ND	ND	ND	**12**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9 S	8-May-15	**13**	ND	ND	ND	ND	ND	**5.6**	**1.3**	ND	ND	ND	ND	ND	ND	**2.6**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9 S	6-May-16	**1,500**	ND	**950**	ND	ND	ND	ND	ND	ND	ND	ND	**230**	ND	ND	**9,500**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9 S	18-Apr-17	**12**	**2.1**	**11**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**8.5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9 S (Dup)	18-Apr-17	**30**	**1.6**	**12**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**5.5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9 S	2-May-18	ND	**1.7**	ND	ND	ND	ND	ND	ND	ND	**1.2**	ND	ND	ND	ND	**1.4**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9 S (Dup)	2-May-18	ND	**1.7**	ND	ND	ND	ND	ND	ND	ND	**1.3**	ND	ND	ND	ND	**1.3**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9 S	24-Apr-19	**100**	**2.1**	**94**	**5.7**	ND	ND	ND	**1.1**	ND	**1.9**	ND	ND	ND	ND	**11**	ND	ND	**1.6**	**5.3**	ND	ND	ND	ND	ND	ND	**1.0**	ND	ND	ND	ND	**7.2**
9 S	22-Apr-20	ND	**2.3**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1.7**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9 S	15-Apr-21	ND	**1.1**	ND	ND	ND	ND	ND	ND	ND	**1.6**	ND	ND	ND	ND	ND	ND	ND	ND	**4.4**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 7-2
VOCs Detected in Landfill Leachate and LDS Sump Liquid Samples (µg/L)
Riverbend Landfill

Sample Location	Sample Date	Acetone	Benzene	2-Butanone (MEK)	Carbon Disulfide	Chloroethane	Dibromochloromethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	Ethylbenzene	2-Hexanone	Methylene Chloride	Styrene	Tetrachloroethene	Toluene	1,1,1-Trichloroethane	Trichloroethene	Vinyl chloride	Total Xylenes	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	cis-1,2-Dichloroethene	Isopropylbenzene	4-Isopropyltoluene	n-Propylbenzene	Naphthalene	4-Methyl-2-pentanone
Leachate Pond	8-Apr-13	**230**	ND	**110**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond	21-Nov-13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond	5-May-14	**1,100**	ND	**580**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond	20-Nov-14	**1,400**	ND	**460**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond	11-May-15	**910**	ND	**630**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond	11-Nov-15	**850**	ND	**250**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond	28-Apr-16	**230**	ND	**180**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1.7**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**11**
Leachate Pond	17-Nov-16	**25**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1.6**	ND	ND	ND	ND	**1.7**	**1.3**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond	18-Apr-17	**2,000**	ND	**950**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond	9-Nov-17	**900**	ND	**470**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**11**
Leachate Pond	3-May-18	**1,000**	ND	**530**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond	6-Nov-18	**290**	ND	**200**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond	25-Apr-19	**1,100**	ND	**570**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**6.9**
Leachate Pond	20-Nov-19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**3.5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond	22-Apr-20	**230**	ND	**43**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond	11-Nov-20	ND	ND	**87**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond	15-Apr-21	**230**	ND	**43**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond	18-Nov-21	**14**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond LDS	11-Apr-13	**230**	ND	**570**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond LDS	21-Nov-13	**12**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**10**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond LDS	5-May-14	**1,000**	ND	**660**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**5.8**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**8.0**
Leachate Pond LDS	20-Nov-14	**110**	**1.2**	**34**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**5.9**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond LDS	11-May-15	**13**	ND	**18**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**4.5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**14**
Leachate Pond LDS	11-Nov-15	ND	**1.3**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**3.0**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond LDS	28-Apr-16	**860**	ND	**400**	ND	ND	ND	ND	ND	ND	ND	**31**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**6.5**
Leachate Pond LDS	17-Nov-16	**200**	ND	**150**	ND	ND	ND	ND	ND	ND	**9.1**	ND	ND	ND	ND	**7.4**	ND	ND	ND	**24**	ND	ND	**3.7**	ND	ND	ND	ND	ND	ND	ND	**6.8**	ND
Leachate Pond LDS	18-Apr-17	**1,400**	ND	**790**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**11**
Leachate Pond LDS	9-Nov-17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**3.9**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond LDS	3-May-18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**3.2**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond LDS	28-Apr-20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond LDS	11-Nov-20	**27**	ND	**150**	ND	ND	ND	ND	ND	ND	ND	ND	**4.5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond LDS	15-Apr-21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond LDS	18-Nov-21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

NOTE:
Detections are in **bold** type; LDS = secondary leak detection system; NT = not tested; ND = not detected at or above the practical quantitation limit; D = compounds identified in analysis at a secondary dilution factor;
J = indicates an estimate value; E = compounds whose concentrations were above the calibration range of the GC/MS instrument for that analysis; µg/L = micrograms per liter.
Where available, the last 10 years of data is presented in the table above. Older historic data is available in this table in older annual reports.

APPENDIX A

Summary Tables of Historical Groundwater Elevations, Hydrographs, and Field Water Quality Monitoring Data of Groundwater and Leachate Management System Samples

Groundwater Elevations

Table A-1
Groundwater Elevations
Riverbend Landfill

Monitoring Location	Date	Reference Elevation [a] (ft-msl)	Depth to Water (ft-bgs)	Groundwater Elevation (ft-msl)
MW-01A (Deep)	12-Apr-11	155.30	24.57	130.73
MW-01A (Deep)	1-Nov-11	155.30	29.60	125.70
MW-01A (Deep)	30-Apr-12	155.30	23.35	131.95
MW-01A (Deep)	12-Nov-12	155.30	40.50	114.80
MW-01A (Deep)	8-Apr-13	155.30	22.65	132.65
MW-01A (Deep)	18-Nov-13	155.30	25.57	129.73
MW-01A (Deep)	28-Apr-14	155.30	23.28	132.02
MW-01A (Deep)	17-Nov-14	155.30	38.92	116.38
MW-01A (Deep)	15-May-15	155.30	27.50	127.80
MW-01A (Deep)	10-Nov-15	155.30	32.90	122.40
MW-01A (Deep)	2-May-16	155.30	36.79	118.51
MW-01A (Deep)	15-Nov-16	155.30	40.18	115.12
MW-01A (Deep)	17-Apr-17	155.30	43.41	111.89
MW-01A (Deep)	7-Nov-17	155.30	40.35	114.95
MW-01A (Deep)	24-Apr-18	155.30	40.43	114.87
MW-01A (Deep)	5-Nov-18	155.30	30.74	124.56
MW-01A (Deep)	22-Apr-19	155.30	22.77	132.53
MW-01A (Deep)	18-Nov-19	155.30	30.13	125.17
MW-01A (Deep)	20-Apr-20	155.30	23.47	131.83
MW-01A (Deep)	9-Nov-20	155.30	27.80	127.50
MW-01A (Deep)	12-Apr-21	155.30	21.37	133.93
MW-01A (Deep)	15-Dec-21	155.30	25.87	129.43
MW-01B (Shallow)	12-Apr-11	155.00	5.16	149.84
MW-01B (Shallow)	1-Nov-11	155.00	13.34	141.66
MW-01B (Shallow)	30-Apr-12	155.00	7.09	147.91
MW-01B (Shallow)	12-Nov-12	155.00	10.14	144.86
MW-01B (Shallow)	8-Apr-13	155.00	6.54	148.46
MW-01B (Shallow)	18-Nov-13	155.00	9.81	145.19
MW-01B (Shallow)	28-Apr-14	155.00	5.51	149.49
MW-01B (Shallow)	17-Nov-14	155.00	7.70	147.30
MW-01B (Shallow)	5-May-15	155.00	7.80	147.20
MW-01B (Shallow)	10-Nov-15	155.00	8.10	146.90
MW-01B (Shallow)	2-May-16	155.00	7.20	147.80
MW-01B (Shallow)	15-Nov-16	155.00	5.50	149.50
MW-01B (Shallow)	17-Apr-17	155.00	5.44	149.56
MW-01B (Shallow)	7-Nov-17	155.00	6.29	148.71
MW-01B (Shallow)	24-Apr-18	155.00	5.80	149.20
MW-01B (Shallow)	5-Nov-18	155.00	8.51	146.49
MW-01B (Shallow)	22-Apr-19	155.00	6.24	148.76
MW-01B (Shallow)	18-Nov-19	155.00	9.62	145.38
MW-01B (Shallow)	20-Apr-20	155.00	7.19	147.81
MW-01B (Shallow)	9-Nov-20	155.00	10.69	144.31
MW-01B (Shallow)	12-Apr-21	155.00	7.02	147.98
MW-01B (Shallow)	15-Nov-21	155.00	6.37	148.63
MW-02R (Shallow)	15-Nov-16	148.30	10.06	138.24
MW-02R (Shallow)	17-Apr-17	148.30	11.29	137.01
MW-02R (Shallow)	7-Nov-17	148.30	14.82	133.48
MW-02R (Shallow)	24-Apr-18	148.30	12.81	135.49
MW-02R (Shallow)	5-Nov-18	148.30	19.30	129.00

Table A-1
Groundwater Elevations
Riverbend Landfill

Monitoring Location	Date	Reference Elevation [a] (ft-msl)	Depth to Water (ft-bgs)	Groundwater Elevation (ft-msl)
MW-02R (Shallow)	22-Apr-19	148.30	13.28	135.02
MW-02R (Shallow)	18-Nov-19	148.30	19.66	128.64
MW-02R (Shallow)	20-Apr-20	148.30	17.85	130.45
MW-02R (Shallow)	9-Nov-20	148.30	19.52	128.78
MW-02R (Shallow)	12-Apr-21	148.30	18.21	130.09
MW-02R (Shallow)	15-Nov-21	148.30	10.75	137.55
MW-03A (Shallow)	12-Apr-11	140.81	17.92	122.89
MW-03A (Shallow)	1-Nov-11	140.81	18.95	121.86
MW-03A (Shallow)	30-Apr-12	140.81	18.17	122.64
MW-03A (Shallow)	12-Nov-12	140.81	18.74	122.07
MW-03A (Shallow)	8-Apr-13	140.81	18.49	122.32
MW-03A (Shallow)	18-Nov-13	140.81	18.75	122.06
MW-03A (Shallow)	28-Apr-14	140.81	18.10	122.71
MW-03A (Shallow)	17-Nov-14	140.81	18.57	122.24
MW-03A (Shallow)	5-May-15	140.81	18.41	122.40
MW-03A (Shallow)	10-Nov-15	140.81	18.71	122.10
MW-03A (Shallow)	2-May-16	140.81	18.27	122.54
MW-03A (Shallow)	31-Aug-16	140.81	19.08	121.73
MW-03A (Shallow)	15-Nov-16	140.81	18.13	122.68
MW-03A (Shallow)	17-Apr-17	140.81	17.78	123.03
MW-03A (Shallow)	14-Jul-17	140.81	18.72	122.09
MW-03A (Shallow)	11-Sep-17	140.81	19.30	121.51
MW-03A (Shallow)	7-Nov-17	140.81	18.86	121.95
MW-03A (Shallow)	24-Apr-18	140.81	17.65	123.16
MW-03A (Shallow)	5-Nov-18	140.81	18.69	122.12
MW-03A (Shallow)	22-Apr-19	140.81	17.82	122.99
MW-03A (Shallow)	18-Nov-19	140.81	18.65	122.16
MW-03A (Shallow)	20-Apr-20	140.81	17.89	122.92
MW-03A (Shallow)	9-Nov-20	140.81	18.81	122.00
MW-03A (Shallow)	12-Apr-21	140.81	17.02	123.79
MW-03A (Shallow)	15-Nov-21	140.81	17.63	123.18
MW-03B (Deep)	12-Apr-11	140.57	15.88	124.69
MW-03B (Deep)	1-Nov-11	140.57	22.98	117.59
MW-03B (Deep)	30-Apr-12	140.57	16.82	123.75
MW-03B (Deep)	12-Nov-12	140.57	23.19	117.38
MW-03B (Deep)	8-Apr-13	140.57	17.80	122.77
MW-03B (Deep)	18-Nov-13	140.57	20.75	119.82
MW-03B (Deep)	28-Apr-14	140.57	17.05	123.52
MW-03B (Deep)	17-Nov-14	140.57	22.92	117.65
MW-03B (Deep)	5-May-15	140.57	19.52	121.05
MW-03B (Deep)	10-Nov-15	140.57	23.50	117.07
MW-03B (Deep)	2-May-16	140.57	19.00	121.57
MW-03B (Deep)	15-Nov-16	140.57	20.66	119.91
MW-03B (Deep)	17-Apr-17	140.57	18.17	122.40
MW-03B (Deep)	7-Nov-17	140.57	23.27	117.30
MW-03B (Deep)	24-Apr-18	140.57	17.65	122.92
MW-03B (Deep)	5-Nov-18	140.57	24.12	116.45
MW-03B (Deep)	22-Apr-19	140.57	16.54	124.03
MW-03B (Deep)	18-Nov-19	140.57	22.50	118.07

Table A-1
Groundwater Elevations
Riverbend Landfill

Monitoring Location	Date	Reference Elevation [a] (ft-msl)	Depth to Water (ft-bgs)	Groundwater Elevation (ft-msl)
MW-03B (Deep)	20-Apr-20	140.57	18.65	121.92
MW-03B (Deep)	9-Nov-20	140.57	23.08	117.49
MW-03B (Deep)	12-Apr-21	140.57	18.21	122.36
MW-03B (Deep)	15-Nov-21	140.57	19.47	121.10
MW-04A (Shallow)	12-Apr-11	142.31	25.44	116.87
MW-04A (Shallow)	1-Nov-11	142.31	28.31	114.00
MW-04A (Shallow)	30-Apr-12	142.31	25.73	116.58
MW-04A (Shallow)	12-Nov-12	142.31	28.50	113.81
MW-04A (Shallow)	8-Apr-13	142.31	26.80	115.51
MW-04A (Shallow)	18-Nov-13	142.31	27.22	115.09
MW-04A (Shallow)	28-Apr-14	142.31	25.99	116.32
MW-04A (Shallow)	17-Nov-14	142.31	26.96	115.35
MW-04A (Shallow)	9-Mar-15	142.31	25.81	116.50
MW-04A (Shallow)	5-May-15	142.31	26.95	115.36
MW-04A (Shallow)	10-Nov-15	142.31	28.35	113.96
MW-04A (Shallow)	2-May-16	142.31	26.29	116.02
MW-04A (Shallow)	31-Aug-16	142.31	28.14	114.17
MW-04A (Shallow)	5-Nov-16	142.31	26.38	115.93
MW-04A (Shallow)	17-Apr-17	142.31	24.78	117.53
MW-04A (Shallow)	14-Jul-17	142.31	27.36	114.95
MW-04A (Shallow)	11-Sep-17	142.31	27.76	114.55
MW-04A (Shallow)	7-Nov-17	142.31	26.67	115.64
MW-04A (Shallow)	24-Apr-18	142.31	25.09	117.22
MW-04A (Shallow)	5-Nov-18	142.31	27.15	115.16
MW-04A (Shallow)	22-Apr-19	142.31	25.14	117.17
MW-04A (Shallow)	18-Nov-19	142.31	27.10	115.21
MW-04A (Shallow)	20-Apr-20	142.31	26.17	116.14
MW-04A (Shallow)	9-Nov-20	142.31	27.67	114.64
MW-04A (Shallow)	12-Apr-21	142.31	25.32	116.99
MW-04A (Shallow)	15-Nov-21	142.31	21.70	120.61
MW-04B (Deep)	12-Apr-11	141.80	24.14	117.66
MW-04B (Deep)	1-Nov-11	141.80	31.50	110.30
MW-04B (Deep)	30-Apr-12	141.80	25.49	116.31
MW-04B (Deep)	12-Nov-12	141.80	30.80	111.00
MW-04B (Deep)	8-Apr-13	141.80	26.65	115.15
MW-04B (Deep)	18-Nov-13	141.80	29.11	112.69
MW-04B (Deep)	28-Apr-14	141.80	25.25	116.55
MW-04B (Deep)	17-Nov-14	141.80	29.87	111.93
MW-04B (Deep)	9-Mar-15	141.80	26.61	115.19
MW-04B (Deep)	5-May-15	141.80	27.93	113.87
MW-04B (Deep)	10-Nov-15	141.80	31.49	110.31
MW-04B (Deep)	2-May-16	141.80	27.41	114.39
MW-04B (Deep)	15-Nov-16	141.80	27.86	113.94
MW-04B (Deep)	17-Apr-17	141.80	24.57	117.23
MW-04B (Deep)	7-Nov-17	141.80	29.31	112.49
MW-04B (Deep)	24-Apr-18	141.80	24.34	117.46
MW-04B (Deep)	5-Nov-18	141.80	32.03	109.77
MW-04B (Deep)	22-Apr-19	141.80	24.80	117.00
MW-04B (Deep)	18-Nov-19	141.80	31.23	110.57

Table A-1
Groundwater Elevations
Riverbend Landfill

Monitoring Location	Date	Reference Elevation [a] (ft-msl)	Depth to Water (ft-bgs)	Groundwater Elevation (ft-msl)
MW-04B (Deep)	20-Apr-20	141.80	27.39	114.41
MW-04B (Deep)	9-Nov-20	141.80	31.66	110.14
MW-04B (Deep)	12-Apr-21	141.80	26.66	115.14
MW-04B (Deep)	15-Nov-21	141.80	22.78	119.02
MW-05A (Shallow)	12-Apr-11	138.73	16.40	122.33
MW-05A (Shallow)	1-Nov-11	138.73	18.87	119.86
MW-05A (Shallow)	30-Apr-12	138.73	16.76	121.97
MW-05A (Shallow)	12-Nov-12	138.73	17.65	121.08
MW-05A (Shallow)	8-Apr-13	138.73	17.08	121.65
MW-05A (Shallow)	18-Nov-13	138.73	16.76	121.97
MW-05A (Shallow)	28-Apr-14	138.73	15.85	122.88
MW-05A (Shallow)	17-Nov-14	138.73	17.16	121.57
MW-05A (Shallow)	9-Mar-15	138.73	19.15	119.58
MW-05A (Shallow)	5-May-15	138.73	21.23	117.50
MW-05A (Shallow)	10-Nov-15	138.73	19.17	119.56
MW-05A (Shallow)	2-May-16	138.73	20.89	117.84
MW-05A (Shallow)	31-Aug-16	138.73	26.92	111.81
MW-05A (Shallow)	15-Nov-16	138.73	15.55	123.18
MW-05A (Shallow)	17-Apr-17	138.73	15.65	123.08
MW-05A (Shallow)	14-Jul-17	138.73	24.24	114.49
MW-05A (Shallow)	11-Sep-17	138.73	26.56	112.17
MW-05A (Shallow)	7-Nov-17	138.73	17.12	121.61
MW-05A (Shallow)	24-Apr-18	138.73	16.51	122.22
MW-05A (Shallow)	5-Nov-18	138.73	24.26	114.47
MW-05A (Shallow)	22-Apr-19	138.73	17.82	120.91
MW-05A (Shallow)	18-Nov-19	138.73	24.05	114.68
MW-05A (Shallow)	20-Apr-20	138.73	21.10	117.63
MW-05A (Shallow)	9-Nov-20	138.73	24.97	113.76
MW-05A (Shallow)	12-Apr-21	138.73	21.15	117.58
MW-05A (Shallow)	15-Nov-21	138.73	15.58	123.15
MW-05B (Deep)	12-Apr-11	138.82	23.43	115.39
MW-05B (Deep)	1-Nov-11	138.82	NR	---
MW-05B (Deep)	30-Apr-12	138.82	25.67	113.15
MW-05B (Deep) [c]	12-Nov-12	138.88	28.72	110.16
MW-05B (Deep)	8-Apr-13	138.88	26.51	112.37
MW-05B (Deep)	18-Nov-13	138.88	30.15	108.73
MW-05B (Deep)	28-Apr-14	138.88	23.86	115.02
MW-05B (Deep)	17-Nov-14	138.88	29.61	109.27
MW-05B (Deep)	9-Mar-15	138.88	27.04	111.84
MW-05B (Deep)	5-May-15	138.88	29.39	109.49
MW-05B (Deep)	10-Nov-15	138.88	32.98	105.90
MW-05B (Deep)	2-May-16	138.88	28.58	110.30
MW-05B (Deep)	15-Nov-16	138.88	25.84	113.04
MW-05B (Deep)	17-Apr-17	138.88	23.10	115.78
MW-05B (Deep)	7-Nov-17	138.88	28.57	110.31
MW-05B (Deep)	24-Apr-18	138.88	23.26	115.62
MW-05B (Deep)	5-Nov-18	138.88	34.56	104.32
MW-05B (Deep)	22-Apr-19	138.88	25.15	113.73
MW-05B (Deep)	18-Nov-19	138.88	34.39	104.49

Table A-1
Groundwater Elevations
Riverbend Landfill

Monitoring Location	Date	Reference Elevation [a] (ft-msl)	Depth to Water (ft-bgs)	Groundwater Elevation (ft-msl)
MW-05B (Deep)	20-Apr-20	138.88	28.73	110.15
MW-05B (Deep)	9-Nov-20	138.88	34.61	104.27
MW-05B (Deep)	12-Apr-21	138.88	29.38	109.50
MW-05B (Deep)	15-Nov-21	138.88	19.39	119.49
MW-06A (Shallow)	12-Apr-11	128.95	6.62	122.33
MW-06A (Shallow)	1-Nov-11	128.95	8.15	120.80
MW-06A (Shallow)	30-Apr-12	128.95	7.41	121.54
MW-06A (Shallow)	12-Nov-12	128.95	6.94	122.01
MW-06A (Shallow)	8-Apr-13	128.95	6.69	122.26
MW-06A (Shallow)	18-Nov-13	128.95	8.28	120.67
MW-06A (Shallow)	28-Apr-14	128.95	6.36	122.59
MW-06A (Shallow)	17-Nov-14	128.95	9.21	119.74
MW-06A (Shallow)	9-Mar-15	128.95	8.49	120.46
MW-06A (Shallow)	5-May-15	128.95	9.20	119.75
MW-06A (Shallow)	10-Nov-15	128.95	6.88	122.07
MW-06A (Shallow)	2-May-16	128.95	8.10	120.85
MW-06A (Shallow)	31-Aug-16	128.95	15.96	112.99
MW-06A (Shallow)	15-Nov-16	128.95	5.58	123.37
MW-06A (Shallow)	17-Apr-17	128.95	7.10	121.85
MW-06A (Shallow)[d]	14-Jul-17	128.29	9.30	118.99
MW-06A (Shallow)	11-Sep-17	128.29	14.04	114.25
MW-06A (Shallow)	7-Nov-17	128.29	5.94	122.35
MW-06A (Shallow)	24-Apr-18	128.29	6.22	122.07
MW-06A (Shallow)	5-Nov-18	128.29	17.16	111.13
MW-06A (Shallow)	22-Apr-19	128.29	6.33	121.96
MW-06A (Shallow)	18-Nov-19	128.29	8.72	119.57
MW-06A (Shallow)	20-Apr-20	128.29	6.73	121.56
MW-06A (Shallow)	9-Nov-20	128.29	17.22	111.07
MW-06A (Shallow)	12-Apr-21	128.29	7.77	120.52
MW-06A (Shallow)	15-Nov-21	128.29	6.37	121.92
MW-06B (Deep)	12-Apr-11	128.59	12.08	116.51
MW-06B (Deep)	1-Nov-11	128.59	19.91	108.68
MW-06B (Deep)	30-Apr-12	128.59	12.97	115.62
MW-06B (Deep)	12-Nov-12	128.59	18.20	110.39
MW-06B (Deep)	8-Apr-13	128.59	14.58	114.01
MW-06B (Deep)	18-Nov-13	128.59	17.74	110.85
MW-06B (Deep)	28-Apr-14	128.59	13.06	115.53
MW-06B (Deep)	17-Nov-14	128.59	17.93	110.66
MW-06B (Deep)	9-Mar-15	128.59	13.75	114.84
MW-06B (Deep)	5-May-15	128.59	15.39	113.20
MW-06B (Deep)	10-Nov-15	128.59	20.65	107.94
MW-06B (Deep)	2-May-16	128.59	14.76	113.83
MW-06B (Deep)	15-Nov-16	128.59	16.34	112.25
MW-06B (Deep)	17-Apr-17	128.59	11.89	116.70
MW-06B (Deep)	7-Nov-17	128.59	17.67	110.92
MW-06B (Deep)	24-Apr-18	128.59	12.13	116.46
MW-06B (Deep)	5-Nov-18	128.59	20.78	107.81
MW-06B (Deep)	22-Apr-19	128.59	13.39	115.20
MW-06B (Deep)	18-Nov-19	128.59	20.29	108.30

Table A-1
Groundwater Elevations
Riverbend Landfill

Monitoring Location	Date	Reference Elevation [a] (ft-msl)	Depth to Water (ft-bgs)	Groundwater Elevation (ft-msl)
MW-06B (Deep)	20-Apr-20	128.59	15.27	113.32
MW-06B (Deep)	9-Nov-20	128.59	21.12	107.47
MW-06B (Deep)	12-Apr-21	128.59	14.60	113.99
MW-06B (Deep)	15-Nov-21	128.59	14.36	114.23
MW-09A (Shallow)	12-Apr-11	128.42	0.20	128.22
MW-09A (Shallow)	1-Nov-11	128.42	12.37	116.05
MW-09A (Shallow)	30-Apr-12	128.42	8.70	119.72
MW-09A (Shallow)	12-Nov-12	128.42	12.17	116.25
MW-09A (Shallow)	8-Apr-13	128.42	8.60	119.82
MW-09A (Shallow)	18-Nov-13	128.42	11.15	117.27
MW-09A (Shallow)	28-Apr-14	128.42	8.28	120.14
MW-09A (Shallow)	17-Nov-14	128.42	12.20	116.22
MW-09A (Shallow)	9-Mar-15	128.42	8.82	119.60
MW-09A (Shallow)	5-May-15	128.42	9.30	119.12
MW-09A (Shallow)	10-Nov-15	128.42	14.69	113.73
MW-09A (Shallow)	2-May-16	128.42	9.55	118.87
MW-09A (Shallow)	15-Nov-16	128.42	11.92	116.50
MW-09A (Shallow)	17-Apr-17	128.42	8.45	119.97
MW-09A (Shallow)	7-Nov-17	128.42	13.33	115.09
MW-09A (Shallow)	24-Apr-18	128.42	8.86	119.56
MW-09A (Shallow)	5-Nov-18	128.42	14.74	113.68
MW-09A (Shallow)	22-Apr-19	128.42	9.93	118.49
MW-09A (Shallow)	18-Nov-19	128.42	13.70	114.72
MW-09A (Shallow)	20-Apr-20	128.42	10.12	118.30
MW-09A (Shallow)	9-Nov-20	128.42	14.36	114.06
MW-09A (Shallow)	12-Apr-21	128.42	9.55	118.87
MW-09A (Shallow)	15-Nov-21	128.42	13.73	114.69
MW-09B(R)(Deep)	12-Apr-11	127.40	7.86	119.54
MW-09B(R)(Deep)	1-Nov-11	127.40	1.75	125.65
MW-09B(R)(Deep)	30-Apr-12	127.40	0.73	126.67
MW-09B(R)(Deep)	12-Nov-12	127.40	1.60	125.80
MW-09B(R)(Deep)	8-Apr-13	127.40	0.86	126.54
MW-09B(R)(Deep)	18-Nov-13	127.40	2.25	125.15
MW-09B(R)(Deep)	28-Apr-14	127.40	1.36	126.04
MW-09B(R)(Deep)	17-Nov-14	127.40	5.22	122.18
MW-09B(R)(Deep)	9-Mar-15	127.40	3.20	124.20
MW-09B(R)(Deep)	5-May-15	127.40	2.84	124.56
MW-09B(R)(Deep)	10-Nov-15	127.40	6.42	120.98
MW-09B(R)(Deep)	2-May-16	127.40	2.46	124.94
MW-09B(R)(Deep)	15-Nov-16	127.40	4.51	122.89
MW-09B(R)(Deep)	17-Apr-17	127.40	2.88	124.52
MW-09B(R)(Deep)	7-Nov-17	127.40	7.43	119.97
MW-09B(R)(Deep)	24-Apr-18	127.40	2.95	124.45
MW-09B(R)(Deep)	5-Nov-18	127.40	6.54	120.86
MW-09B(R)(Deep)	22-Apr-19	127.40	1.24	126.16
MW-09B(R)(Deep)	18-Nov-19	127.40	5.05	122.35
MW-09B(R)(Deep)	20-Apr-20	127.40	2.40	125.00
MW-09B(R)(Deep)	9-Nov-20	127.40	5.09	122.31
MW-09B(R)(Deep)	12-Apr-21	127.40	1.09	126.31

Table A-1
Groundwater Elevations
Riverbend Landfill

Monitoring Location	Date	Reference Elevation [a] (ft-msl)	Depth to Water (ft-bgs)	Groundwater Elevation (ft-msl)
MW-09B(R)(Deep)	15-Nov-21	127.40	4.82	122.58
MW-10A (Shallow)	12-Apr-11	153.21	3.94	149.27
MW-10A (Shallow)	1-Nov-11	153.21	19.07	134.14
MW-10A (Shallow)	30-Apr-12	153.21	4.84	148.37
MW-10A (Shallow)	12-Nov-12	153.21	17.95	135.26
MW-10A (Shallow)	8-Apr-13	153.21	4.65	148.56
MW-10A (Shallow)	18-Nov-13	153.21	17.96	135.25
MW-10A (Shallow)	28-Apr-14	153.21	4.38	148.83
MW-10A (Shallow)	17-Nov-14	153.21	14.95	138.26
MW-10A (Shallow)	5-May-15	153.21	7.99	145.22
MW-10A (Shallow)	10-Nov-15	153.21	18.50	134.71
MW-10A (Shallow)	2-May-16	153.21	7.34	145.87
MW-10A (Shallow)	15-Nov-16	153.21	13.12	140.09
MW-10A (Shallow)	17-Apr-17	153.21	5.63	147.58
MW-10A (Shallow)	7-Nov-17	153.21	16.53	136.68
MW-10A (Shallow)	24-Apr-18	153.21	5.51	147.70
MW-10A (Shallow)	5-Nov-18	153.21	19.62	133.59
MW-10A (Shallow)	22-Apr-19	153.21	5.72	147.49
MW-10A (Shallow)	18-Nov-19	153.21	17.45	135.76
MW-10A (Shallow)	20-Apr-20	153.21	6.68	146.53
MW-10A (Shallow)	9-Nov-20	153.21	21.02	132.19
MW-10A (Shallow)	12-Apr-21	153.21	6.05	147.16
MW-10A (Shallow)	15-Nov-21	153.21	14.52	138.69
MW-10B (Deep)	12-Apr-11	152.87	16.88	135.99
MW-10B (Deep)	1-Nov-11	152.87	25.77	127.10
MW-10B (Deep)	30-Apr-12	152.87	17.50	135.37
MW-10B (Deep)	12-Nov-12	152.87	27.25	125.62
MW-10B (Deep)	8-Apr-13	152.87	17.57	135.30
MW-10B (Deep)	18-Nov-13	152.87	21.99	130.88
MW-10B (Deep)	28-Apr-14	152.87	17.71	135.16
MW-10B (Deep)	17-Nov-14	152.87	30.34	122.53
MW-10B (Deep)	5-May-15	152.87	21.21	131.66
MW-10B (Deep)	10-Nov-15	152.87	26.56	126.31
MW-10B (Deep)	2-May-16	152.87	20.65	132.22
MW-10B (Deep)	15-Nov-16	152.87	25.19	127.68
MW-10B (Deep)	17-Apr-17	152.87	25.71	127.16
MW-10B (Deep)	7-Nov-17	152.87	27.68	125.19
MW-10B (Deep)	24-Apr-18	152.87	23.40	129.47
MW-10B (Deep)	5-Nov-18	152.87	28.65	124.22
MW-10B (Deep)	22-Apr-19	152.87	17.47	135.40
MW-10B (Deep)	18-Nov-19	152.87	23.78	129.09
MW-10B (Deep)	20-Apr-20	152.87	18.72	134.15
MW-10B (Deep)	9-Nov-20	152.87	24.36	128.51
MW-10B (Deep)	12-Apr-21	152.87	6.76	146.11
MW-10B (Deep)	15-Nov-21	152.87	22.56	130.31
MW-12A (Shallow)	12-Apr-11	126.00	6.80	119.20
MW-12A (Shallow)	1-Nov-11	126.00	18.70	107.30
MW-12A (Shallow)	30-Apr-12	126.00	11.02	114.98
MW-12A (Shallow)	12-Nov-12	126.00	10.74	115.26

Table A-1
Groundwater Elevations
Riverbend Landfill

Monitoring Location	Date	Reference Elevation [a] (ft-msl)	Depth to Water (ft-bgs)	Groundwater Elevation (ft-msl)
MW-12A (Shallow)	8-Apr-13	126.00	9.79	116.21
MW-12A (Shallow)	18-Nov-13	126.00	14.71	111.29
MW-12A (Shallow)	28-Apr-14	126.00	7.01	118.99
MW-12A (Shallow)	17-Nov-14	126.00	13.05	112.95
MW-12A (Shallow)	9-Mar-15	126.00	12.15	113.85
MW-12A (Shallow)	5-May-15	126.00	14.90	111.10
MW-12A (Shallow)	10-Nov-15	126.00	16.21	109.79
MW-12A (Shallow)	2-May-16	126.00	13.86	112.14
MW-12A (Shallow)	31-Aug-16	126.00	19.91	106.09
MW-12A (Shallow)	15-Nov-16	126.00	5.94	120.06
MW-12A (Shallow)	17-Apr-17	126.00	7.89	118.11
MW-12A (Shallow)[d]	14-Jul-17	126.81	17.63	109.18
MW-12A (Shallow)	11-Sep-17	126.81	19.67	107.14
MW-12A (Shallow)	7-Nov-17	126.81	12.00	114.81
MW-12A (Shallow)	24-Apr-18	126.81	7.18	119.63
MW-12A (Shallow)	5-Nov-18	126.81	20.67	106.14
MW-12A (Shallow)	22-Apr-19	126.81	10.72	116.09
MW-12A (Shallow)	18-Nov-19	126.81	21.31	105.50
MW-12A (Shallow)	20-Apr-20	126.81	13.08	113.73
MW-12A (Shallow)	9-Nov-20	126.81	21.47	105.34
MW-12A (Shallow)	12-Apr-21	126.81	13.64	113.17
MW-12A (Shallow)	15-Nov-21	126.81	5.60	121.21
MW-12B (Deep)	12-Apr-11	126.54	14.35	112.19
MW-12B (Deep)	1-Nov-11	126.54	23.71	102.83
MW-12B (Deep)	30-Apr-12	126.54	16.88	109.66
MW-12B (Deep)	12-Nov-12	126.54	20.71	105.83
MW-12B (Deep)	8-Apr-13	126.54	16.19	110.35
MW-12B (Deep)	18-Nov-13	126.54	20.95	105.59
MW-12B (Deep)	28-Apr-14	126.54	14.72	111.82
MW-12B (Deep)	17-Nov-14	126.54	21.30	105.24
MW-12B (Deep)	9-Mar-15	126.54	17.86	108.68
MW-12B (Deep)	5-May-15	126.54	19.92	106.62
MW-12B (Deep)	10-Nov-15	126.54	23.31	103.23
MW-12B (Deep)	2-May-16	126.54	19.15	107.39
MW-12B (Deep)	15-Nov-16	126.54	16.70	109.84
MW-12B (Deep)	17-Apr-17	126.54	13.75	112.79
MW-12B (Deep)[d]	7-Nov-17	126.05	19.12	106.93
MW-12B (Deep)	24-Apr-18	126.05	13.96	112.09
MW-12B (Deep)	5-Nov-18	126.05	24.04	102.01
MW-12B (Deep)	22-Apr-19	126.05	15.85	110.20
MW-12B (Deep)	18-Nov-19	126.05	24.12	101.93
MW-12B (Deep)	20-Apr-20	126.05	19.48	106.57
MW-12B (Deep)	9-Nov-20	126.05	24.16	101.89
MW-12B (Deep)	12-Apr-21	126.05	18.83	107.22
MW-12B (Deep)	15-Nov-21	126.05	7.81	118.24
MW-14A (Shallow)	12-Apr-11	121.87	12.45	109.42
MW-14A (Shallow)	1-Nov-11	121.87	21.49	100.38
MW-14A (Shallow)	30-Apr-12	121.87	15.21	106.66
MW-14A (Shallow)	12-Nov-12	121.87	18.65	103.22

Table A-1
Groundwater Elevations
Riverbend Landfill

Monitoring Location	Date	Reference Elevation [a] (ft-msl)	Depth to Water (ft-bgs)	Groundwater Elevation (ft-msl)
MW-14A (Shallow)	8-Apr-13	121.87	15.57	106.30
MW-14A (Shallow)	18-Nov-13	121.87	18.52	103.35
MW-14A (Shallow)	28-Apr-14	121.87	13.31	108.56
MW-14A (Shallow)	17-Nov-14	121.87	19.62	102.25
MW-14A (Shallow)	5-May-15	121.87	17.32	104.55
MW-14A (Shallow)	10-Nov-15	121.87	21.60	100.27
MW-14A (Shallow)	2-May-16	121.87	16.86	105.01
MW-14A (Shallow)	31-Aug-16	121.87	21.95	99.92
MW-14A (Shallow)	15-Nov-16	121.87	16.81	105.06
MW-14A (Shallow)	17-Apr-17	121.87	12.10	109.77
MW-14A (Shallow)	14-Jul-17	121.87	19.54	102.33
MW-14A (Shallow)	11-Sep-17	121.87	21.05	100.82
MW-14A (Shallow)	7-Nov-17	121.87	16.01	105.86
MW-14A (Shallow)	24-Apr-18	121.87	12.19	109.68
MW-14A (Shallow)	5-Nov-18	121.87	22.22	99.65
MW-14A (Shallow)	22-Apr-19	121.87	13.45	108.42
MW-14A (Shallow)	18-Nov-19	121.87	21.43	100.44
MW-14A (Shallow)	20-Apr-20	121.87	17.47	104.40
MW-14A (Shallow)	9-Nov-20	121.87	21.60	100.27
MW-14A (Shallow)	12-Apr-21	121.87	16.77	105.10
MW-14A (Shallow)	15-Nov-21	121.87	2.36	119.51
MW-14B (Deep)	12-Apr-11	123.32	13.52	109.80
MW-14B (Deep)	1-Nov-11	123.32	22.11	101.21
MW-14B (Deep)	30-Apr-12	123.32	16.22	107.10
MW-14B (Deep)	12-Nov-12	123.32	19.10	104.22
MW-14B (Deep)	8-Apr-13	123.32	14.93	108.39
MW-14B (Deep)	18-Nov-13	123.32	18.95	104.37
MW-14B (Deep)	28-Apr-14	123.32	13.79	109.53
MW-14B (Deep)	17-Nov-14	123.32	19.99	103.33
MW-14B (Deep)	5-May-15	123.32	18.55	104.77
MW-14B (Deep)	10-Nov-15	123.32	21.33	101.99
MW-14B (Deep)	2-May-16	123.32	18.00	105.32
MW-14B (Deep)	15-Nov-16	123.32	15.53	107.79
MW-14B (Deep)	17-Apr-17	123.32	13.01	110.31
MW-14B (Deep)	7-Nov-17	123.32	17.14	106.18
MW-14B (Deep)	24-Apr-18	123.32	13.35	109.97
MW-14B (Deep)	5-Nov-18	123.32	22.03	101.29
MW-14B (Deep)	22-Apr-19	123.32	14.73	108.59
MW-14B (Deep)	18-Nov-19	123.32	22.00	101.32
MW-14B (Deep)	20-Apr-20	123.32	18.31	105.01
MW-14B (Deep)	9-Nov-20	123.32	21.74	101.58
MW-14B (Deep)	12-Apr-21	123.32	17.21	106.11
MW-14B (Deep)	15-Nov-21	123.32	3.68	119.64
MW-15A (Shallow)	12-Apr-11	130.07	9.12	120.95
MW-15A (Shallow)	1-Nov-11	130.07	20.91	109.16
MW-15A (Shallow)	30-Apr-12	130.07	9.40	120.67
MW-15A (Shallow)	12-Nov-12	130.07	9.78	120.29
MW-15A (Shallow)	8-Apr-13	130.07	8.28	121.79
MW-15A (Shallow)	18-Nov-13	130.07	9.51	120.56

Table A-1
Groundwater Elevations
Riverbend Landfill

Monitoring Location	Date	Reference Elevation [a] (ft-msl)	Depth to Water (ft-bgs)	Groundwater Elevation (ft-msl)
MW-15A (Shallow)	28-Apr-14	130.07	8.35	121.72
MW-15A (Shallow)	17-Nov-14	130.07	9.25	120.82
MW-15A (Shallow)	9-Mar-15	130.07	9.45	120.62
MW-15A (Shallow)	5-May-15	130.07	9.89	120.18
MW-15A (Shallow)	10-Nov-15	130.07	22.27	107.80
MW-15A (Shallow)	2-May-16	130.07	9.65	120.42
MW-15A (Shallow)	31-Aug-16	130.07	20.15	109.92
MW-15A (Shallow)	15-Nov-16	130.07	7.11	122.96
MW-15A (Shallow)	17-Apr-17	130.07	9.12	120.95
MW-15A (Shallow)	14-Jul-17	130.07	15.02	115.05
MW-15A (Shallow)	11-Sep-17	130.07	19.68	110.39
MW-15A (Shallow)	7-Nov-17	130.07	18.97	111.10
MW-15A (Shallow)	24-Apr-18	130.07	9.35	120.72
MW-15A (Shallow)	5-Nov-18	130.07	22.05	108.02
MW-15A (Shallow)	22-Apr-19	130.07	9.09	120.98
MW-15A (Shallow)	18-Nov-19	130.07	22.25	107.82
MW-15A (Shallow)	20-Apr-20	130.07	9.65	120.42
MW-15A (Shallow)	9-Nov-20	130.07	22.02	108.05
MW-15A (Shallow)	12-Apr-21	130.07	9.50	120.57
MW-15A (Shallow)	15-Nov-21	130.07	7.26	122.81
MW-15B (Deep)	12-Apr-11	129.73	14.35	115.38
MW-15B (Deep)	1-Nov-11	129.73	23.07	106.66
MW-15B (Deep)	30-Apr-12	129.73	15.65	114.08
MW-15B (Deep)	12-Nov-12	129.73	20.86	108.87
MW-15B (Deep)	8-Apr-13	129.73	16.96	112.77
MW-15B (Deep)	18-Nov-13	129.73	20.71	109.02
MW-15B (Deep)	28-Apr-14	129.73	15.30	114.43
MW-15B (Deep)	17-Nov-14	129.73	20.67	109.06
MW-15B (Deep)	9-Mar-15	129.73	16.25	113.48
MW-15B (Deep)	5-May-15	129.73	18.01	111.72
MW-15B (Deep)	10-Nov-15	129.73	23.90	105.83
MW-15B (Deep)	2-May-16	129.73	17.36	112.37
MW-15B (Deep)	15-Nov-16	129.73	18.41	111.32
MW-15B (Deep)	17-Apr-17	129.73	13.19	116.54
MW-15B (Deep)	7-Nov-17	129.73	20.07	109.66
MW-15B (Deep)	24-Apr-18	129.73	14.03	115.70
MW-15B (Deep)	5-Nov-18	129.73	23.83	105.90
MW-15B (Deep)	22-Apr-19	129.73	15.52	114.21
MW-15B (Deep)	18-Nov-19	129.73	23.47	106.26
MW-15B (Deep)	20-Apr-20	129.73	17.77	111.96
MW-15B (Deep)	9-Nov-20	129.73	24.07	105.66
MW-15B (Deep)	12-Apr-21	129.73	17.11	112.62
MW-15B (Deep)	15-Nov-21	129.73	14.60	115.13
MW-16A (Shallow)	12-Apr-11	128.89	13.71	115.18
MW-16A (Shallow)	1-Nov-11	128.89	20.41	108.48
MW-16A (Shallow)	30-Apr-12	128.89	14.03	114.86
MW-16A (Shallow)	12-Nov-12	128.89	19.40	109.49
MW-16A (Shallow)	8-Apr-13	128.89	15.70	113.19
MW-16A (Shallow)	18-Nov-13	128.89	18.35	110.54

Table A-1
Groundwater Elevations
Riverbend Landfill

Monitoring Location	Date	Reference Elevation [a] (ft-msl)	Depth to Water (ft-bgs)	Groundwater Elevation (ft-msl)
MW-16A (Shallow)	28-Apr-14	128.89	14.55	114.34
MW-16A (Shallow)	17-Nov-14	128.89	19.16	109.73
MW-16A (Shallow)	9-Mar-15	128.89	14.93	113.96
MW-16A (Shallow)	5-May-15	128.89	16.14	112.75
MW-16A (Shallow)	10-Nov-15	128.89	21.85	107.04
MW-16A (Shallow)	2-May-16	128.89	15.71	113.18
MW-16A (Shallow)	15-Nov-16	128.89	18.00	110.89
MW-16A (Shallow)	17-Apr-17	128.89	13.46	115.43
MW-16A (Shallow)	7-Nov-17	128.89	18.78	110.11
MW-16A (Shallow)	24-Apr-18	128.89	13.99	114.90
MW-16A (Shallow)	5-Nov-18	128.89	21.07	107.82
MW-16A (Shallow)	22-Apr-19	128.89	15.25	113.64
MW-16A (Shallow)	18-Nov-19	128.89	20.61	108.28
MW-16A (Shallow)	20-Apr-20	128.89	16.38	112.51
MW-16A (Shallow)	9-Nov-20	128.89	22	106.89
MW-16A (Shallow)	12-Apr-21	128.89	15.76	113.13
MW-16A (Shallow)	15-Nov-21	128.89	15.56	113.33
MW-16B (Deep)	12-Apr-11	128.95	14.06	114.89
MW-16B (Deep)	1-Nov-11	128.95	20.62	108.33
MW-16B (Deep)	30-Apr-12	128.95	14.65	114.30
MW-16B (Deep)	12-Nov-12	128.95	19.26	109.69
MW-16B (Deep)	8-Apr-13	128.95	15.86	113.09
MW-16B (Deep)	18-Nov-13	128.95	18.36	110.59
MW-16B (Deep)	28-Apr-14	128.95	14.82	114.13
MW-16B (Deep)	17-Nov-14	128.95	19.09	109.86
MW-16B (Deep)	9-Mar-15	128.95	15.39	113.56
MW-16B (Deep)	5-May-15	128.95	16.52	112.43
MW-16B (Deep)	10-Nov-15	128.95	21.37	107.58
MW-16B (Deep)	2-May-16	128.95	16.03	112.92
MW-16B (Deep)	15-Nov-16	128.95	17.81	111.14
MW-16B (Deep)	17-Apr-17	128.95	13.76	115.19
MW-16B (Deep)	7-Nov-17	128.95	18.67	110.28
MW-16B (Deep)	24-Apr-18	128.95	14.20	114.75
MW-16B (Deep)	5-Nov-18	128.95	21.17	107.78
MW-16B (Deep)	22-Apr-19	128.95	15.40	113.55
MW-16B (Deep)	18-Nov-19	128.95	20.30	108.65
MW-16B (Deep)	20-Apr-20	128.95	16.62	112.33
MW-16B (Deep)	9-Nov-20	128.95	21.71	107.24
MW-16B (Deep)	12-Apr-21	128.95	16.07	112.88
MW-16B (Deep)	15-Nov-21	128.95	17.56	111.39
MW-17A (Shallow)	12-Apr-11	153.83	6.25	147.58
MW-17A (Shallow)	1-Nov-11	153.83	17.95	135.88
MW-17A (Shallow)	30-Apr-12	153.83	7.91	145.92
MW-17A (Shallow)	12-Nov-12	153.83	15.70	138.13
MW-17A (Shallow)	8-Apr-13	153.83	8.05	145.78
MW-17A (Shallow)	18-Nov-13	153.83	14.31	139.52
MW-17A (Shallow)	28-Apr-14	153.83	7.04	146.79
MW-17A (Shallow)	17-Nov-14	153.83	14.52	139.31
MW-17A (Shallow)	5-May-15	153.83	9.99	143.84

Table A-1
Groundwater Elevations
Riverbend Landfill

Monitoring Location	Date	Reference Elevation [a] (ft-msl)	Depth to Water (ft-bgs)	Groundwater Elevation (ft-msl)
MW-17A (Shallow)	10-Nov-15	153.83	20.62	133.21
MW-17A (Shallow)	2-May-16	153.83	8.99	144.84
MW-17A (Shallow)	15-Nov-16	153.83	8.50	145.33
MW-17A (Shallow)	17-Apr-17	153.83	6.65	147.18
MW-17A (Shallow)	7-Nov-17	153.83	11.91	141.92
MW-17A (Shallow)	24-Apr-18	153.83	7.92	145.91
MW-17A (Shallow)	5-Nov-18	153.83	22.53	131.30
MW-17A (Shallow)	22-Apr-19	153.83	7.30	146.53
MW-17A (Shallow)	18-Nov-19	153.83	21.75	132.08
MW-17A (Shallow)	20-Apr-20	153.83	9.96	143.87
MW-17A (Shallow)	9-Nov-20	153.83	21.76	132.07
MW-17A (Shallow)	12-Apr-21	153.83	9.81	144.02
MW-17A (Shallow)	15-Nov-21	153.83	10.72	143.11
MW-18A (Shallow)	12-Apr-11	148.77	7.24	141.53
MW-18A (Shallow)	1-Nov-11	148.77	18.95	129.82
MW-18A (Shallow)	30-Apr-12	148.77	11.41	137.36
MW-18A (Shallow)	12-Nov-12	148.77	13.61	135.16
MW-18A (Shallow)	8-Apr-13	148.77	8.31	140.46
MW-18A (Shallow)	18-Nov-13	148.77	15.00	133.77
MW-18A (Shallow)	28-Apr-14	148.77	7.55	141.22
MW-18A (Shallow)	17-Nov-14	148.77	14.62	134.15
MW-18A (Shallow)	5-May-15	148.77	13.80	134.97
MW-18A (Shallow)	10-Nov-15	148.77	16.05	132.72
MW-18A (Shallow)	2-May-16	148.77	13.02	135.75
MW-18A (Shallow)	15-Nov-16	148.77	9.15	139.62
MW-18A (Shallow)	17-Apr-17	148.77	10.00	138.77
MW-18A (Shallow)	7-Nov-17	148.77	14.84	133.93
MW-18A (Shallow)	24-Apr-18	148.77	12.89	135.88
MW-18A (Shallow)	5-Nov-18	148.77	18.78	129.99
MW-18A (Shallow)	22-Apr-19	148.77	12.18	136.59
MW-18A (Shallow)	18-Nov-19	148.77	19.34	129.43
MW-18A (Shallow)	20-Apr-20	148.77	14.47	134.30
MW-18A (Shallow)	9-Nov-20	148.77	21.03	127.74
MW-18A (Shallow)	12-Apr-21	148.77	13.21	135.56
MW-18A (Shallow)	15-Nov-21	148.77	12.51	136.26
MW-18B (Deep)	12-Apr-11	148.57	13.30	135.27
MW-18B (Deep)	1-Nov-11	148.57	22.48	126.09
MW-18B (Deep)	30-Apr-12	148.57	13.75	134.82
MW-18B (Deep)	12-Nov-12	148.57	22.20	126.37
MW-18B (Deep)	8-Apr-13	148.57	14.40	134.17
MW-18B (Deep)	18-Nov-13	148.57	18.67	129.90
MW-18B (Deep)	28-Apr-14	148.57	14.27	134.30
MW-18B (Deep)	17-Nov-14	148.57	21.77	126.80
MW-18B (Deep)	5-May-15	148.57	16.87	131.70
MW-18B (Deep)	10-Nov-15	148.57	22.62	125.95
MW-18B (Deep)	2-May-16	148.57	16.02	132.55
MW-18B (Deep)	15-Nov-16	148.57	19.09	129.48
MW-18B (Deep)	17-Apr-17	148.57	16.10	132.47
MW-18B (Deep)	7-Nov-17	148.57	21.88	126.69

Table A-1
Groundwater Elevations
Riverbend Landfill

Monitoring Location	Date	Reference Elevation [a] (ft-msl)	Depth to Water (ft-bgs)	Groundwater Elevation (ft-msl)
MW-18B (Deep)	24-Apr-18	148.57	17.44	131.13
MW-18B (Deep)	5-Nov-18	148.57	27.49	121.08
MW-18B (Deep)	22-Apr-19	148.57	13.90	134.67
MW-18B (Deep)	18-Nov-19	148.57	20.28	128.29
MW-18B (Deep)	20-Apr-20	148.57	15.30	133.27
MW-18B (Deep)	9-Nov-20	148.57	22.23	126.34
MW-18B (Deep)	12-Apr-21	148.57	13.71	134.86
MW-18B (Deep)	15-Nov-21	148.57	20.31	128.26
MW-19A (Shallow)	12-Apr-11	151.27	8.80	142.47
MW-19A (Shallow)	1-Nov-11	151.27	21.55	129.72
MW-19A (Shallow)	30-Apr-12	151.27	7.51	143.76
MW-19A (Shallow)	12-Nov-12	151.27	21.78	129.49
MW-19A (Shallow)	8-Apr-13	151.27	7.41	143.86
MW-19A (Shallow)	18-Nov-13	151.27	19.90	131.37
MW-19A (Shallow)	28-Apr-14	151.27	5.46	145.81
MW-19A (Shallow)	17-Nov-14	151.27	22.99	128.28
MW-19A (Shallow)	5-May-15	151.27	10.04	141.23
MW-19A (Shallow)	10-Nov-15	151.27	25.75	125.52
MW-19A (Shallow)	2-May-16	151.27	9.04	142.23
MW-19A (Shallow)	15-Nov-16	151.27	18.42	132.85
MW-19A (Shallow)	17-Apr-17	151.27	5.41	145.86
MW-19A (Shallow)	7-Nov-17	151.27	25.24	126.03
MW-19A (Shallow)	24-Apr-18	151.27	6.26	145.01
MW-19A (Shallow)	5-Nov-18	151.27	26.42	124.85
MW-19A (Shallow)	22-Apr-19	151.27	5.98	145.29
MW-19A (Shallow)	18-Nov-19	151.27	26.12	125.15
MW-19A (Shallow)	20-Apr-20	151.27	8.88	142.39
MW-19A (Shallow)	9-Nov-20	151.27	25.97	125.30
MW-19A (Shallow)	12-Apr-21	151.27	8.31	142.96
MW-19A (Shallow)	15-Nov-21	151.27	22.32	128.95
MW-20A (Shallow)	12-Apr-11	129.92	2.67	127.25
MW-20A (Shallow)	1-Nov-11	129.92	6.40	123.52
MW-20A (Shallow)	30-Apr-12	129.92	3.09	126.83
MW-20A (Shallow)	12-Nov-12	129.92	5.85	124.07
MW-20A (Shallow)	8-Apr-13	129.92	3.27	126.65
MW-20A (Shallow)	18-Nov-13	129.92	6.11	123.81
MW-20A (Shallow)	28-Apr-14	129.92	3.11	126.81
MW-20A (Shallow)	17-Nov-14	129.92	5.35	124.57
MW-20A (Shallow)	5-May-15	129.92	4.84	125.08
MW-20A (Shallow)	10-Nov-15	129.92	8.60	121.32
MW-20A (Shallow)	2-May-16	129.92	4.81	125.11
MW-20A (Shallow)	15-Nov-16	129.92	4.76	125.16
MW-20A (Shallow)	17-Apr-17	129.92	3.30	126.62
MW-20A (Shallow)	7-Nov-17	129.92	7.91	122.01
MW-20A (Shallow)	24-Apr-18	129.92	3.54	126.38
MW-20A (Shallow)	5-Nov-18	129.92	8.19	121.73
MW-20A (Shallow)	22-Apr-19	129.92	3.48	126.44
MW-20A (Shallow)	18-Nov-19	129.92	7.64	122.28
MW-20A (Shallow)	20-Apr-20	129.92	4.58	125.34

Table A-1
Groundwater Elevations
Riverbend Landfill

Monitoring Location	Date	Reference Elevation [a] (ft-msl)	Depth to Water (ft-bgs)	Groundwater Elevation (ft-msl)
MW-20A (Shallow)	9-Nov-20	129.92	8.31	121.61
MW-20A (Shallow)	12-Apr-21	129.92	3.85	126.07
MW-20A (Shallow)	15-Nov-21	129.92	5.12	124.80
MW-20B (Deep)	12-Apr-11	129.72	1.71	128.01
MW-20B (Deep)	1-Nov-11	129.72	8.99	120.73
MW-20B (Deep)	30-Apr-12	129.72	2.55	127.17
MW-20B (Deep)	12-Nov-12	129.72	9.53	120.19
MW-20B (Deep)	8-Apr-13	129.72	3.22	126.50
MW-20B (Deep)	18-Nov-13	129.72	6.57	123.15
MW-20B (Deep)	28-Apr-14	129.72	2.77	126.95
MW-20B (Deep)	17-Nov-14	129.72	9.44	120.28
MW-20B (Deep)	5-May-15	129.72	5.18	124.54
MW-20B (Deep)	10-Nov-15	129.72	9.65	120.07
MW-20B (Deep)	2-May-16	129.72	4.59	125.13
MW-20B (Deep)	15-Nov-16	129.72	6.58	123.14
MW-20B (Deep)	17-Apr-17	129.72	4.65	125.07
MW-20B (Deep)	7-Nov-17	129.72	9.90	119.82
MW-20B (Deep)	24-Apr-18	129.72	3.97	125.75
MW-20B (Deep)	5-Nov-18	129.72	10.56	119.16
MW-20B (Deep)	22-Apr-19	129.72	2.15	127.57
MW-20B (Deep)	18-Nov-19	129.72	8.05	121.67
MW-20B (Deep)	20-Apr-20	129.72	4.00	125.72
MW-20B (Deep)	9-Nov-20	129.72	9	120.72
MW-20B (Deep)	12-Apr-21	129.72	2.53	127.19
MW-20B (Deep)	15-Nov-21	129.72	6.84	122.88
MW-21A (Shallow)	12-Apr-11	120.02	5.49	114.53
MW-21A (Shallow)	1-Nov-11	120.02	14.08	105.94
MW-21A (Shallow)	30-Apr-12	120.02	8.69	111.33
MW-21A (Shallow)	12-Nov-12	120.02	11.35	108.67
MW-21A (Shallow)	8-Apr-13	120.02	9.34	110.68
MW-21A (Shallow)	18-Nov-13	120.02	10.61	109.41
MW-21A (Shallow)	28-Apr-14	120.02	7.22	112.80
MW-21A (Shallow)	17-Nov-14	120.02	10.78	109.24
MW-21A (Shallow)	5-May-15	120.02	10.14	109.88
MW-21A (Shallow)	10-Nov-15	120.02	13.85	106.17
MW-21A (Shallow)	2-May-16	120.02	9.81	110.21
MW-21A (Shallow)	31-Aug-16	120.02	14.77	105.25
MW-21A (Shallow)	15-Nov-16	120.02	8.55	111.47
MW-21A (Shallow)	17-Apr-17	120.02	8.53	111.49
MW-21A (Shallow)	14-Jul-17	120.02	11.46	108.56
MW-21A (Shallow)	11-Sep-17	120.02	12.99	107.03
MW-21A (Shallow)	7-Nov-17	120.02	8.75	111.27
MW-21A (Shallow)	24-Apr-18	120.02	5.31	114.71
MW-21A (Shallow)	5-Nov-18	120.02	14.13	105.89
MW-21A (Shallow)	22-Apr-19	120.02	6.90	113.12
MW-21A (Shallow)	18-Nov-19	120.02	14.05	105.97
MW-21A (Shallow)	20-Apr-20	120.02	10.25	109.77
MW-21A (Shallow)	9-Nov-20	120.02	14.35	105.67
MW-21A (Shallow)	12-Apr-21	120.02	10.12	109.90

Table A-1
Groundwater Elevations
Riverbend Landfill

Monitoring Location	Date	Reference Elevation [a] (ft-msl)	Depth to Water (ft-bgs)	Groundwater Elevation (ft-msl)
MW-21A (Shallow)	15-Nov-21	120.02	2.91	117.11
MW-21B (Deep)	12-Apr-11	119.53	6.22	113.31
MW-21B (Deep)	1-Nov-11	119.53	13.73	105.80
MW-21B (Deep)	30-Apr-12	119.53	8.47	111.06
MW-21B (Deep)	12-Nov-12	119.53	11.43	108.10
MW-21B (Deep)	8-Apr-13	119.53	9.22	110.31
MW-21B (Deep)	18-Nov-13	119.53	10.71	108.82
MW-21B (Deep)	28-Apr-14	119.53	7.39	112.14
MW-21B (Deep)	17-Nov-14	119.53	11.21	108.32
MW-21B (Deep)	5-May-15	119.53	10.06	109.47
MW-21B (Deep)	5-Nov-15	119.53	13.43	106.10
MW-21B (Deep)	2-May-16	119.53	10.15	109.38
MW-21B (Deep)	15-Nov-16	119.53	9.35	110.18
MW-21B (Deep)	17-Apr-17	119.53	6.22	113.31
MW-21B (Deep)	7-Nov-17	119.53	8.90	110.63
MW-21B (Deep)	24-Apr-18	119.53	5.49	114.04
MW-21B (Deep)	5-Nov-18	119.53	13.89	105.64
MW-21B (Deep)	22-Apr-19	119.53	6.79	112.74
MW-21B (Deep)	18-Nov-19	119.53	13.75	105.78
MW-21B (Deep)	20-Apr-20	119.53	9.86	109.67
MW-21B (Deep)	9-Nov-20	119.53	13.97	105.56
MW-21B (Deep)	12-Apr-21	119.53	9.78	109.75
MW-21B (Deep)	15-Nov-21	119.53	0.43	119.10
MW-22A (Shallow)	12-Apr-11	125.38	14.02	111.36
MW-22A (Shallow)	1-Nov-11	125.38	NR	---
MW-22A (Shallow)	30-Apr-12	125.38	17.83	107.55
MW-22A (Shallow)	12-Nov-12	125.38	21.58	103.80
MW-22A (Shallow)	8-Apr-13	125.38	18.28	107.10
MW-22A (Shallow)	18-Nov-13	125.38	21.99	103.39
MW-22A (Shallow)	28-Apr-14	125.38	15.87	109.51
MW-22A (Shallow)	17-Nov-14	125.38	22.09	103.29
MW-22A (Shallow)	5-May-15	125.38	20.29	105.09
MW-22A (Shallow)	10-Nov-15	125.38	22.20	103.18
MW-22A (Shallow)	2-May-16	125.38	19.12	106.26
MW-22A (Shallow)	31-Aug-16	125.38	20.11	105.27
MW-22A (Shallow)	15-Nov-16	125.38	20.31	105.07
MW-22A (Shallow)	17-Apr-17	125.38	14.29	111.09
MW-22A (Shallow)	14-Jul-17	124.38	NR	---
MW-22A (Shallow)	11-Sep-17	125.38	NR	---
MW-22A (Shallow)	7-Nov-17	125.38	20.09	105.29
MW-22A (Shallow)	24-Apr-18	125.38	13.95	111.43
MW-22A (Shallow)	5-Nov-18	125.38	22.15	103.23
MW-22A (Shallow)	22-Apr-19	125.38	15.38	110.00
MW-22A (Shallow)	18-Nov-19	125.38	22.17	103.21
MW-22A (Shallow)	20-Apr-20	125.38	19.58	105.80
MW-22A (Shallow)	9-Nov-20	125.38	22.15	103.23
MW-22A (Shallow)	12-Apr-21	125.38	19.48	105.90
MW-22A (Shallow)	15-Nov-21	125.38	3.2	122.18
MW-22B (Deep)	12-Apr-11	125.43	14.50	110.93

Table A-1
Groundwater Elevations
Riverbend Landfill

Monitoring Location	Date	Reference Elevation [a] (ft-msl)	Depth to Water (ft-bgs)	Groundwater Elevation (ft-msl)
MW-22B (Deep)	1-Nov-11	125.43	23.82	101.61
MW-22B (Deep)	30-Apr-12	125.43	18.44	106.99
MW-22B (Deep)	12-Nov-12	125.43	21.91	103.52
MW-22B (Deep)	8-Apr-13	125.43	17.01	108.42
MW-22B (Deep)	18-Nov-13	125.43	21.75	103.68
MW-22B (Deep)	28-Apr-14	125.43	15.72	109.71
MW-22B (Deep)	17-Nov-14	125.43	22.45	102.98
MW-22B (Deep)	5-May-15	125.43	20.92	104.51
MW-22B (Deep)	10-Nov-15	125.43	23.45	101.98
MW-22B (Deep)	2-May-16	125.43	20.43	105.00
MW-22B (Deep)	15-Nov-16	125.43	17.90	107.53
MW-22B (Deep)	17-Apr-17	125.43	14.65	110.78
MW-22B (Deep)	7-Nov-17	125.43	20.48	104.95
MW-22B (Deep)	24-Apr-18	125.43	15.15	110.28
MW-22B (Deep)	5-Nov-18	125.43	24.42	101.01
MW-22B (Deep)	22-Apr-19	125.43	16.71	108.72
MW-22B (Deep)	18-Nov-19	125.43	24.71	100.72
MW-22B (Deep)	20-Apr-20	125.43	20.61	104.82
MW-22B (Deep)	9-Nov-20	125.43	24.27	101.16
MW-22B (Deep)	12-Apr-21	125.43	20.47	104.96
MW-22B (Deep)	15-Nov-21	125.43	4.78	120.65
MW-23A (Shallow)	12-Apr-11	131.79	15.85	115.94
MW-23A (Shallow)	1-Nov-11	131.79	21.41	110.38
MW-23A (Shallow)	30-Apr-12	131.79	16.95	114.84
MW-23A (Shallow)	12-Nov-12	131.79	18.23	113.56
MW-23A (Shallow)	8-Apr-13	131.79	15.43	116.36
MW-23A (Shallow)	18-Nov-13	131.79	18.75	113.04
MW-23A (Shallow)	28-Apr-14	131.79	13.45	118.34
MW-23A (Shallow)	17-Nov-14	131.79	18.65	113.14
MW-23A (Shallow)	5-May-15	131.79	17.42	114.37
MW-23A (Shallow)	10-Nov-15	131.79	21.05	110.74
MW-23A (Shallow)	2-May-16	131.79	17.00	114.79
MW-23A (Shallow)	15-Nov-16	131.79	16.56	115.23
MW-23A (Shallow)	17-Apr-17	131.79	14.60	117.19
MW-23A (Shallow)	7-Nov-17	131.79	19.74	112.05
MW-23A (Shallow)	24-Apr-18	131.79	15.27	116.52
MW-23A (Shallow)	5-Nov-18	131.79	21.77	110.02
MW-23A (Shallow)	22-Apr-19	131.79	14.38	117.41
MW-23A (Shallow)	18-Nov-19	131.79	21.10	110.69
MW-23A (Shallow)	20-Apr-20	131.79	16.72	115.07
MW-23A (Shallow)	9-Nov-20	131.79	21.31	110.48
MW-23A (Shallow)	12-Apr-21	131.79	17.10	114.69
MW-23A (Shallow)	15-Nov-21	131.79	8.82	122.97
MW-23B (Deep)	12-Apr-11	131.60	22.83	108.77
MW-23B (Deep)	1-Nov-11	131.60	33.66	97.94
MW-23B (Deep)	30-Apr-12	131.60	26.12	105.48
MW-23B (Deep)	12-Nov-12	131.60	28.29	103.31
MW-23B (Deep)	8-Apr-13	131.60	24.00	107.60
MW-23B (Deep)	18-Nov-13	131.60	28.11	103.49

Table A-1
Groundwater Elevations
Riverbend Landfill

Monitoring Location	Date	Reference Elevation [a] (ft-msl)	Depth to Water (ft-bgs)	Groundwater Elevation (ft-msl)
MW-23B (Deep)	28-Apr-14	131.60	23.59	108.01
MW-23B (Deep)	17-Nov-14	131.60	29.86	101.74
MW-23B (Deep)	5-May-15	131.60	27.81	103.79
MW-23B (Deep)	10-Nov-15	131.60	30.30	101.30
MW-23B (Deep)	2-May-16	131.60	26.69	104.91
MW-23B (Deep)	15-Nov-16	131.60	21.62	109.98
MW-23B (Deep)	17-Apr-17	131.60	17.97	113.63
MW-23B (Deep)	7-Nov-17	131.60	24.80	106.80
MW-23B (Deep)	24-Apr-18	131.60	17.77	113.83
MW-23B (Deep)	5-Nov-18	131.60	26.05	105.55
MW-23B (Deep)	22-Apr-19	131.60	19.00	112.60
MW-23B (Deep)	18-Nov-19	131.60	25.30	106.30
MW-23B (Deep)	20-Apr-20	131.60	21.61	109.99
MW-23B (Deep)	9-Nov-20	131.60	25.12	106.48
MW-23B (Deep)	12-Apr-21	131.60	21.41	110.19
MW-23B (Deep)	15-Nov-21	131.60	11.03	120.57
MW-24A (Shallow)	12-Apr-11	149.93	8.46	141.47
MW-24A (Shallow)	1-Nov-11	149.93	16.71	133.22
MW-24A (Shallow)	30-Apr-12	149.93	10.93	139.00
MW-24A (Shallow)	12-Nov-12	149.93	15.75	134.18
MW-24A (Shallow)	8-Apr-13	149.93	11.10	138.83
MW-24A (Shallow)	18-Nov-13	149.93	15.57	134.36
MW-24A (Shallow)	28-Apr-14	149.93	8.55	141.38
MW-24A (Shallow)	17-Nov-14	149.93	22.99	126.94
MW-24A (Shallow)	5-May-15	149.93	14.46	135.47
MW-24A (Shallow)	10-Nov-15	149.93	25.54	124.39
MW-24A (Shallow)	2-May-16	149.93	14.11	135.82
MW-24A (Shallow)	15-Nov-16	149.93	12.36	137.57
MW-24A (Shallow)	17-Apr-17	149.93	9.25	140.68
MW-24A (Shallow)	7-Nov-17	149.93	24.26	125.67
MW-24A (Shallow)	24-Apr-18	149.93	10.12	139.81
MW-24A (Shallow)	5-Nov-18	149.93	25.15	124.78
MW-24A (Shallow)	22-Apr-19	149.93	9.91	140.02
MW-24A (Shallow)	18-Nov-19	149.93	25.50	124.43
MW-24A (Shallow)	20-Apr-20	149.93	12.85	137.08
MW-24A (Shallow)	9-Nov-20	149.93	19.90	130.03
MW-24A (Shallow)	12-Apr-21	149.93	12.31	137.62
MW-24A (Shallow)	15-Nov-21	149.93	19.27	130.66
MW-25A (Shallow)	10-Nov-15	155.26	8.60	146.66
MW-25A (Shallow)	2-May-16	155.26	8.74	146.52
MW-25A (Shallow)	15-Nov-16	155.26	6.57	148.69
MW-25A (Shallow)	17-Apr-17	155.26	7.14	148.12
MW-25A (Shallow)	7-Nov-17	155.26	7.86	147.40
MW-25A (Shallow)	24-Apr-18	155.26	7.62	147.64
MW-25A (Shallow)	5-Nov-18	155.26	9.71	145.55
MW-25A (Shallow)	22-Apr-19	155.26	7.67	147.59
MW-25A (Shallow)	18-Nov-19	155.26	11.31	143.95
MW-25A (Shallow)	20-Apr-20	155.26	8.92	146.34
MW-25A (Shallow)	9-Nov-20	155.26	10.52	144.74

Table A-1
Groundwater Elevations
Riverbend Landfill

Monitoring Location	Date	Reference Elevation [a] (ft-msl)	Depth to Water (ft-bgs)	Groundwater Elevation (ft-msl)
MW-25A (Shallow)	12-Apr-21	155.26	8.60	146.66
MW-25A (Shallow)	15-Nov-21	155.26	7.08	148.18
MW-25B (Deep)	10-Nov-15	155.54	34.21	121.33
MW-25B (Deep)	2-May-16	155.54	30.25	125.29
MW-25B (Deep)	15-Nov-16	155.54	36.95	118.59
MW-25B (Deep)	17-Apr-17	155.54	40.85	114.69
MW-25B (Deep)	7-Nov-17	155.54	38.09	117.45
MW-25B (Deep)	24-Apr-18	155.54	37.52	118.02
MW-25B (Deep)	5-Nov-18	155.54	31.92	123.62
MW-25B (Deep)	22-Apr-19	155.54	23.65	131.89
MW-25B (Deep)	18-Nov-19	155.54	30.31	125.23
MW-25B (Deep)	20-Apr-20	155.54	25.05	130.49
MW-25B (Deep)	9-Nov-20	155.54	24.19	131.35
MW-25B (Deep)	12-Apr-21	155.54	22.73	132.81
MW-25B (Deep)	15-Nov-21	155.54	27.35	128.19
P-01	12-Apr-11	125.93	3.87	122.06
P-01	1-Nov-11	125.93	6.01	119.92
P-01	30-Apr-12	125.93	4.67	121.26
P-01	12-Nov-12	125.93	5.27	120.66
P-01	8-Apr-13	125.93	4.42	121.51
P-01	18-Nov-13	125.93	4.30	121.63
P-01	28-Apr-14	125.93	3.60	122.33
P-01	17-Nov-14	125.93	5.02	120.91
P-01	9-Mar-15	125.93	6.90	119.03
P-01	5-May-15	125.93	10.68	115.25
P-01	10-Nov-15	125.93	6.51	119.42
P-01	2-May-16	125.93	9.87	116.06
P-01	31-Aug-16	125.93	15.01	110.92
P-01	15-Nov-16	125.93	3.00	122.93
P-01	17-Apr-17	125.93	3.11	122.82
P-01[d]	14-Jul-17	126.02	13.36	112.66
P-01	11-Sep-17	126.02	14.65	111.37
P-01	7-Nov-17	126.02	4.20	121.82
P-01	24-Apr-18	126.02	3.97	122.05
P-01	5-Nov-18	126.02	13.52	112.50
P-01	22-Apr-19	126.02	5.41	120.61
P-01	18-Nov-19	126.02	13.75	112.27
P-01	20-Apr-20	126.02	10.67	115.35
P-01	9-Nov-20	126.02	14.20	111.82
P-01	12-Apr-21	126.02	11.06	114.96
P-01	15-Nov-21	126.02	2.87	123.15
P-02	12-Apr-11	123.88	2.50	121.38
P-02	1-Nov-11	123.88	6.61	117.27
P-02	30-Apr-12	123.88	4.29	119.59
P-02	12-Nov-12	123.88	3.59	120.29
P-02	8-Apr-13	123.88	3.10	120.78
P-02	18-Nov-13	123.88	4.31	119.57
P-02	28-Apr-14	123.88	2.25	121.63
P-02	17-Nov-14	123.88	5.35	118.53

Table A-1
Groundwater Elevations
Riverbend Landfill

Monitoring Location	Date	Reference Elevation [a] (ft-msl)	Depth to Water (ft-bgs)	Groundwater Elevation (ft-msl)
P-02	9-Mar-15	123.88	6.42	117.46
P-02	5-May-15	123.88	9.38	114.50
P-02	10-Nov-15	123.88	4.46	119.42
P-02	2-May-16	123.88	8.85	115.03
P-02	31-Aug-16	123.88	13.77	110.11
P-02	15-Nov-16	123.88	1.86	122.02
P-02	17-Apr-17	123.88	2.13	121.75
P-02[d]	14-Jul-17	124.02	10.78	113.24
P-02	11-Sep-17	124.02	13.38	110.64
P-02	7-Nov-17	124.02	3.20	120.82
P-02	24-Apr-18	124.02	2.57	121.45
P-02	5-Nov-18	124.02	13.24	110.78
P-02	22-Apr-19	124.02	4.44	119.58
P-02	18-Nov-19	124.02	12.84	111.18
P-02	20-Apr-20	124.02	9.20	114.82
P-02	9-Nov-20	124.02	13.96	110.06
P-02	12-Apr-21	124.02	9.67	114.35
P-02	15-Nov-21	124.02	1.22	122.80
P-03	12-Apr-11	123.63	2.57	121.06
P-03	1-Nov-11	123.63	15.90	107.73
P-03	30-Apr-12	123.63	8.12	115.51
P-03	12-Nov-12	123.63	7.65	115.98
P-03	8-Apr-13	123.63	6.62	117.01
P-03	18-Nov-13	123.63	12.09	111.54
P-03	28-Apr-14	123.63	3.55	120.08
P-03	17-Nov-14	123.63	10.38	113.25
P-03	5-May-15	123.63	12.35	111.28
P-03	10-Nov-15	123.63	13.66	109.97
P-03	2-May-16	123.63	11.36	112.27
P-03	31-Aug-16	123.63	17.24	106.39
P-03	15-Nov-16	123.63	2.65	120.98
P-03	17-Apr-17	123.63	4.20	119.43
P-03[d]	14-Jul-17	123.89	14.64	109.25
P-03	11-Sep-17	123.89	16.45	107.44
P-03	7-Nov-17	123.89	8.72	115.17
P-03	24-Apr-18	123.89	3.47	120.42
P-03	5-Nov-18	123.89	16.85	107.04
P-03	22-Apr-19	123.89	7.44	116.45
P-03	18-Nov-19	123.89	16.95	106.94
P-03	20-Apr-20	123.89	10.72	113.17
P-03	9-Nov-20	123.89	NR	---
P-03	12-Apr-21	123.89	10.85	113.04
P-03	15-Nov-21	123.89	2.12	121.77
PW-1	12-Apr-11	151.71	31.31	120.40
PW-1	1-Nov-11	151.71	26.55	125.16
PW-1	30-Apr-12	151.71	21.38	130.33
PW-1	12-Nov-12	151.71	41.80	109.91
PW-1	8-Apr-13	151.71	20.80	130.91

Table A-1
Groundwater Elevations
Riverbend Landfill

Monitoring Location	Date	Reference Elevation [a] (ft-msl)	Depth to Water (ft-bgs)	Groundwater Elevation (ft-msl)
PW-1	18-Nov-13	151.71	22.47	129.24
PW-1	28-Apr-14	151.71	20.20	131.51
PW-1	17-Nov-14	151.71	35.81	115.90
PW-1	5-May-15	151.71	24.06	127.65
PW-1	10-Nov-15	151.71	29.88	121.83
PW-1	2-May-16	151.71	49.59	102.12
PW-1	15-Nov-16	151.71	55.17	96.54
PW-1	17-Apr-17	151.71	36.90	114.81
PW-1	7-Nov-17	151.71	56.80	94.91
PW-1	24-Apr-18	151.71	34.02	117.69
PW-1	5-Nov-18	151.71	27.67	124.04
PW-1	22-Apr-19	151.71	19.26	132.45
PW-1	18-Nov-19	151.71	30.65	121.06
PW-1	20-Apr-20	151.71	20.38	131.33
PW-1	9-Nov-20	151.71	24.61	127.10
PW-1	12-Apr-21	151.71	18.22	133.49
PW-1	15-Nov-21	151.71	22.69	129.02
P-05A	12-Apr-11	140.70	3.61	137.09
P-05A	1-Nov-11	140.70	13.91	126.79
P-05A	30-Apr-12	140.70	4.20	136.50
P-05A	12-Nov-12	140.70	15.54	125.16
P-05A	8-Apr-13	140.74	3.67	137.07
P-05A	18-Nov-13	140.74	18.11	122.63
P-05A	28-Apr-14	140.74	3.49	137.25
P-05A	17-Nov-14	140.74	15.28	125.46
P-05A	5-May-15	140.74	6.93	133.81
P-05A	10-Nov-15	140.74	NR	---
P-05A	2-May-16	140.74	6.45	134.29
P-05A	15-Nov-16	140.74	19.45	121.29
P-05A	17-Apr-17	140.74	3.18	137.56
P-05A	7-Nov-17	140.74	NR	---
P-05A	24-Apr-18	140.74	3.60	137.14
P-05A	5-Nov-18	140.74	NR	---
P-05A	22-Apr-19	140.74	3.97	136.77
P-05A	18-Nov-19	140.74	21.22	119.52
P-05A	20-Apr-20	140.74	4.76	135.98
P-05A	9-Nov-20	140.74	Dry	---
P-05A	12-Apr-21	140.74	3.77	136.97
P-05A	15-Nov-21	140.74	Dry	Dry
P-06A	12-Apr-11	131.60	3.61	127.99
P-06A	1-Nov-11	131.60	9.52	122.08
P-06A	30-Apr-12	131.60	4.15	127.45
P-06A	12-Nov-12	131.60	8.03	123.57
P-06A	8-Apr-13	131.58	4.09	127.49
P-06A	18-Nov-13	131.58	5.95	125.63
P-06A	28-Apr-14	131.58	3.85	127.73

Table A-1
Groundwater Elevations
Riverbend Landfill

Monitoring Location	Date	Reference Elevation [a] (ft-msl)	Depth to Water (ft-bgs)	Groundwater Elevation (ft-msl)
P-06A	17-Nov-14	131.58	5.87	125.71
P-06A	5-May-15	131.58	5.56	126.02
P-06A	10-Nov-15	131.58	10.73	120.85
P-06A	2-May-16	131.58	5.26	126.32
P-06A	15-Nov-16	131.58	4.98	126.60
P-06A	17-Apr-17	131.58	4.64	126.94
P-06A	7-Nov-17	131.58	8.46	123.12
P-06A	24-Apr-18	131.58	5.25	126.33
P-06A	5-Nov-18	131.58	11.60	119.98
P-06A	22-Apr-19	131.58	5.56	126.02
P-06A	18-Nov-19	131.58	9.47	122.11
P-06A	20-Apr-20	131.58	5.56	126.02
P-06A	9-Nov-20	131.58	10.22	121.36
P-06A	12-Apr-21	131.58	5.47	126.11
P-06A	15-Nov-21	131.58	5.63	125.95
P-07A	30-Apr-12	148.32	12.95	135.37
P-07A	12-Nov-12	148.32	18.59	129.73
P-07A	8-Apr-13	147.90	11.77	136.13
P-07A	18-Nov-13	147.90	20.47	127.43
P-07A	28-Apr-14	147.90	9.54	138.36
P-07A	17-Nov-14	147.90	17.94	129.96
P-07A	5-May-15	147.90	12.96	134.94
P-07A	10-Nov-15	147.90	21.20	126.70
P-07A	2-May-16	147.90	14.26	133.64
P-07A	15-Nov-16	147.90	14.51	133.39
P-07A	17-Apr-17	147.90	9.50	138.40
P-07A	7-Nov-17	147.90	20.02	127.88
P-07A	24-Apr-18	147.90	9.99	137.91
P-07A	5-Nov-18	147.90	25.03	122.87
P-07A	22-Apr-19	147.90	12.81	135.09
P-07A	18-Nov-19	147.90	25.51	122.39
P-07A	20-Apr-20	147.90	15.38	132.52
P-07A	9-Dec-20	147.90	25.73	122.17
P-07A	12-Apr-21	147.90	14.24	133.66
P-07A	15-Nov-21	147.90	15.53	132.37
GT10-1	12-Apr-11	145.56	1.55	144.01
GT10-1	1-Nov-11	145.56	15.85	129.71
GT10-1	30-Apr-12	145.56	2.02	143.54
GT10-1	12-Nov-12	145.56	18.45	127.11
GT10-1	8-Apr-13	145.56	1.76	143.80
GT10-1	18-Nov-13	145.56	17.32	128.24
GT10-1	28-Apr-14	145.56	1.40	144.16
GT10-1	17-Nov-14	145.56	14.51	131.05
GT10-1	5-May-15	145.56	4.99	140.57
GT10-1	10-Nov-15	145.56	18.02	127.54
GT10-1	2-May-16	145.56	3.22	142.34

Table A-1
Groundwater Elevations
Riverbend Landfill

Monitoring Location	Date	Reference Elevation [a] (ft-msl)	Depth to Water (ft-bgs)	Groundwater Elevation (ft-msl)
GT10-1	15-Nov-16	145.56	9.60	135.96
GT10-1	17-Apr-17	145.56	1.65	143.91
GT10-1	7-Nov-17	145.56	12.73	132.83
GT10-1	24-Apr-18	145.56	0.79	144.77
GT10-1	5-Nov-18	145.56	14.80	130.76
GT10-1	22-Apr-19	145.56	1.07	144.49
GT10-1	18-Nov-19	145.56	10.80	134.76
GT10-1	20-Apr-20	145.56	2.25	143.31
GT10-1	9-Nov-20	145.56	15.06	130.50
GT10-1	12-Apr-21	145.56	2.22	143.34
GT10-1	15-Nov-21	145.56	10.43	135.13
GT10-11	12-Apr-11	150.08	3.64	146.44
GT10-11	1-Nov-11	150.08	18.67	131.41
GT10-11	30-Apr-12	150.08	4.43	145.65
GT10-11	12-Nov-12	150.08	17.92	132.16
GT10-11	8-Apr-13	150.08	4.38	145.70
GT10-11	18-Nov-13	150.08	14.40	135.68
GT10-11	28-Apr-14	150.08	3.32	146.76
GT10-11	17-Nov-14	150.08	18.00	132.08
GT10-11	5-May-15	150.08	6.34	143.74
GT10-11	10-Nov-15	150.08	21.93	128.15
GT10-11	2-May-16	150.08	5.62	144.46
GT10-11	15-Nov-16	150.08	11.76	138.32
GT10-11	17-Apr-17	150.08	3.18	146.90
GT10-11	7-Nov-17	150.08	22.58	127.50
GT10-11	24-Apr-18	150.08	3.78	146.30
GT10-11	5-Nov-18	150.08	24.35	125.73
GT10-11	22-Apr-19	150.08	3.55	146.53
GT10-11	18-Nov-19	150.08	24.30	125.78
GT10-11	20-Apr-20	150.08	4.97	145.11
GT10-11	9-Nov-20	150.08	24.28	125.80
GT10-11	12-Apr-21	150.08	3.96	146.12
GT10-11	15-Nov-21	150.08	20.31	129.77
GT10-12	12-Apr-11	152.41	3.39	149.02
GT10-12	1-Nov-11	152.41	19.12	133.29
GT10-12	30-Apr-12	152.41	3.87	148.54
GT10-12	12-Nov-12	152.41	19.36	133.05
GT10-12	8-Apr-13	152.41	4.18	148.23
GT10-12	18-Nov-13	152.41	14.92	137.49
GT10-12	28-Apr-14	152.41	3.36	149.05
GT10-12	17-Nov-14	152.41	16.76	135.65
GT10-12	5-May-15	152.41	6.10	146.31
GT10-12	10-Nov-15	152.41	22.07	130.34
GT10-12	2-May-16	152.41	5.16	147.25
GT10-12	15-Nov-16	152.41	11.29	141.12
GT10-12	17-Apr-17	152.41	3.00	149.41

Table A-1
Groundwater Elevations
Riverbend Landfill

Monitoring Location	Date	Reference Elevation [a] (ft-msl)	Depth to Water (ft-bgs)	Groundwater Elevation (ft-msl)
GT10-12	7-Nov-17	152.41	14.50	137.91
GT10-12	24-Apr-18	152.41	3.07	149.34
GT10-12	5-Nov-18	152.41	22.80	129.61
GT10-12	22-Apr-19	152.41	3.82	148.59
GT10-12	18-Nov-19	152.41	21.35	131.06
GT10-12	20-Apr-20	152.41	5.74	146.67
GT10-12	9-Nov-20	152.41	26.06	126.35
GT10-12	12-Apr-21	152.41	4.97	147.44
GT10-12	15-Nov-21	152.41	17.53	134.88
SA-BH-1	12-Apr-11	155.21	7.36	147.85
SA-BH-1	1-Nov-11	155.21	18.58	136.63
SA-BH-1	30-Apr-12	155.21	7.83	147.38
SA-BH-1	12-Nov-12	155.21	NR	---
SA-BH-1	8-Apr-13	155.21	7.61	147.60
SA-BH-1	18-Nov-13	155.21	22.82	132.39
SA-BH-1	28-Apr-14	155.21	7.24	147.97
SA-BH-1	17-Nov-14	155.21	13.91	141.30
SA-BH-1	5-May-15	155.21	8.46	146.75
SA-BH-1	10-Nov-15	155.21	22.52	132.69
SA-BH-1	2-May-16	155.21	8.40	146.81
SA-BH-1	15-Nov-16	155.21	6.35	148.86
SA-BH-1	17-Apr-17	155.21	7.24	147.97
SA-BH-1	7-Nov-17	155.21	7.27	147.94
SA-BH-1	24-Apr-18	155.21	9.22	145.99
SA-BH-1	5-Nov-18	155.21	22.42	132.79
SA-BH-1	22-Apr-19	155.21	7.42	147.79
SA-BH-1	18-Nov-19	155.21	17.64	137.57
SA-BH-1	20-Apr-20	155.21	7.97	147.24
SA-BH-1	9-Nov-20	155.21	20.46	134.75
SA-BH-1	12-Apr-21	155.21	8.18	147.03
SA-BH-1	15-Nov-21	155.21	7.39	147.82
SA-BH-3	12-Apr-11	155.07	4.68	150.39
SA-BH-3	1-Nov-11	155.07	17.45	137.62
SA-BH-3	30-Apr-12	155.07	5.85	149.22
SA-BH-3	12-Nov-12	155.07	20.34	134.73
SA-BH-3	8-Apr-13	155.07	7.54	147.53
SA-BH-3	18-Nov-13	155.07	20.04	135.03
SA-BH-3	28-Apr-14	155.07	5.65	149.42
SA-BH-3	17-Nov-14	155.07	14.71	140.36
SA-BH-3	5-May-15	155.07	9.09	145.98
SA-BH-3	10-Nov-15	155.07	21.81	133.26
SA-BH-3	2-May-16	155.07	8.55	146.52
SA-BH-3	15-Nov-16	155.07	4.19	150.88
SA-BH-3	17-Apr-17	155.07	4.62	150.45
SA-BH-3	7-Nov-17	155.07	5.13	149.94
SA-BH-3	24-Apr-18	155.07	5.02	150.05

Table A-1
Groundwater Elevations
Riverbend Landfill

Monitoring Location	Date	Reference Elevation [a] (ft-msl)	Depth to Water (ft-bgs)	Groundwater Elevation (ft-msl)
SA-BH-3	5-Nov-18	155.07	22.73	132.34
SA-BH-3	22-Apr-19	155.07	5.13	149.94
SA-BH-3	18-Nov-19	155.07	18.27	136.80
SA-BH-3	20-Apr-20	155.07	8.21	146.86
SA-BH-3	9-Nov-20	155.07	19.77	135.30
SA-BH-3	12-Apr-21	155.07	8.73	146.34
SA-BH-3	15-Nov-21	155.07	7.46	147.61
SA-BH-5	12-Apr-11	151.01	13.00	138.01
SA-BH-5	1-Nov-11	151.01	18.26	132.75
SA-BH-5	30-Apr-12	151.01	15.19	135.82
SA-BH-5	12-Nov-12	151.01	20.29	130.72
SA-BH-5	8-Apr-13	151.01	15.70	135.31
SA-BH-5	18-Nov-13	151.01	18.29	132.72
SA-BH-5	28-Apr-14	151.01	13.60	137.41
SA-BH-5	17-Nov-14	151.01	25.52	125.49
SA-BH-5	5-May-15	151.01	16.64	134.37
SA-BH-5	10-Nov-15	151.01	27.20	123.81
SA-BH-5	2-May-16	151.01	16.51	134.50
SA-BH-5	15-Nov-16	151.01	16.27	134.74
SA-BH-5	17-Apr-17	151.01	11.90	139.11
SA-BH-5	7-Nov-17	151.01	25.12	125.89
SA-BH-5	24-Apr-18	151.01	12.34	138.67
SA-BH-5	5-Nov-18	151.01	26.27	124.74
SA-BH-5	22-Apr-19	151.01	13.97	137.04
SA-BH-5	18-Nov-19	151.01	26.67	124.34
SA-BH-5	20-Apr-20	151.01	16.16	134.85
SA-BH-5	9-Nov-20	151.01	22.42	128.59
SA-BH-5	12-Apr-21	151.01	16.09	134.92
SA-BH-5	15-Nov-21	151.01	6.18	144.83
SA-BH-6	12-Apr-11	125.93	11.51	114.42
SA-BH-6	1-Nov-11	125.93	15.75	110.18
SA-BH-6	30-Apr-12	125.93	12.60	113.33
SA-BH-6	12-Nov-12	125.93	13.69	112.24
SA-BH-6	8-Apr-13	125.93	12.73	113.20
SA-BH-6	18-Nov-13	125.93	14.34	111.59
SA-BH-6	28-Apr-14	125.93	11.34	114.59
SA-BH-6	17-Nov-14	125.93	14.02	111.91
SA-BH-6	5-May-15	125.93	13.93	112.00
SA-BH-6	10-Nov-15	125.93	17.11	108.82
SA-BH-6	2-May-16	125.93	13.58	112.35
SA-BH-6	15-Nov-16	125.93	11.82	114.11
SA-BH-6	17-Apr-17	125.93	11.29	114.64
SA-BH-6	7-Nov-17	125.93	14.18	111.75
SA-BH-6	24-Apr-18	125.93	12.02	113.91
SA-BH-6	5-Nov-18	125.93	16.78	109.15
SA-BH-6	22-Apr-19	125.93	12.19	113.74

Table A-1
Groundwater Elevations
Riverbend Landfill

Monitoring Location	Date	Reference Elevation [a] (ft-msl)	Depth to Water (ft-bgs)	Groundwater Elevation (ft-msl)
SA-BH-6	18-Nov-19	125.93	16.65	109.28
SA-BH-6	20-Apr-20	125.93	13.55	112.38
SA-BH-6	9-Nov-20	125.93	16.62	109.31
SA-BH-6	12-Apr-21	125.93	13.47	112.46
SA-BH-6	15-Nov-21	125.93	2.98	122.95

NOTE:

This table includes the last 10 years of groundwater elevation data. Earlier data can be found in previous year's Annual Reports.

ft-msl = feet mean sea level; ft-bgs = feet below ground surface;

NR = no reading; --- = null value.

[a] All monitoring wells and piezometers were resurveyed in July 2013. All reference elevations remained the same except for P-05A, P-06A, and P-07A.

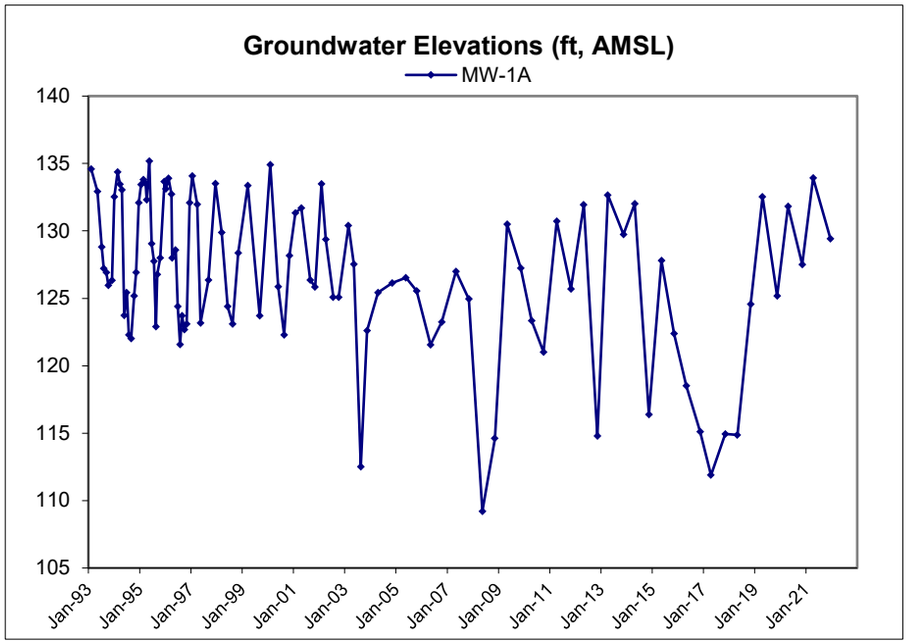
[b] Water levels have not been measured in active production well MB-1 North since 2000 because a sounding tube is not available to lower a water level measuring tape.

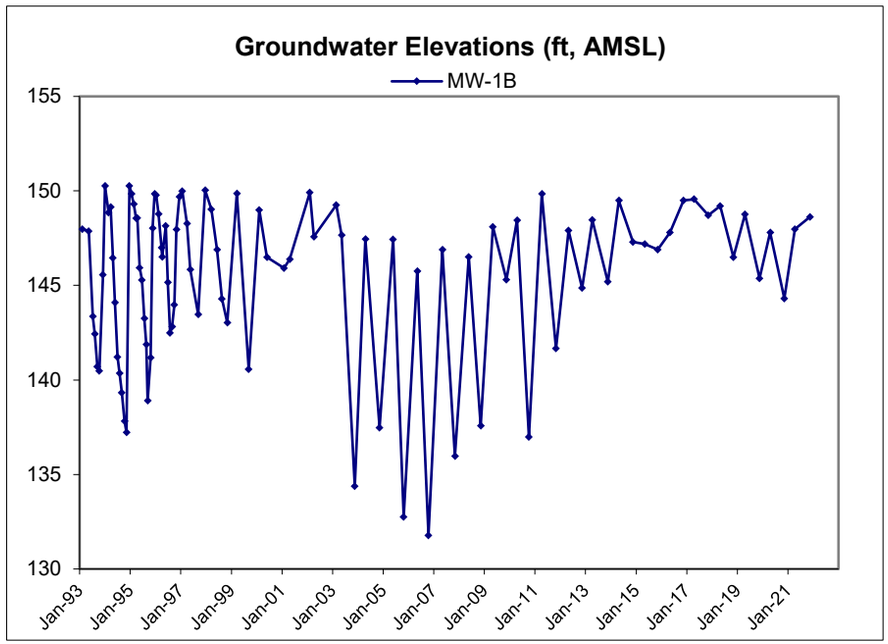
[c] MW-5B re-surveyed in October 2012 after repair to the well casing was completed.

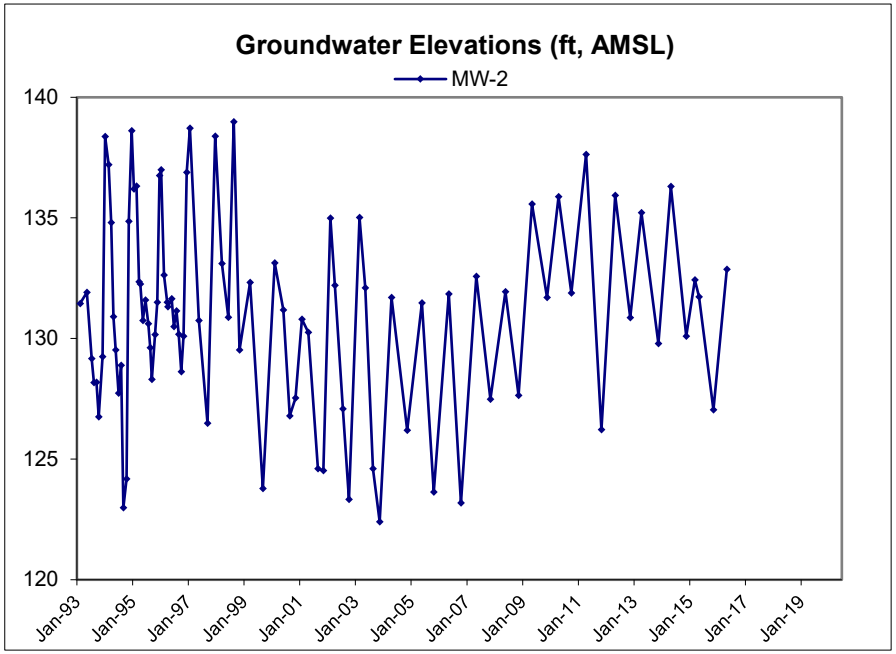
[d] MW-12A, MW-12B, MW-6A, P-01, P-02, and P-03 were re-surveyed in July 2017.

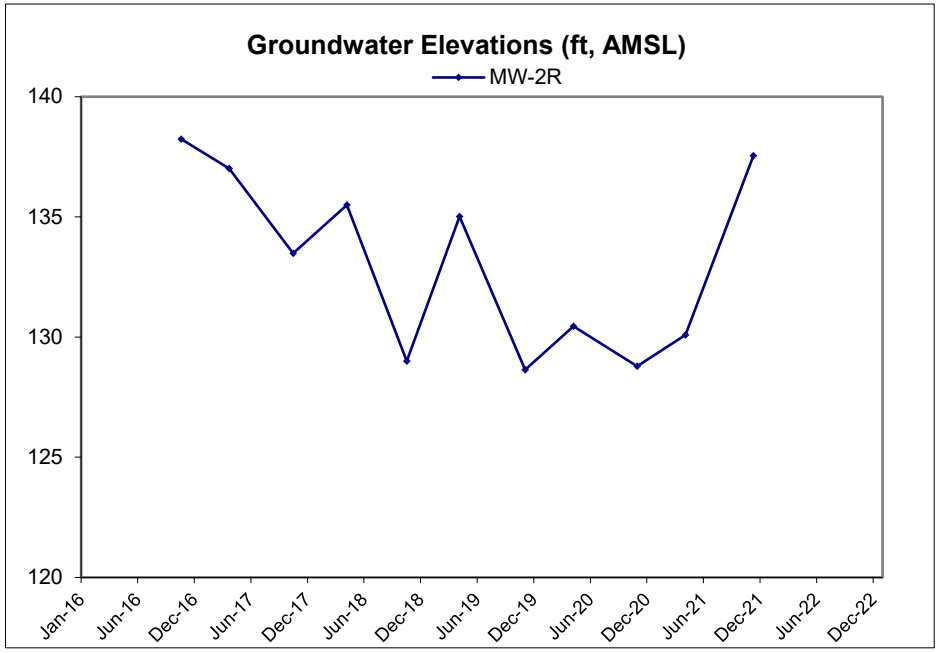
Hydrographs

Groundwater Elevations Measured in Feet Above Mean Sea Level






Groundwater Elevations (ft, AMSL)
MW-2
140
135
130
125
120
Jan-93
Jan-95
Jan-97
Jan-99
Jan-01
Jan-03
Jan-05
Jan-07
Jan-09
Jan-11
Jan-13
Jan-15
Jan-17
Jan-19


Groundwater Elevations (ft, AMSL)
MW-2R
140
135
130
125
120
Jan-16
Jun-16
Dec-16
Jun-17
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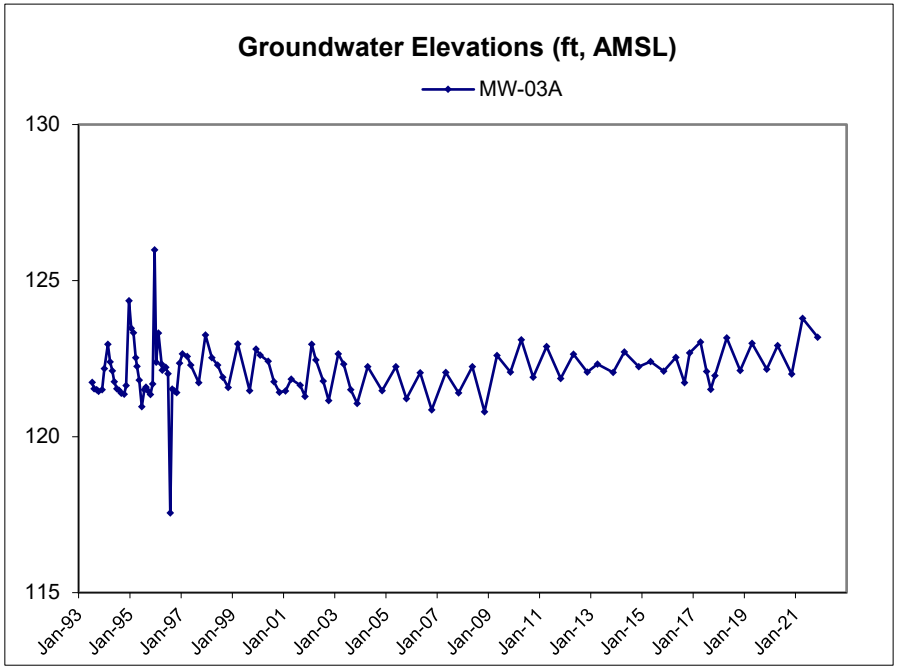
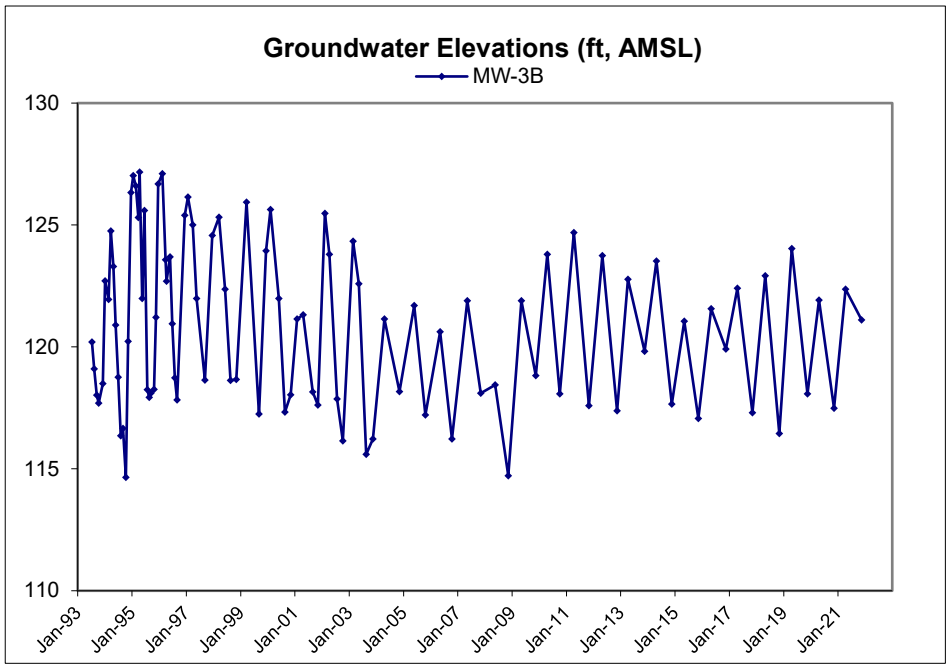
Jun-18
Dec-18
Jun-19
Dec-19
Jun-20
Dec-20
Jun-21
Dec-21
Jun-22
Dec-22


Groundwater Elevations (ft, AMSL)
MW-03A
130
125
120
115
Jan-93
Jan-95
Jan-97
Jan-99
Jan-01
Jan-03
Jan-05
Jan-07
Jan-09
Jan-11
Jan-13
Jan-15
Jan-17
Jan-19
Jan-21


Groundwater Elevations (ft, AMSL)
MW-3B
130
125
120
115
110
Jan-93
Jan-95
Jan-97
Jan-99
Jan-01
Jan-03
Jan-05
Jan-07
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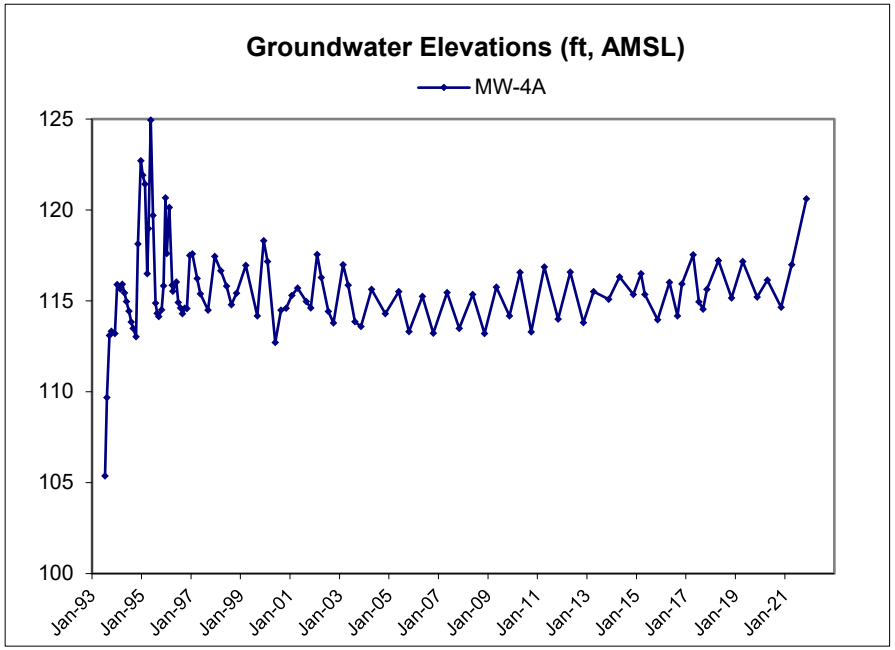
Jan-13
Jan-15
Jan-17
Jan-19
Jan-21


Groundwater Elevations (ft, AMSL)
MW-4A
125
120
115
110
105
100
Jan-93
Jan-95
Jan-97
Jan-99
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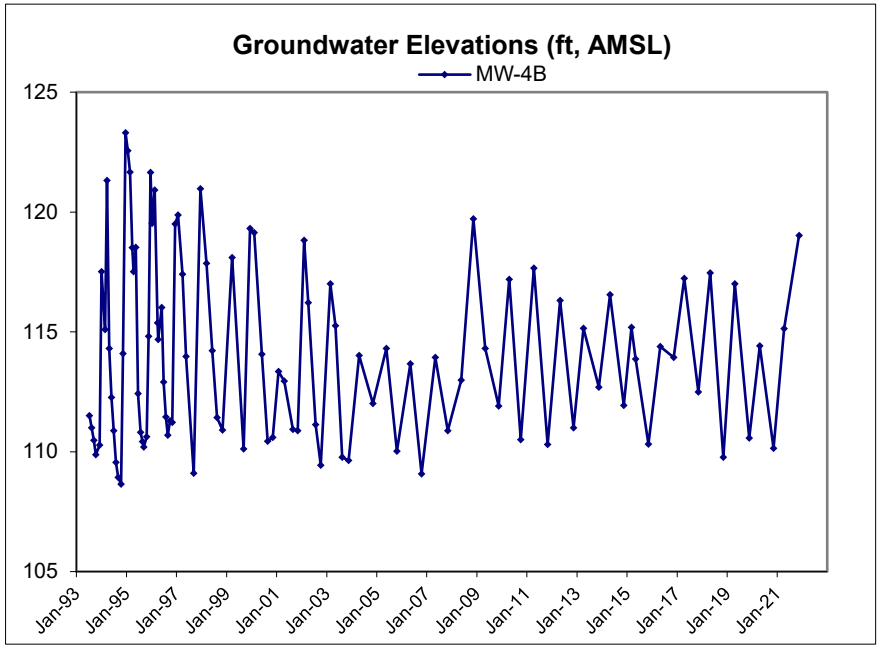
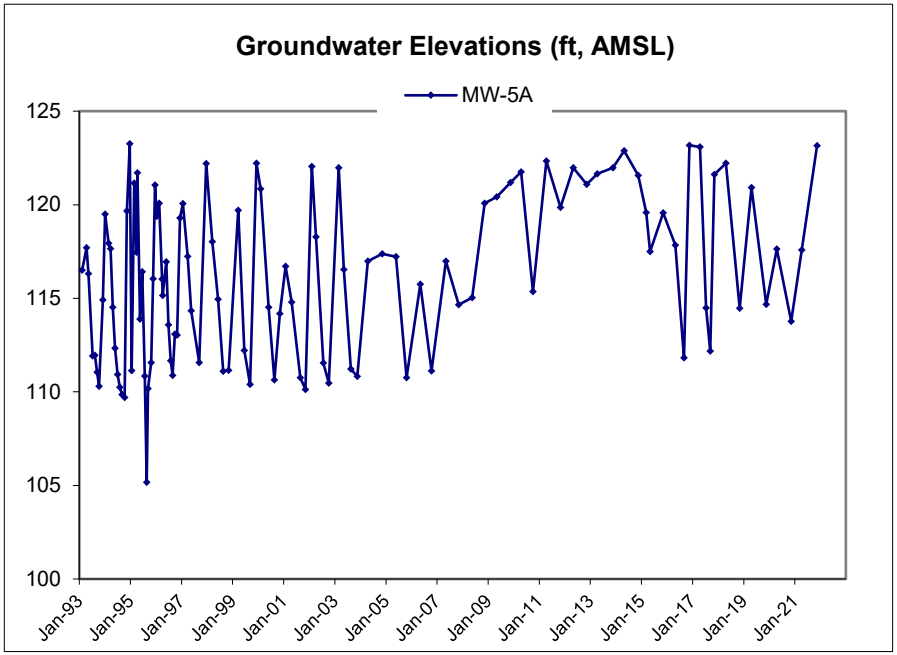
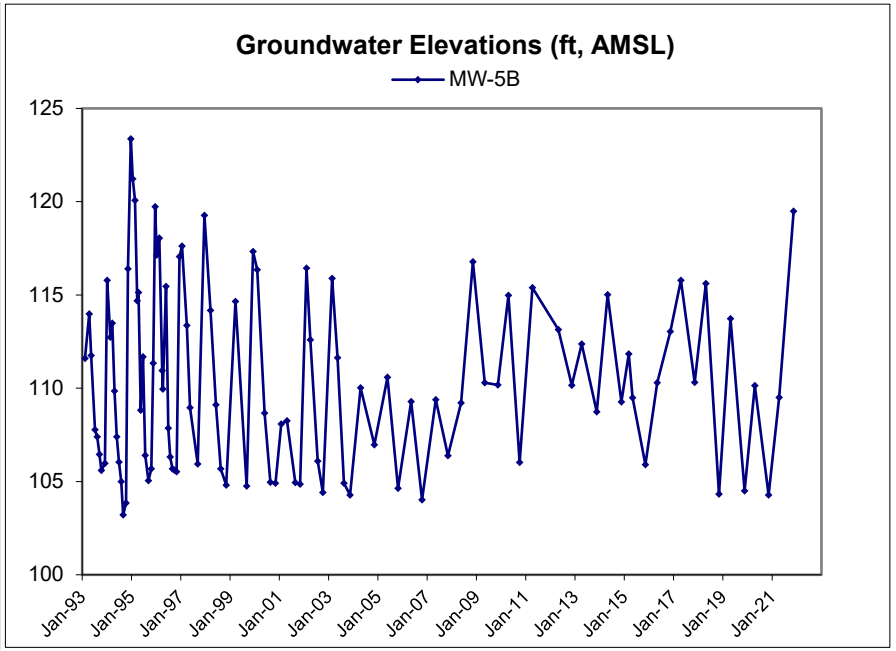
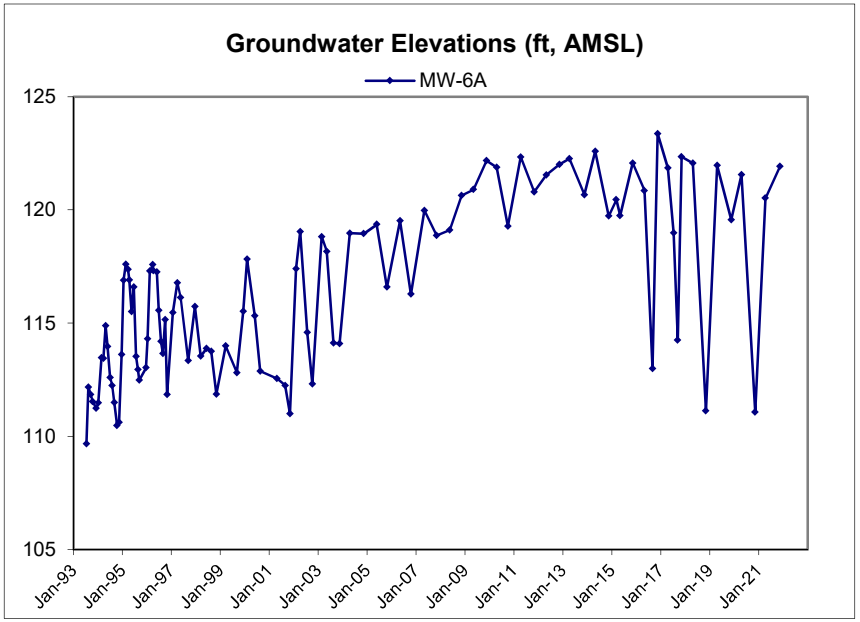
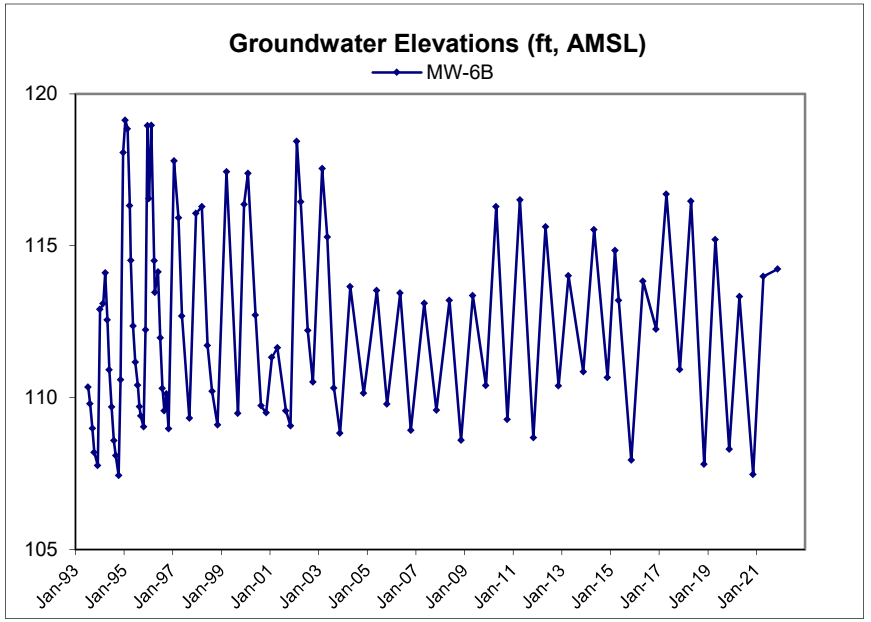
Jan-19
Jan-21

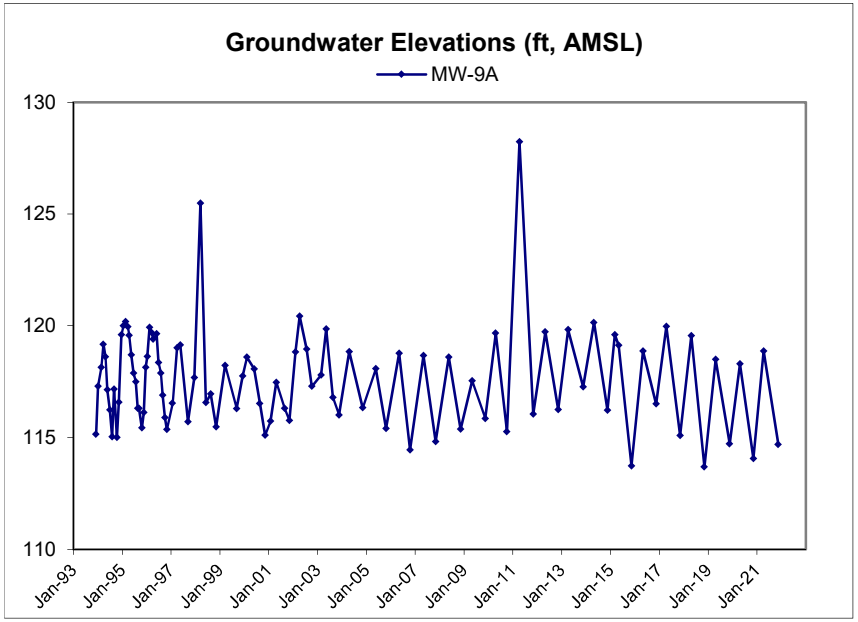

Groundwater Elevations (ft, AMSL)
MW-4B
125
120
115
110
105
Jan-93
Jan-95
Jan-97
Jan-99
Jan-01
Jan-03
Jan-05
Jan-07
Jan-09
Jan-11
Jan-13
Jan-15
Jan-17
Jan-19
Jan-21

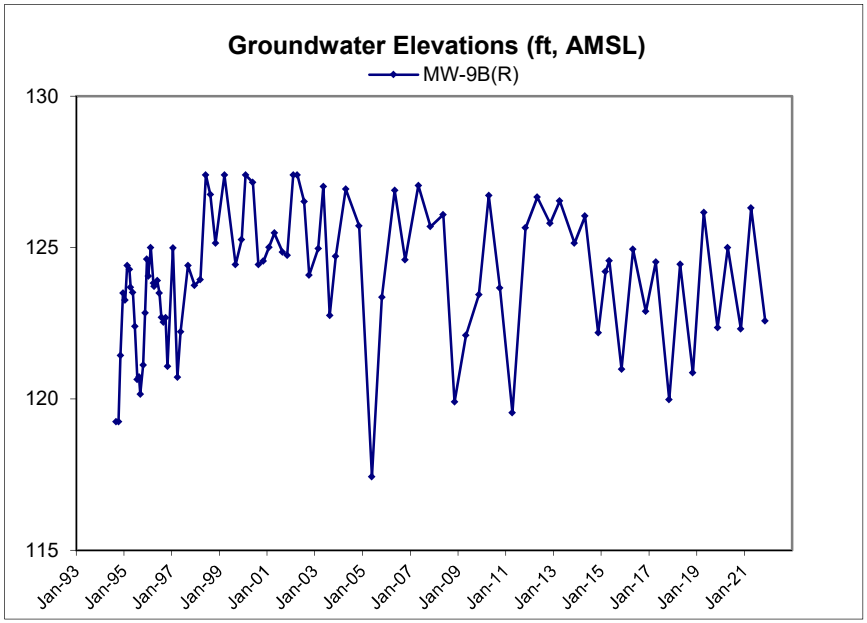

Groundwater Elevations (ft, AMSL)
MW-5A
125
120
115
110
105
100
Jan-93
Jan-95
Jan-97
Jan-99
Jan-01
Jan-03
Jan-05
Jan-07
Jan-09
Jan-11
Jan-13
Jan-15
Jan-17
Jan-19
Jan-21

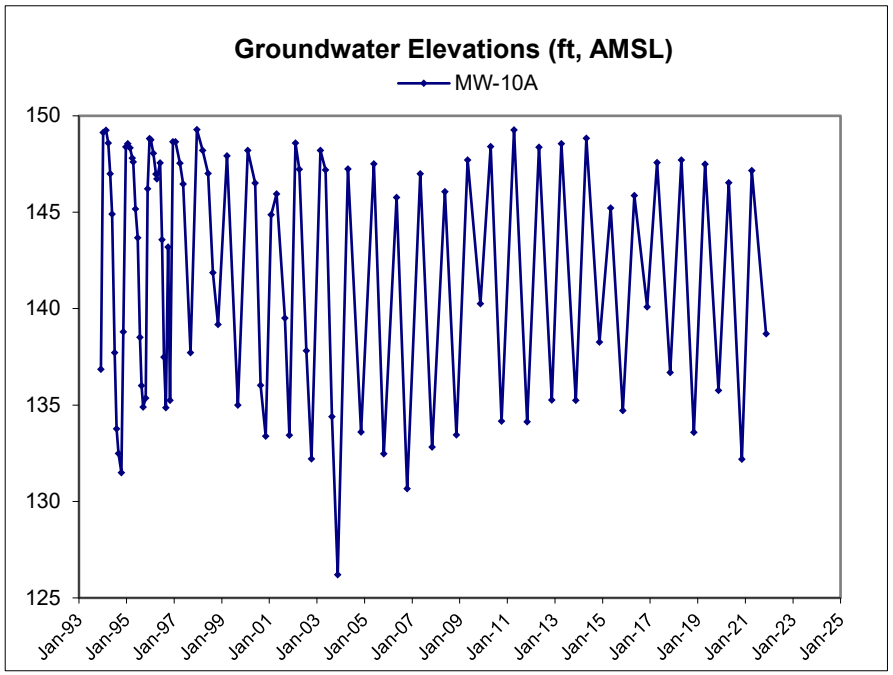

Groundwater Elevations (ft, AMSL)
MW-5B
125
120
115
110
105
100
Jan-93
Jan-95
Jan-97
Jan-99
Jan-01
Jan-03
Jan-05
Jan-07
Jan-09
Jan-11
Jan-13
Jan-15
Jan-17
Jan-19
Jan-21


Groundwater Elevations (ft, AMSL)
MW-6A
125
120
115
110
105
Jan-93
Jan-95
Jan-97
Jan-99
Jan-01
Jan-03
Jan-05
Jan-07
Jan-09
Jan-11
Jan-13
Jan-15
Jan-17
Jan-19
Jan-21


Groundwater Elevations (ft, AMSL)
MW-6B
120
115
110
105
Jan-93
Jan-95
Jan-97
Jan-99
Jan-01
Jan-03
Jan-05
Jan-07
Jan-09
Jan-11
Jan-13
Jan-15
Jan-17
Jan-19
Jan-21


Groundwater Elevations (ft, AMSL)
MW-9A
130
125
120
115
110
Jan-93
Jan-95
Jan-97
Jan-99
Jan-01
Jan-03
Jan-05
Jan-07
Jan-09
Jan-11
Jan-13
Jan-15
Jan-17
Jan-19
Jan-21


Groundwater Elevations (ft, AMSL)
MW-9B(R)
130
125
120
115
Jan-93
Jan-95
Jan-97
Jan-99
Jan-01
Jan-03
Jan-05
Jan-07
Jan-09
Jan-11
Jan-13
Jan-15
Jan-17
Jan-19
Jan-21


Groundwater Elevations (ft, AMSL)
MW-10A
150
145
140
135
130
125
Jan-93
Jan-95
Jan-97
Jan-99
Jan-01
Jan-03
Jan-05
Jan-07
Jan-09
Jan-11
Jan-13
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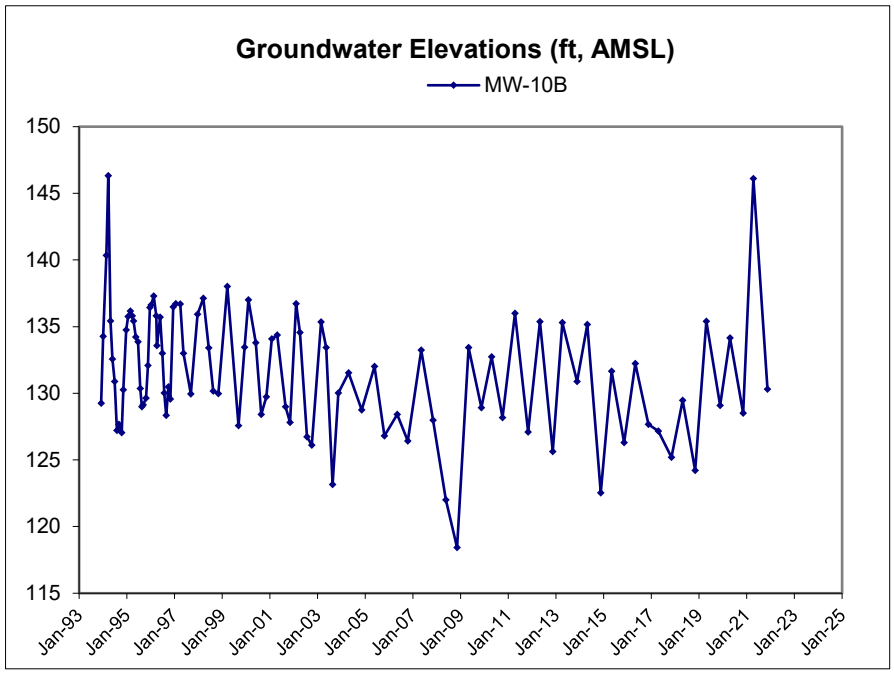
Jan-21
Jan-23
Jan-25


Groundwater Elevations (ft, AMSL)
MW-10B
150
145
140
135
130
125
120
115
Jan-93
Jan-95
Jan-97
Jan-99
Jan-01
Jan-03
Jan-05
Jan-07
Jan-09
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Jan-13
Jan-15
Jan-17
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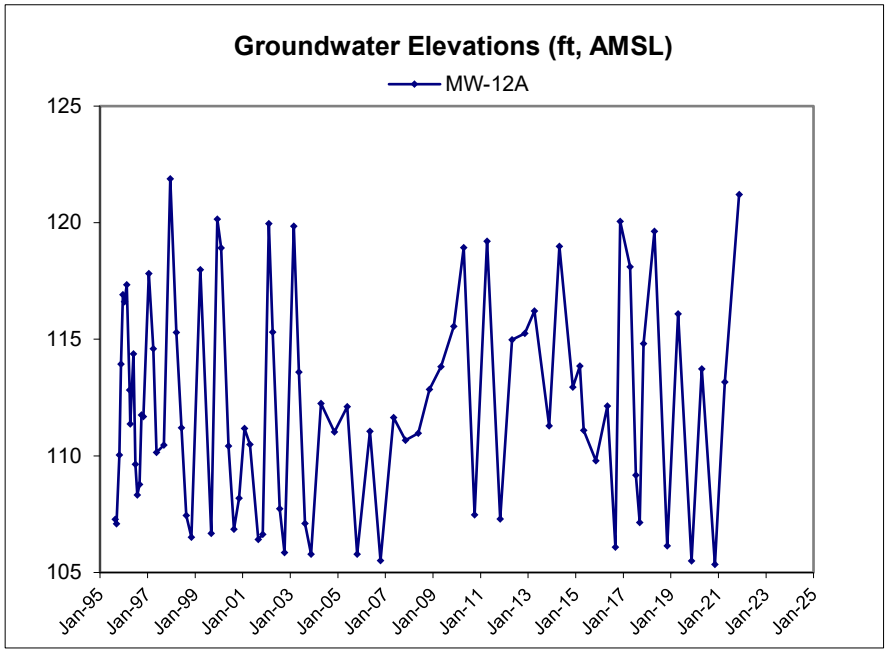
Jan-21
Jan-23
Jan-25


Groundwater Elevations (ft, AMSL)
MW-12A
125
120
115
110
105
Jan-95
Jan-97
Jan-99
Jan-01
Jan-03
Jan-05
Jan-07
Jan-09
Jan-11
Jan-13
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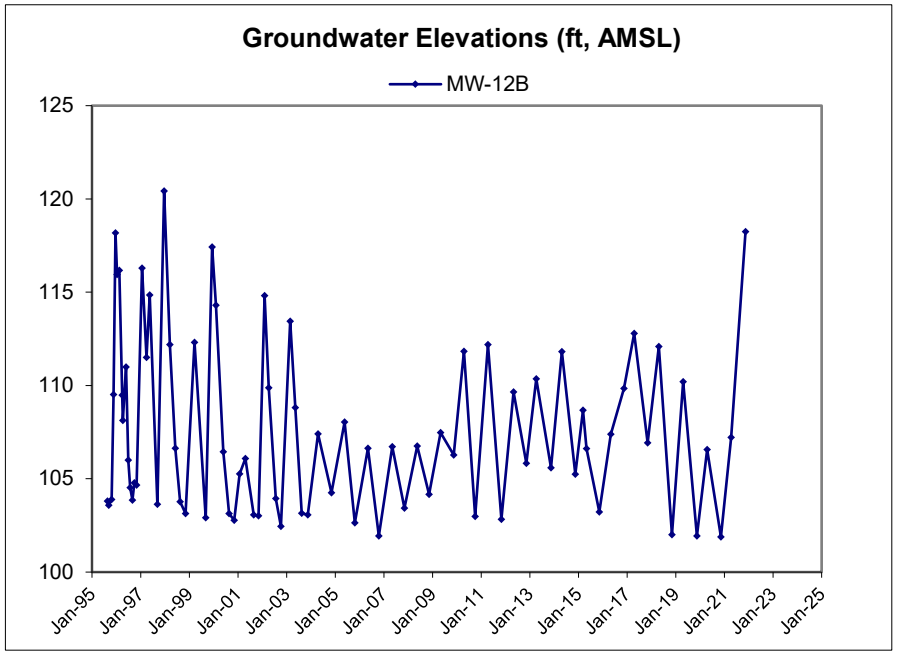
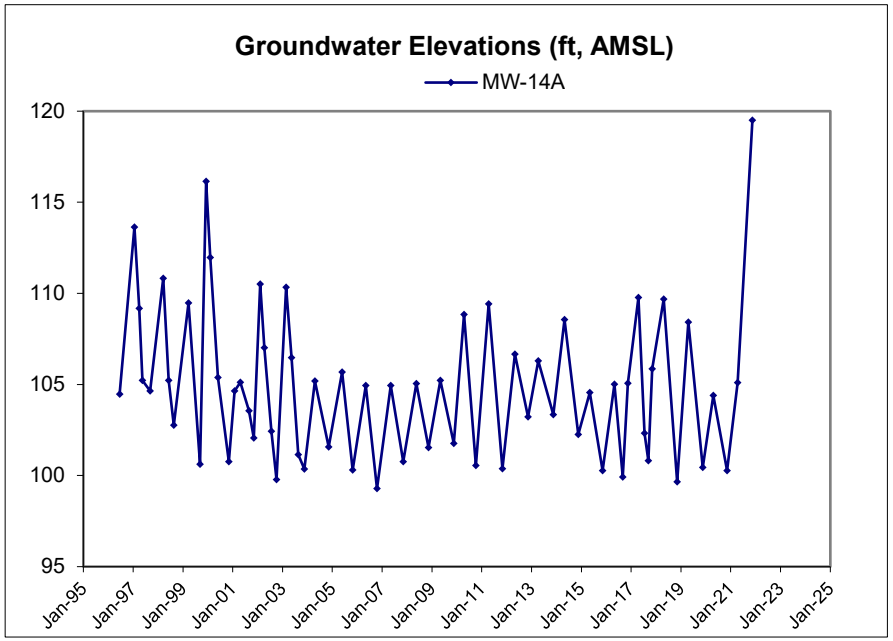
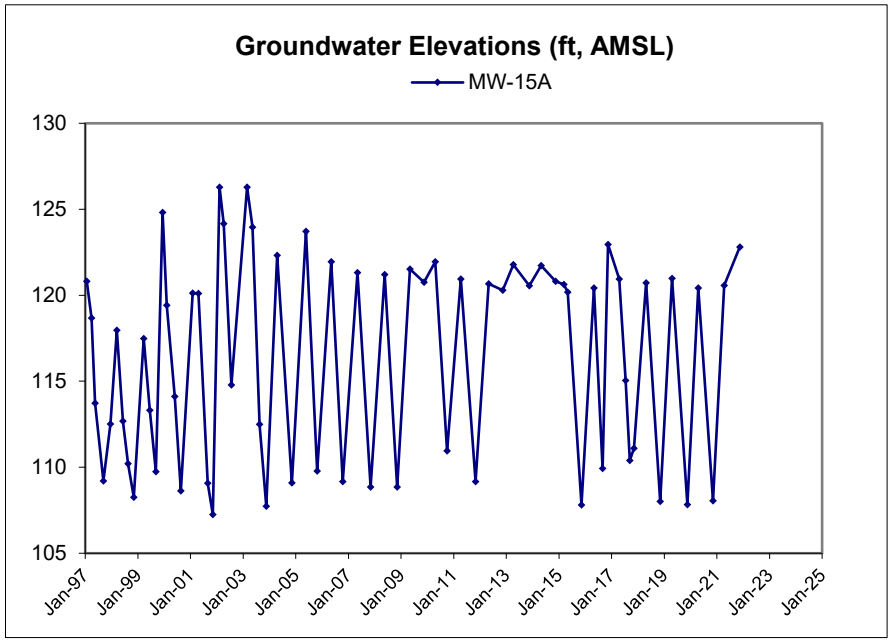
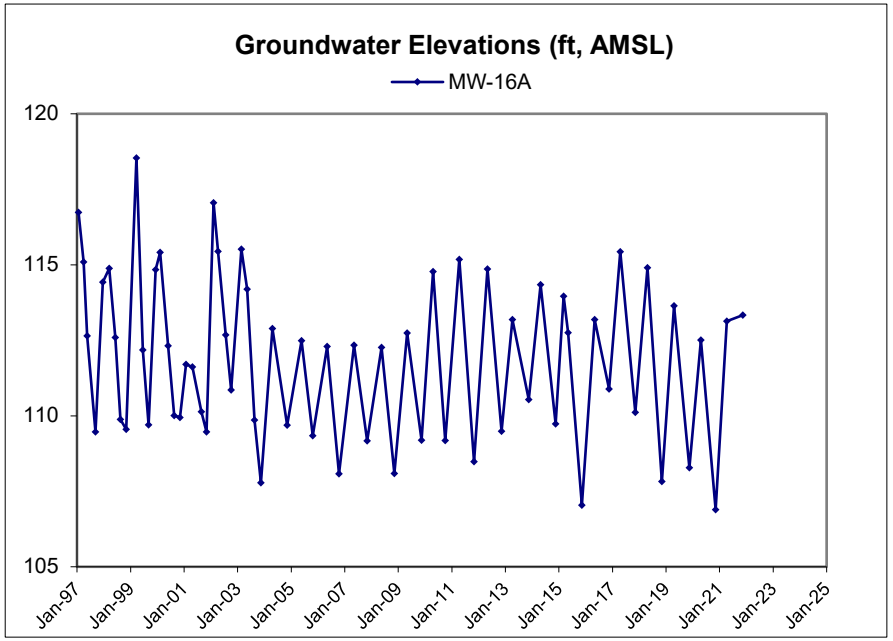
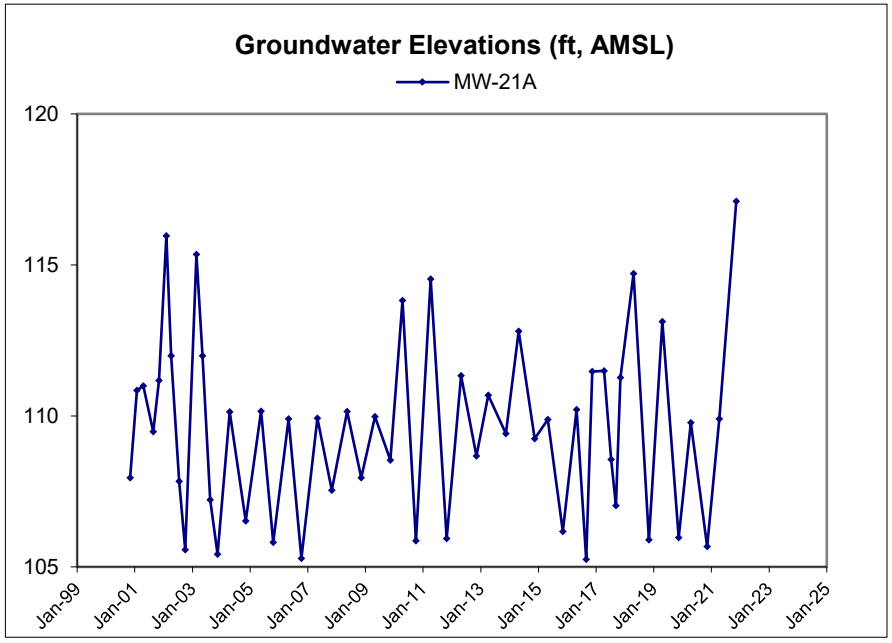
Jan-21
Jan-23
Jan-25

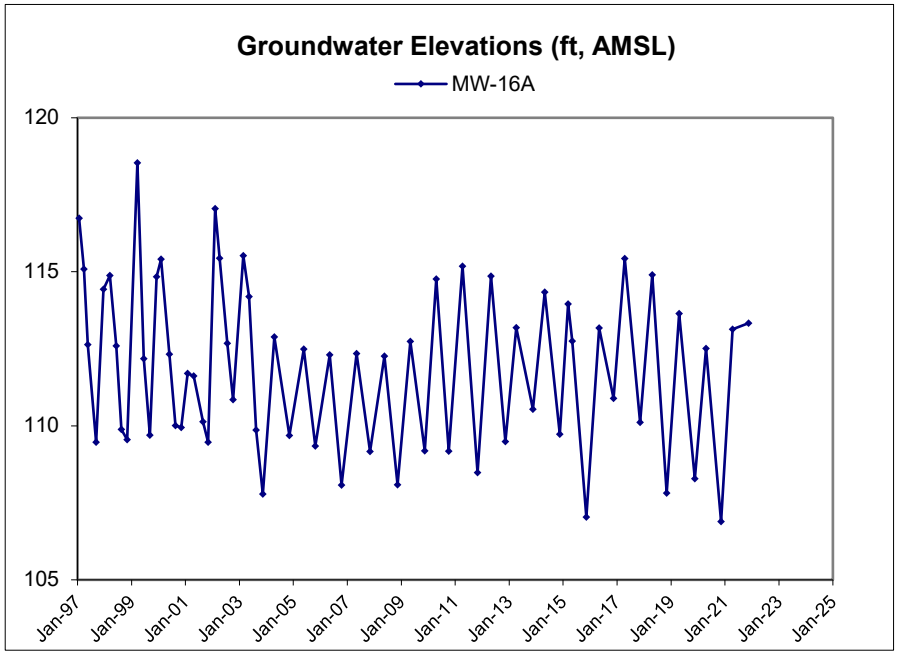

Groundwater Elevations (ft, AMSL)
MW-12B
125
120
115
110
105
100
Jan-95
Jan-97
Jan-99
Jan-01
Jan-03
Jan-05
Jan-07
Jan-09
Jan-11
Jan-13
Jan-15
Jan-17
Jan-19
Jan-21
Jan-23
Jan-25

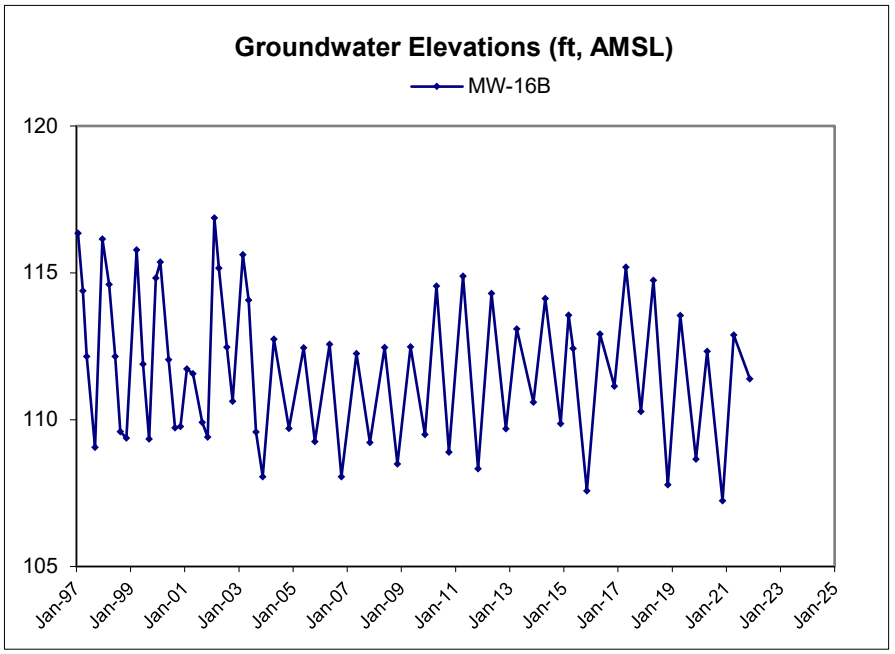

Groundwater Elevations (ft, AMSL)
MW-14A
120
115
110
105
100
95
Jan-95
Jan-97
Jan-99
Jan-01
Jan-03
Jan-05
Jan-07
Jan-09
Jan-11
Jan-13
Jan-15
Jan-17
Jan-19
Jan-21
Jan-23
Jan-25

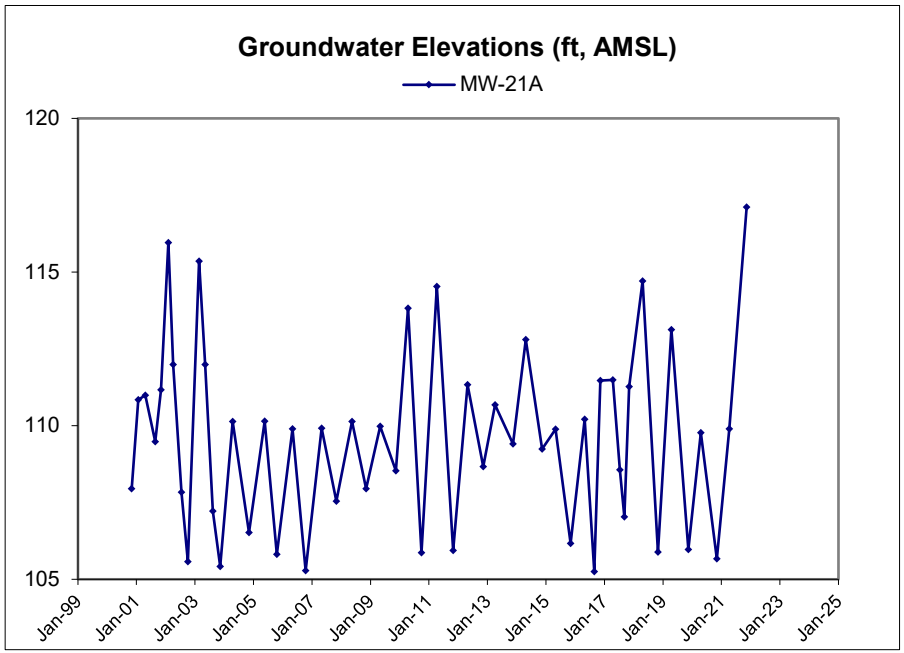

Groundwater Elevations (ft, AMSL)
MW-15A
130
125
120
115
110
105
Jan-97
Jan-99
Jan-01
Jan-03
Jan-05
Jan-07
Jan-09
Jan-11
Jan-13
Jan-15
Jan-17
Jan-19
Jan-21
Jan-23
Jan-25

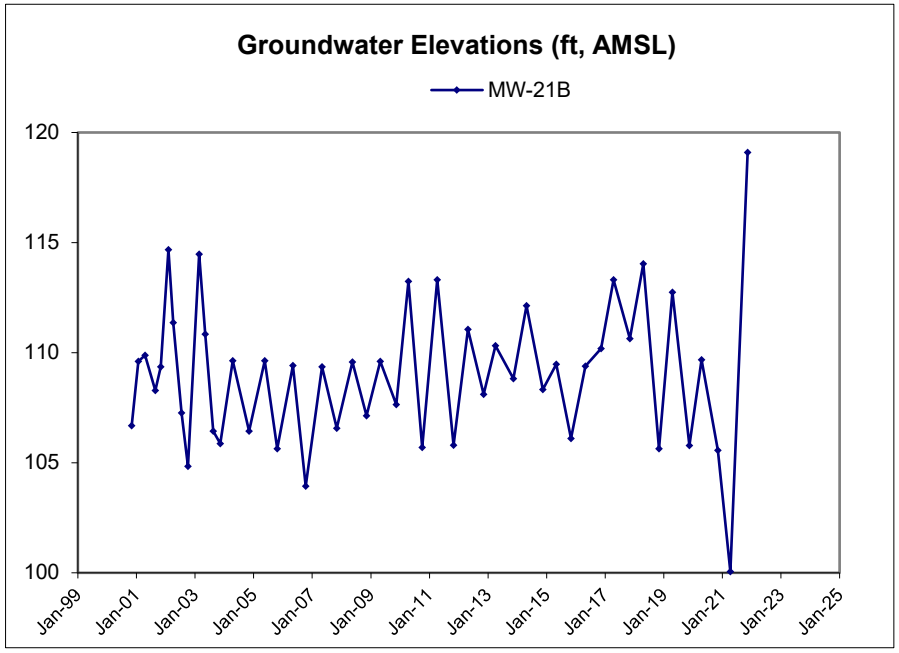

Groundwater Elevations (ft, AMSL)
MW-16A
120
115
110
105
Jan-97
Jan-99
Jan-01
Jan-03
Jan-05
Jan-07
Jan-09
Jan-11
Jan-13
Jan-15
Jan-17
Jan-19
Jan-21
Jan-23
Jan-25

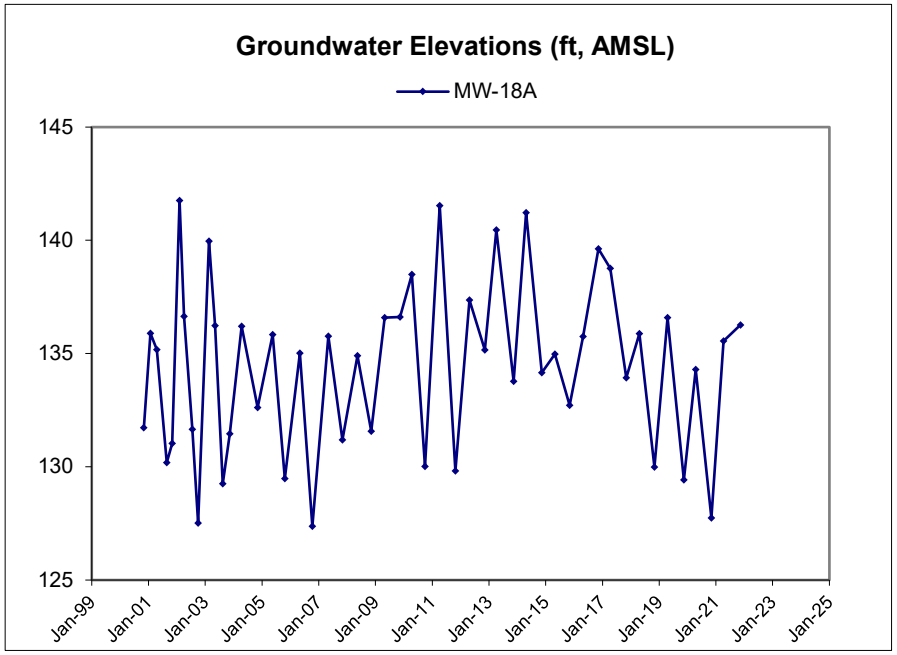

Groundwater Elevations (ft, AMSL)
MW-21A
120
115
110
105
Jan-99
Jan-01
Jan-03
Jan-05
Jan-07
Jan-09
Jan-11
Jan-13
Jan-15
Jan-17
Jan-19
Jan-21
Jan-23
Jan-25

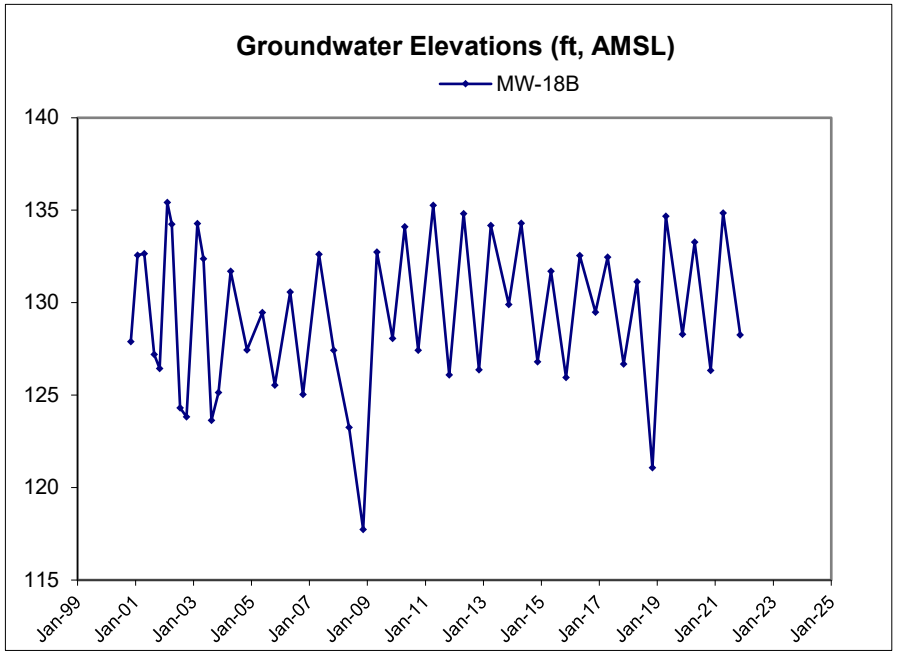

Groundwater Elevations (ft, AMSL)
MW-16A
120
115
110
105
Jan-97
Jan-99
Jan-01
Jan-03
Jan-05
Jan-07
Jan-09
Jan-11
Jan-13
Jan-15
Jan-17
Jan-19
Jan-21
Jan-23
Jan-25


Groundwater Elevations (ft, AMSL)
MW-16B
120
115
110
105
Jan-97
Jan-99
Jan-01
Jan-03
Jan-05
Jan-07
Jan-09
Jan-11
Jan-13
Jan-15
Jan-17
Jan-19
Jan-21
Jan-23
Jan-25


Groundwater Elevations (ft, AMSL)
MW-21A
120
115
110
105
Jan-99
Jan-01
Jan-03
Jan-05
Jan-07
Jan-09
Jan-11
Jan-13
Jan-15
Jan-17
Jan-19
Jan-21
Jan-23
Jan-25


Groundwater Elevations (ft, AMSL)
MW-21B
120
115
110
105
100
Jan-99
Jan-01
Jan-03
Jan-05
Jan-07
Jan-09
Jan-11
Jan-13
Jan-15
Jan-17
Jan-19
Jan-21
Jan-23
Jan-25


Groundwater Elevations (ft, AMSL)
MW-18A
145
140
135
130
125
Jan-99
Jan-01
Jan-03
Jan-05
Jan-07
Jan-09
Jan-11
Jan-13
Jan-15
Jan-17
Jan-19
Jan-21
Jan-23
Jan-25


Groundwater Elevations (ft, AMSL)
MW-18B
140
135
130
125
120
115
Jan-99
Jan-01
Jan-03
Jan-05
Jan-07
Jan-09
Jan-11
Jan-13
Jan-15
Jan-17
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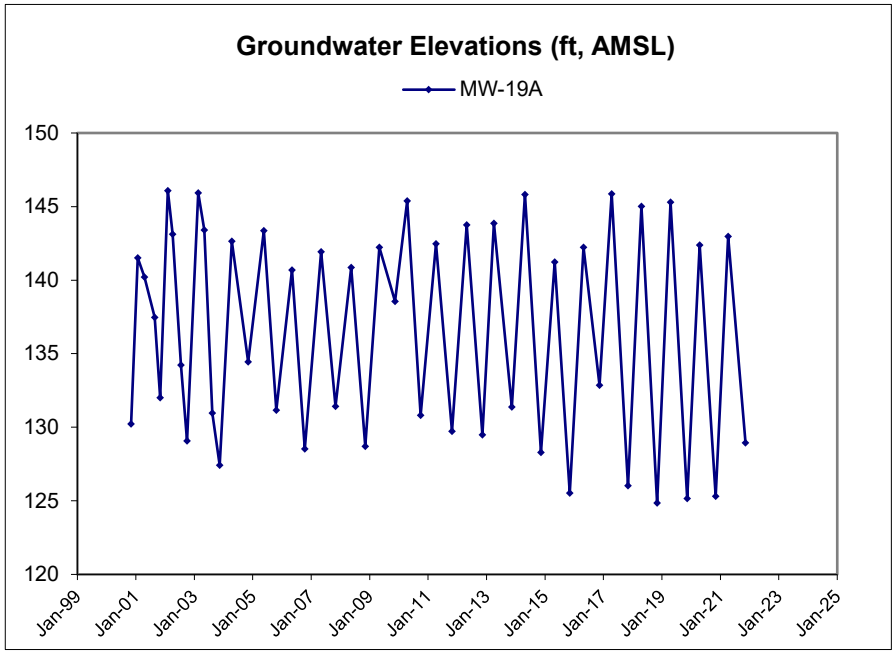
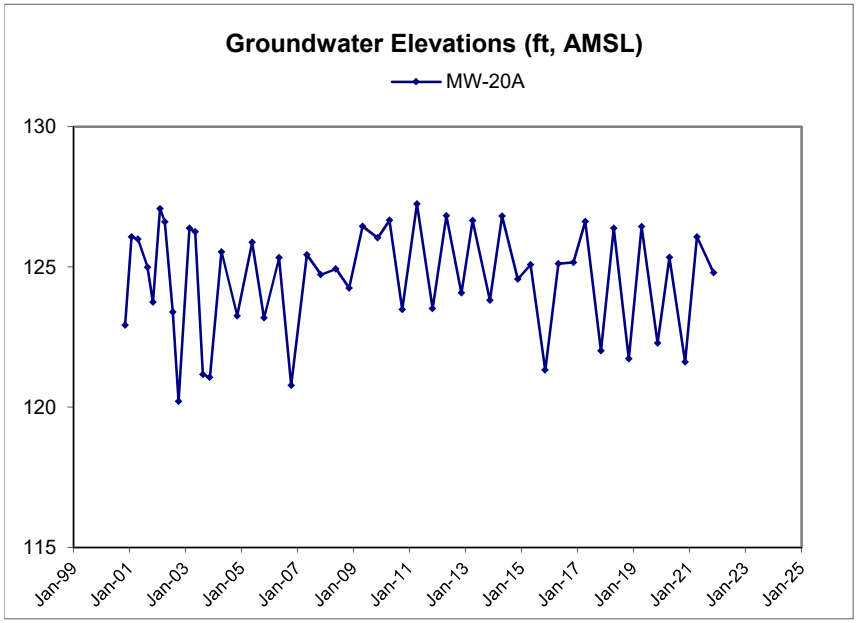
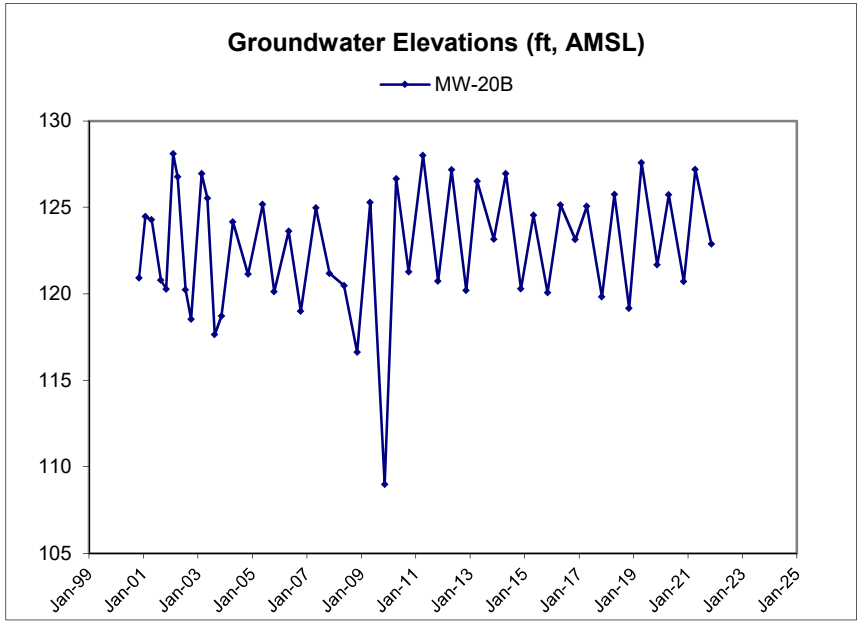
Jan-21
Jan-23
Jan-25


Groundwater Elevations (ft, AMSL)
MW-19A
150
145
140
135
130
125
120
Jan-99
Jan-01
Jan-03
Jan-05
Jan-07
Jan-09
Jan-11
Jan-13
Jan-15
Jan-17
Jan-19
Jan-21
Jan-23
Jan-25


Groundwater Elevations (ft, AMSL)
MW-20A
130
125
120
115
Jan-99
Jan-01
Jan-03
Jan-05
Jan-07
Jan-09
Jan-11
Jan-13
Jan-15
Jan-17
Jan-19
Jan-21
Jan-23
Jan-25


Groundwater Elevations (ft, AMSL)
MW-20B
130
125
120
115
110
105
Jan-99
Jan-01
Jan-03
Jan-05
Jan-07
Jan-09
Jan-11
Jan-13
Jan-15
Jan-17
Jan-19
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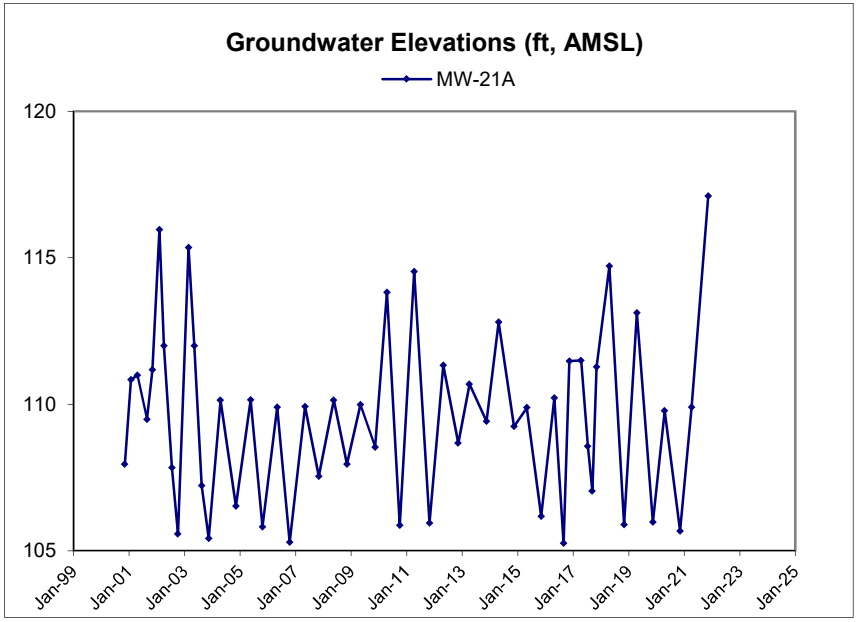
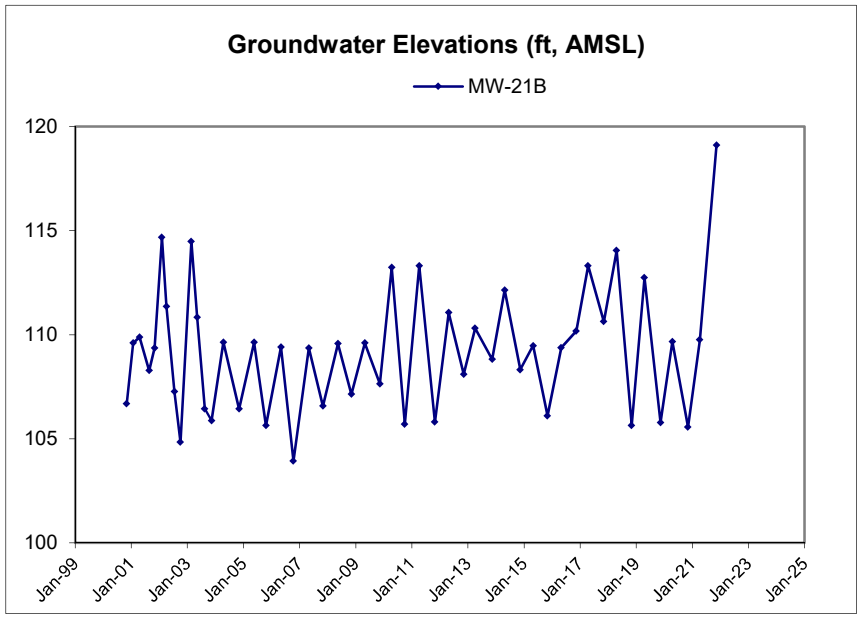
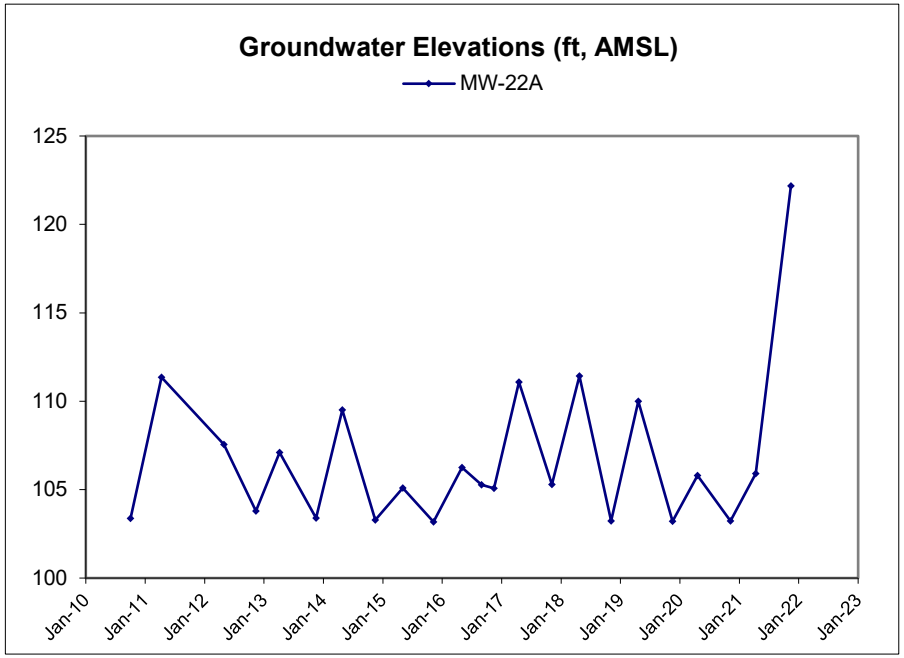
Jan-23
Jan-25


Groundwater Elevations (ft, AMSL)
MW-21A
120
115
110
105
Jan-99
Jan-01
Jan-03
Jan-05
Jan-07
Jan-09
Jan-11
Jan-13
Jan-15
Jan-17
Jan-19
Jan-21
Jan-23
Jan-25


Groundwater Elevations (ft, AMSL)
MW-21B
120
115
110
105
100
Jan-99
Jan-01
Jan-03
Jan-05
Jan-07
Jan-09
Jan-11
Jan-13
Jan-15
Jan-17
Jan-19
Jan-21
Jan-23
Jan-25


Groundwater Elevations (ft, AMSL)
MW-22A
125
120
115
110
105
100
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Jan-18
Jan-19
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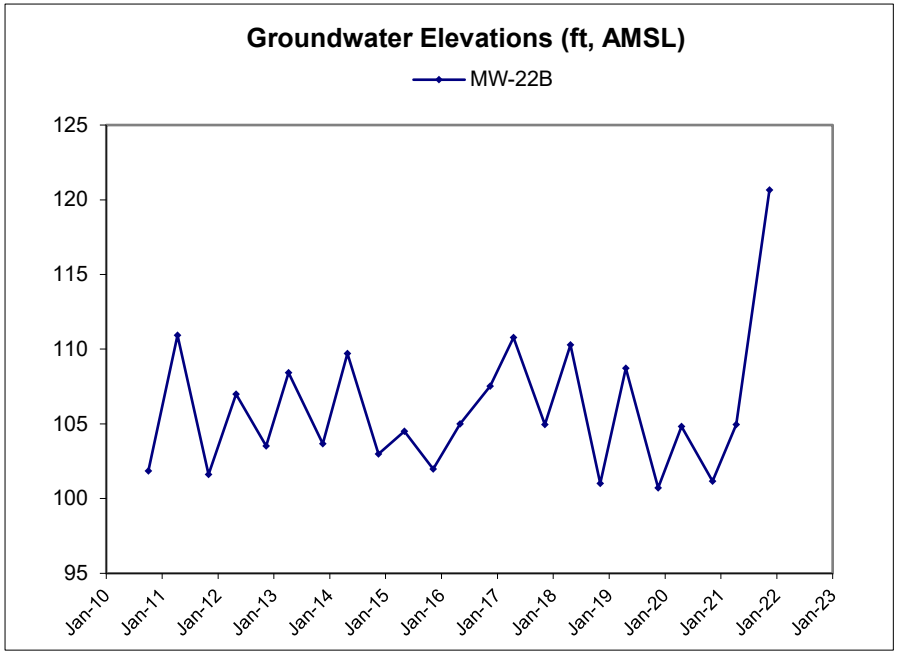
Jan-21
Jan-22
Jan-23


Groundwater Elevations (ft, AMSL)
MW-22B
125
120
115
110
105
100
95
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Jan-18
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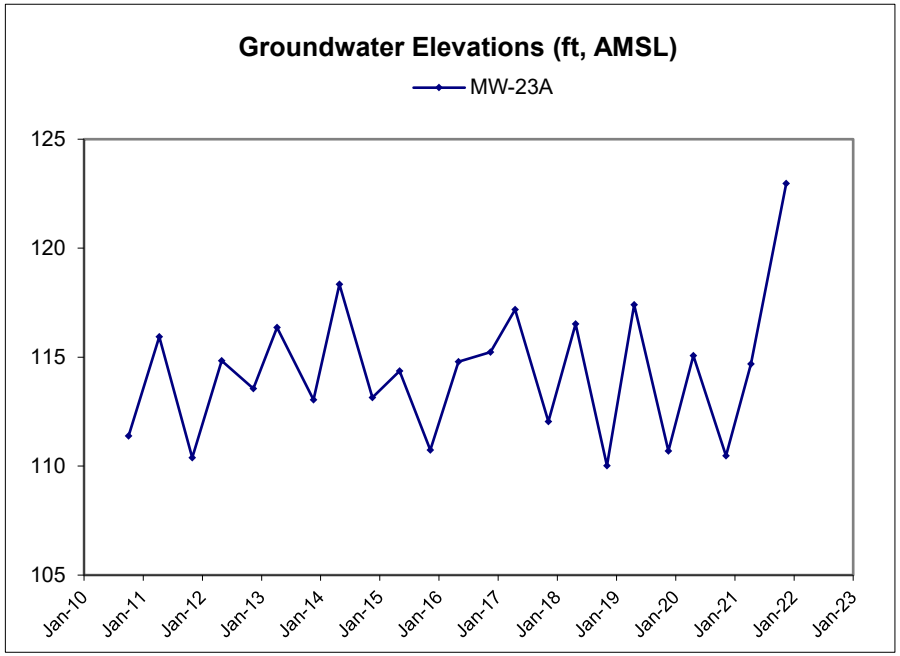
Jan-20
Jan-21
Jan-22
Jan-23


Groundwater Elevations (ft, AMSL)
MW-23A
125
120
115
110
105
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Jan-18
Jan-19
Jan-20
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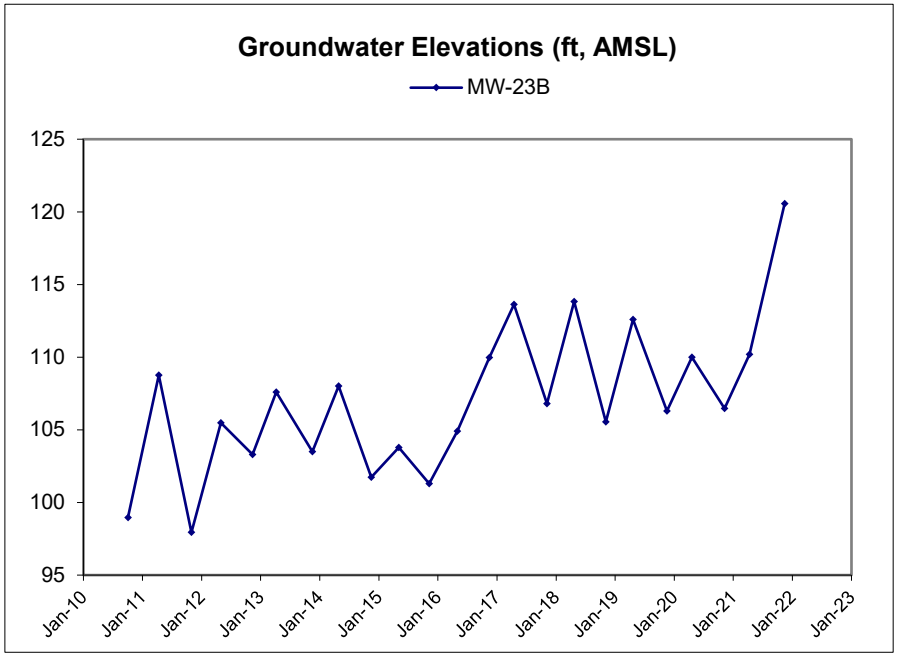
Jan-22
Jan-23


Groundwater Elevations (ft, AMSL)
MW-23B
125
120
115
110
105
100
95
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
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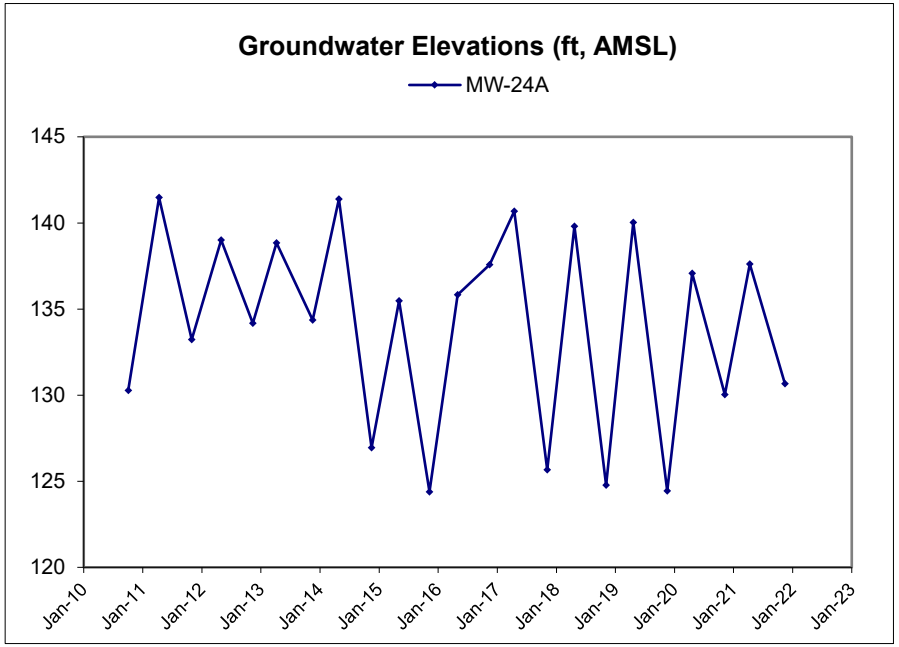
Jan-22
Jan-23


Groundwater Elevations (ft, AMSL)
MW-24A
145
140
135
130
125
120
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
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Jan-19
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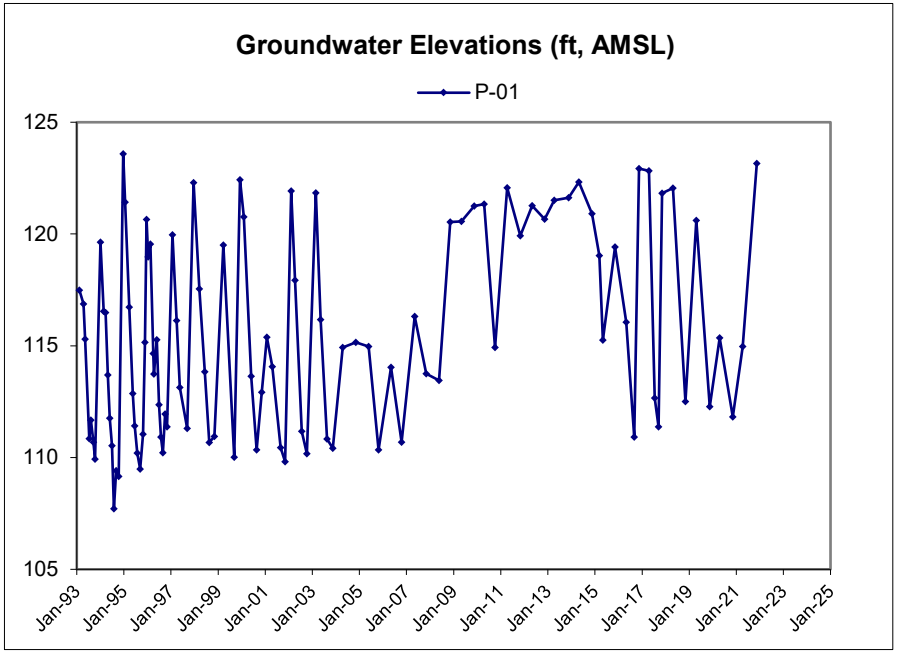
Jan-22
Jan-23


Groundwater Elevations (ft, AMSL)
P-01
125
120
115
110
105
Jan-93
Jan-95
Jan-97
Jan-99
Jan-01
Jan-03
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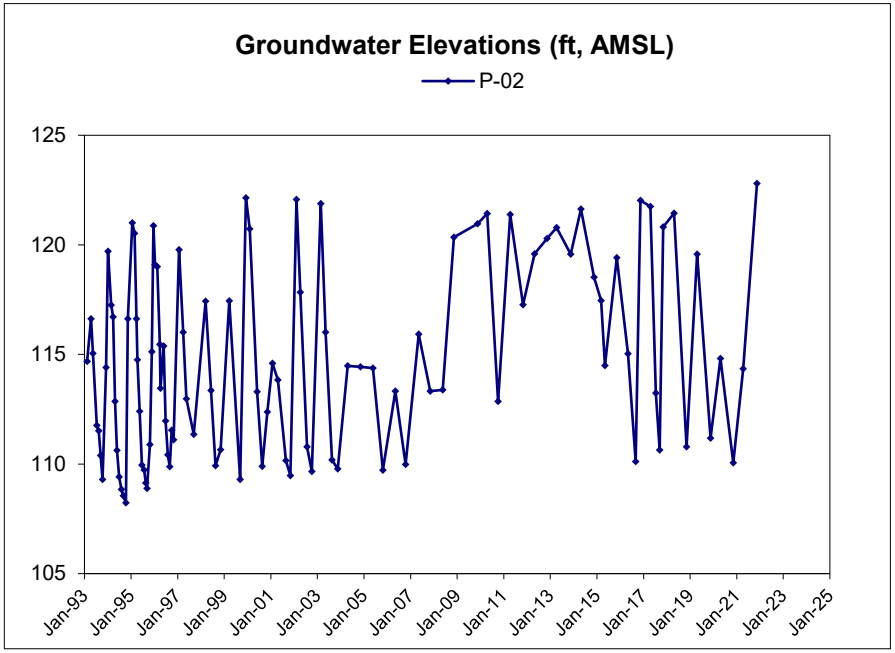
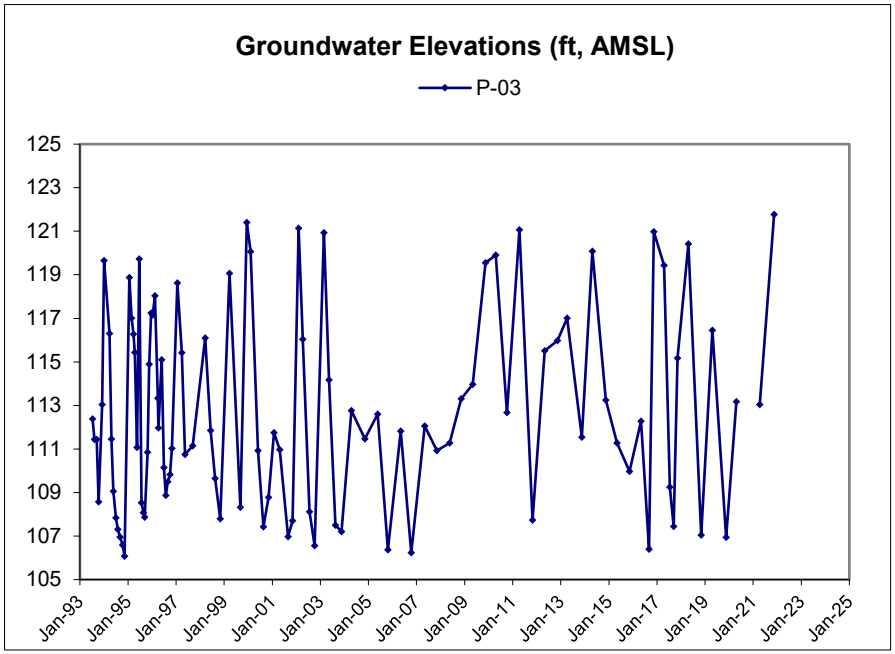
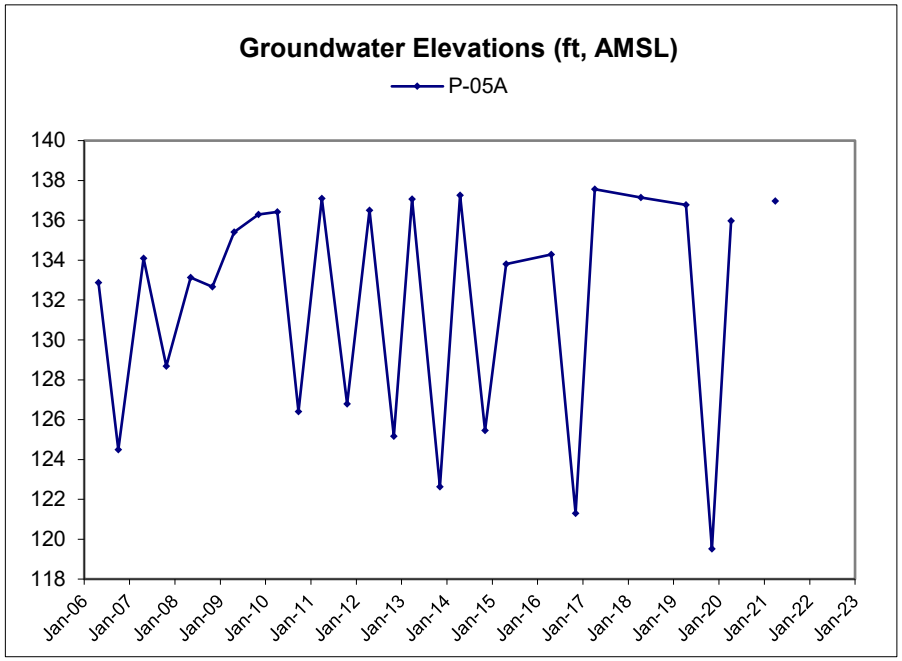
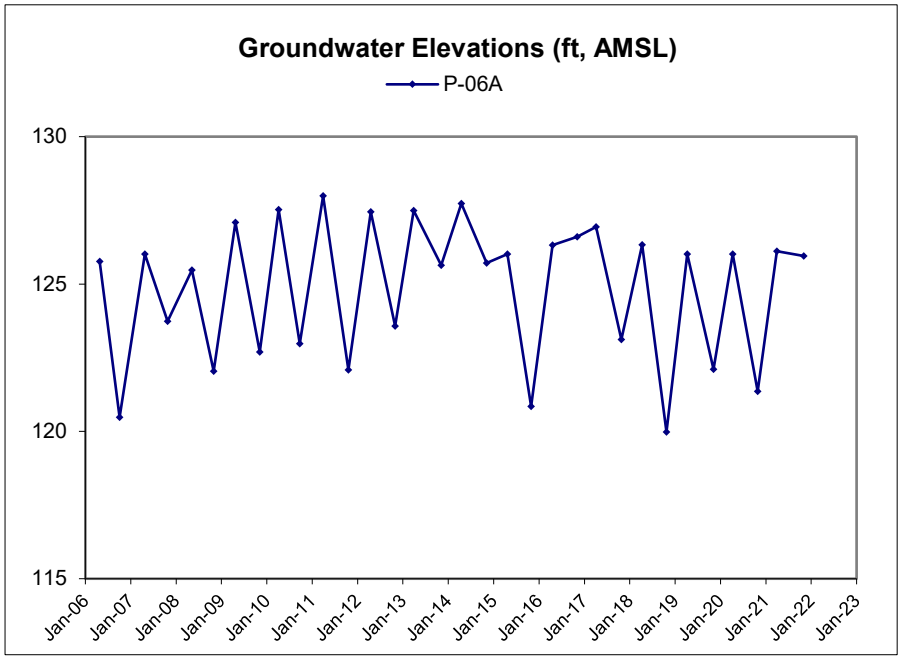
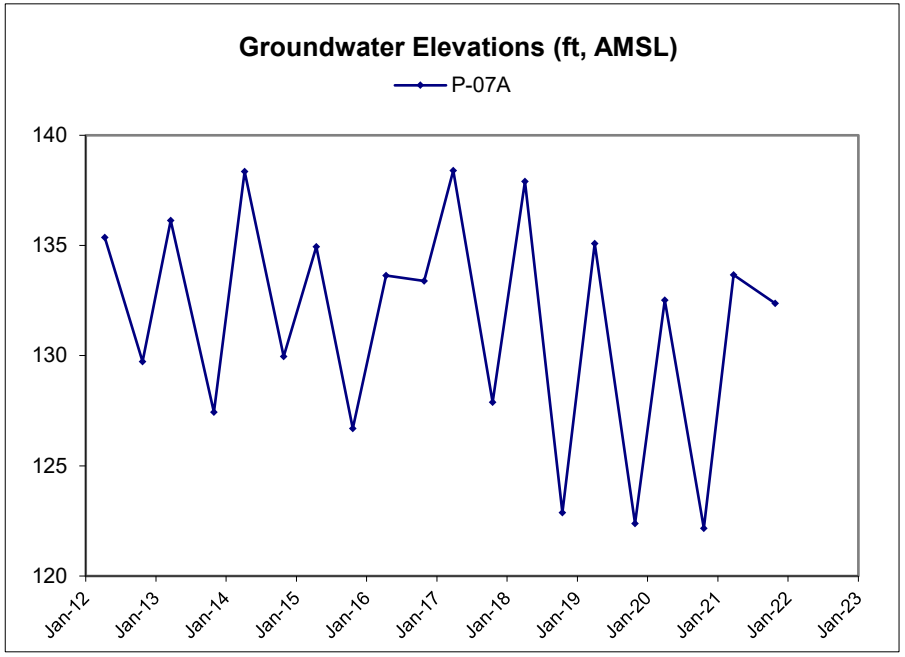
Jan-23
Jan-25

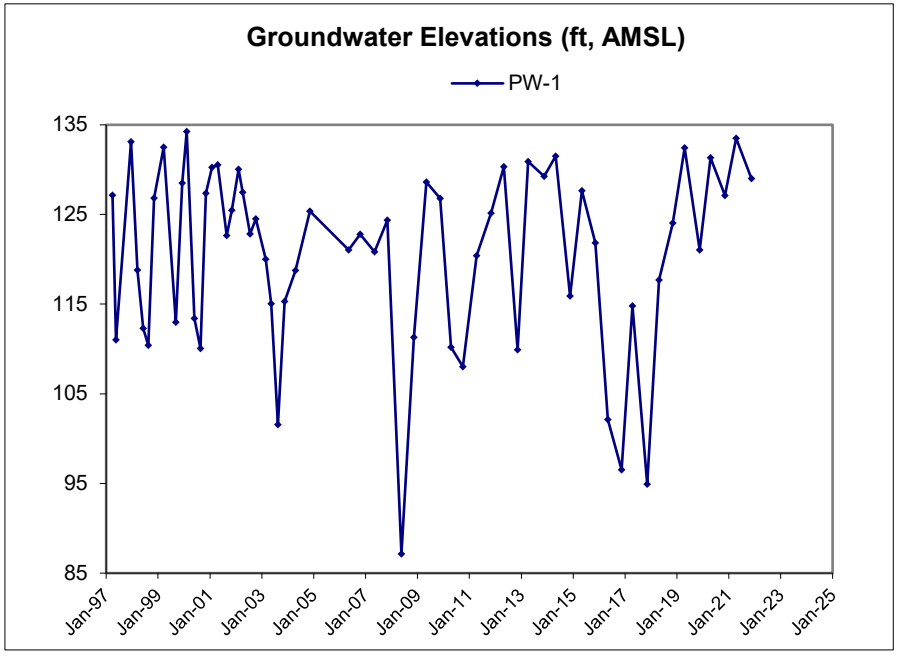

Groundwater Elevations (ft, AMSL)
P-02
125
120
115
110
105
Jan-93
Jan-95
Jan-97
Jan-99
Jan-01
Jan-03
Jan-05
Jan-07
Jan-09
Jan-11
Jan-13
Jan-15
Jan-17
Jan-19
Jan-21
Jan-23
Jan-25

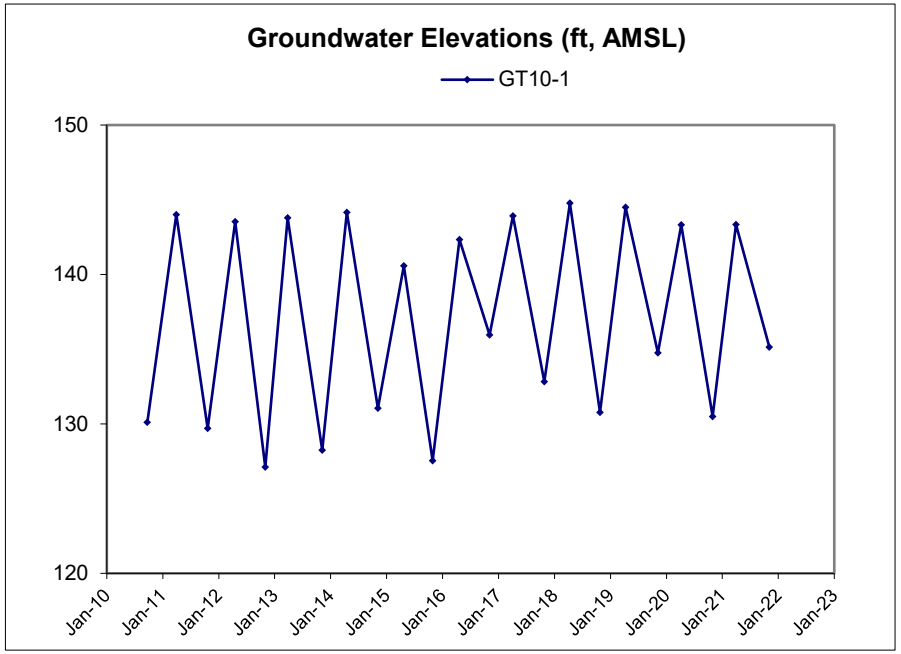

Groundwater Elevations (ft, AMSL)
P-03
125
123
121
119
117
115
113
111
109
107
105
Jan-93
Jan-95
Jan-97
Jan-99
Jan-01
Jan-03
Jan-05
Jan-07
Jan-09
Jan-11
Jan-13
Jan-15
Jan-17
Jan-19
Jan-21
Jan-23
Jan-25

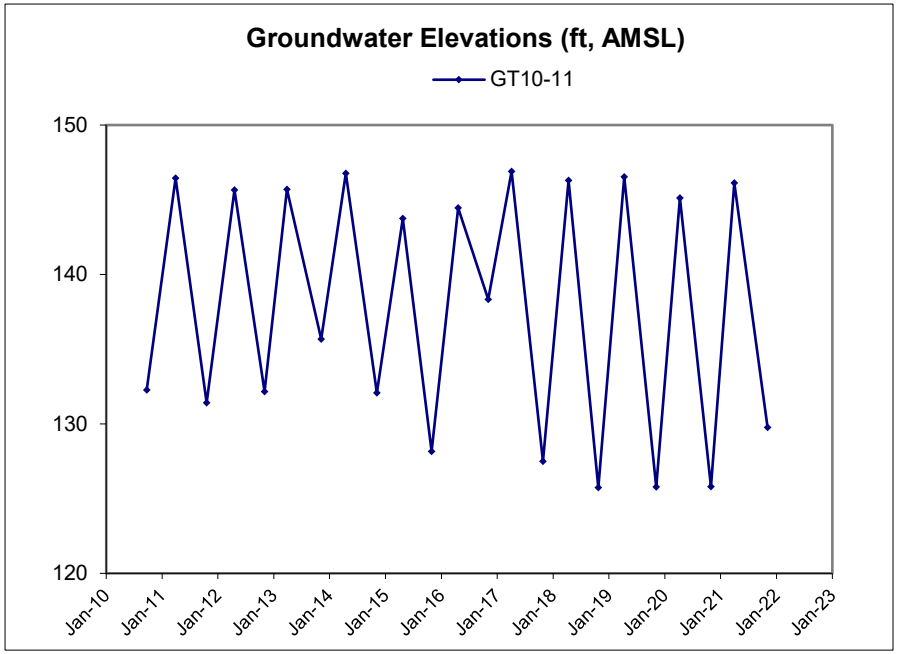

Groundwater Elevations (ft, AMSL)
P-05A
140
138
136
134
132
130
128
126
124
122
120
118
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Jan-18
Jan-19
Jan-20
Jan-21
Jan-22
Jan-23

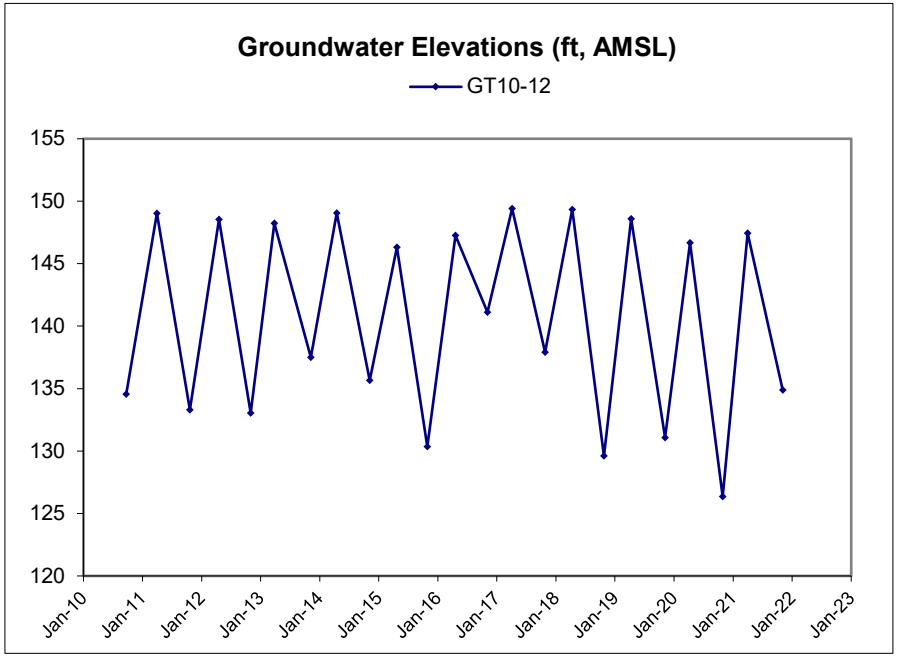

Groundwater Elevations (ft, AMSL)
P-06A
130
125
120
115
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Jan-18
Jan-19
Jan-20
Jan-21
Jan-22
Jan-23

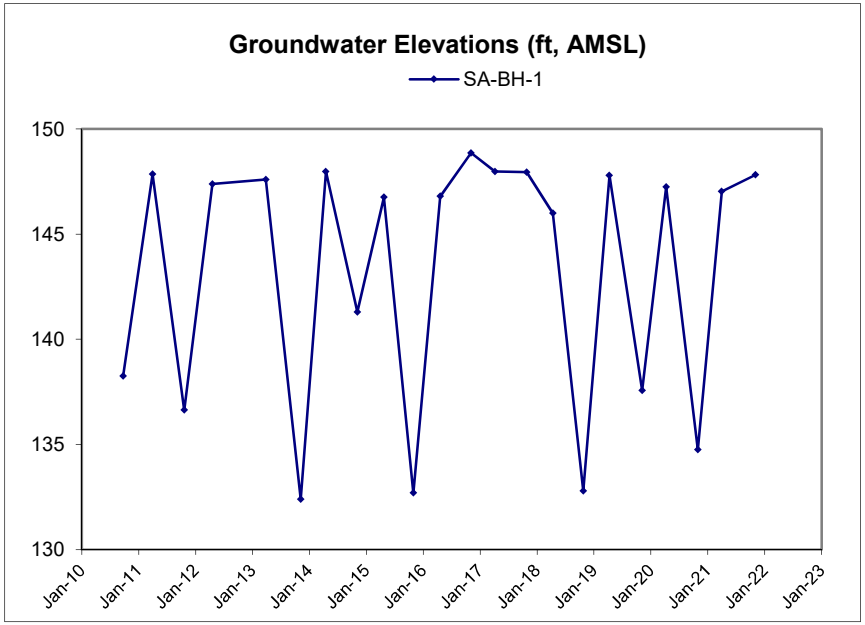

Groundwater Elevations (ft, AMSL)
P-07A
140
135
130
125
120
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Jan-18
Jan-19
Jan-20
Jan-21
Jan-22
Jan-23

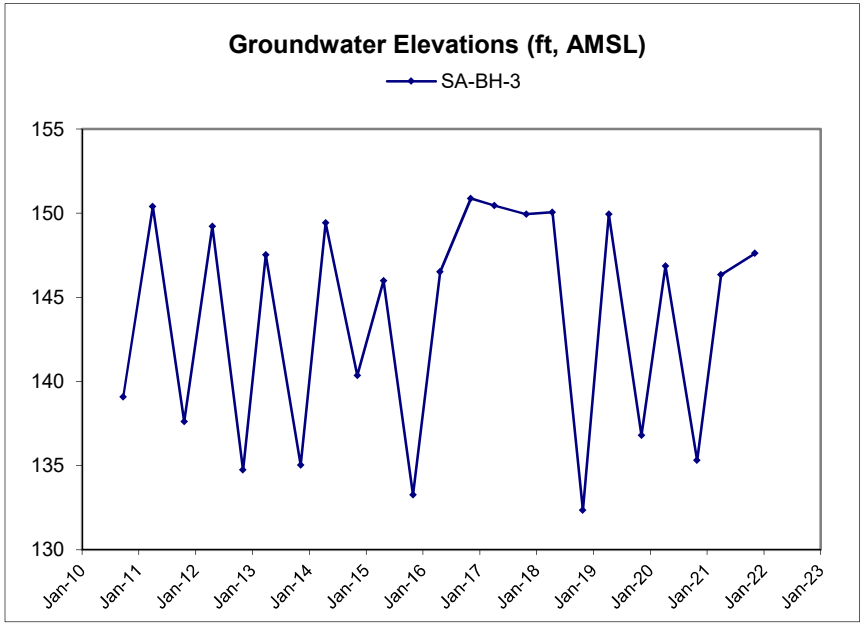

Groundwater Elevations (ft, AMSL)
PW-1
135
125
115
105
95
85
Jan-97
Jan-99
Jan-01
Jan-03
Jan-05
Jan-07
Jan-09
Jan-11
Jan-13
Jan-15
Jan-17
Jan-19
Jan-21
Jan-23
Jan-25

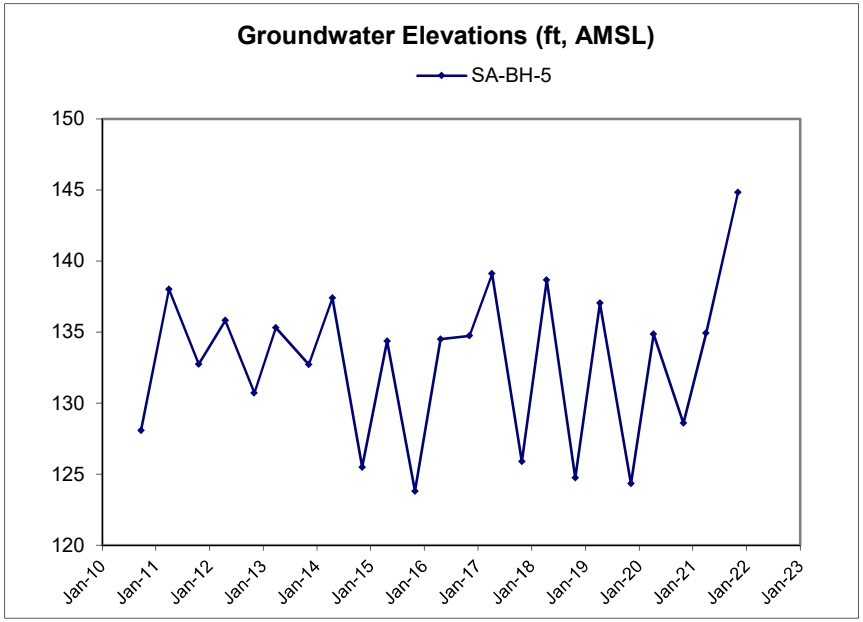

Groundwater Elevations (ft, AMSL)
GT10-1
150
140
130
120
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Jan-18
Jan-19
Jan-20
Jan-21
Jan-22
Jan-23

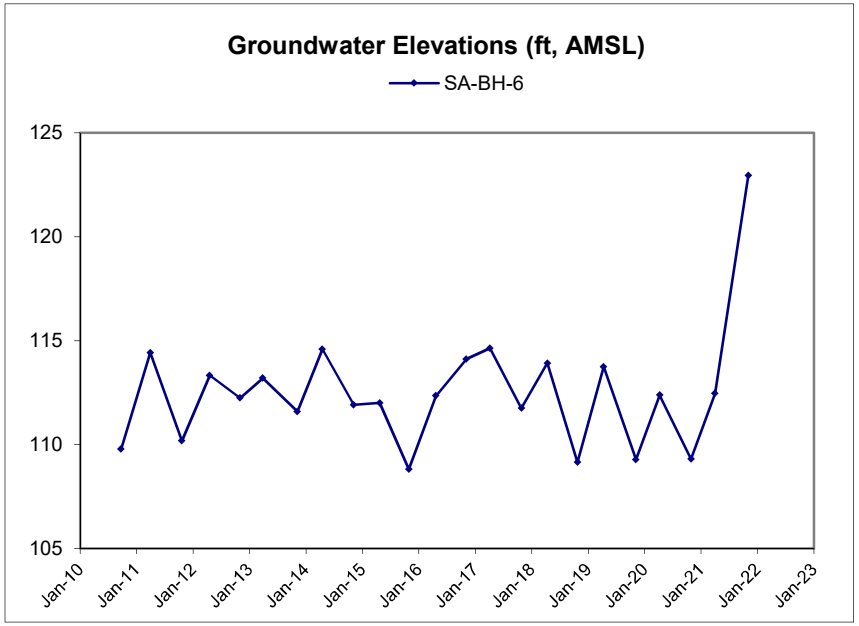

Groundwater Elevations (ft, AMSL)
GT10-11
150
140
130
120
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Jan-18
Jan-19
Jan-20
Jan-21
Jan-22
Jan-23


Groundwater Elevations (ft, AMSL)
GT10-12
155
150
145
140
135
130
125
120
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Jan-18
Jan-19
Jan-20
Jan-21
Jan-22
Jan-23


Groundwater Elevations (ft, AMSL)
SA-BH-1
150
145
140
135
130
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Jan-18
Jan-19
Jan-20
Jan-21
Jan-22
Jan-23


Groundwater Elevations (ft, AMSL)
SA-BH-3
155
150
145
140
135
130
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Jan-18
Jan-19
Jan-20
Jan-21
Jan-22
Jan-23


Groundwater Elevations (ft, AMSL)
SA-BH-5
150
145
140
135
130
125
120
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Jan-18
Jan-19
Jan-20
Jan-21
Jan-22
Jan-23


Groundwater Elevations (ft, AMSL)
SA-BH-6
125
120
115
110
105
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Jan-18
Jan-19
Jan-20
Jan-21
Jan-22
Jan-23

Field Water Quality Parameters in Groundwater

Table A-2 Groundwater
Group 1a: Field Parameters
Riverbend Landfill

Monitoring Location	Sample Date	pH (S.U.)	ORP (mV)	Specific Conductance (µS/cm)	Temperature (°C)	Dissolved Oxygen (mg/L)
	OAR RLs	6.5 to 8.5	NL	NL	NL	NL
	CFR MCLs	6.5 to 8.5	NL	NL	NL	NL
MW-5A	15-Apr-11	6.00	-24.1	656	13.6	0.86
MW-5A	2-Nov-11	5.70	92.5	646	13.9	1.60
MW-5A	1-May-12	5.80	117.9	640	14.0	1.31
MW-5A	13-Nov-12	6.06	114.3	625	14.2	0.65
MW-5A	10-Apr-13	5.75	-96.1	613	14.4	1.56
MW-5A	20-Nov-13	5.66	170.4	721	13.7	0.65
MW-5A	30-Apr-14	5.74	108.4	677	14.6	0.67
MW-5A	18-Nov-14	6.75	-9.3	661	13.7	2.25
MW-5A	6-May-15	5.54	84.1	576	14.6	0.60
MW-5A	11-Nov-15	5.87	-15.7	768	14.7	0.87
MW-5A	4-May-16	5.78	-42.0	722	14.4	0.86
MW-5A	31-Aug-16	5.81	52.3	731	16.5	0.91
MW-5A	16-Nov-16	5.77	-40.9	760	14.3	0.91
MW-5A	18-Apr-17	5.56	-51.2	850	14.3	0.87
MW-5A	12-Sep-17	5.76	50.5	819	16.0	0.88
MW-5A	8-Nov-17	5.84	18.3	870	13.6	0.61
MW-5A	7-Feb-18	5.83	-42.5	895	14.3	0.59
MW-5A	2-May-18	5.81	-8.4	907	14.9	0.62
MW-5A	6-Nov-18	5.83	33.1	890	14.6	1.56
MW-5A	25-Apr-19	5.82	1.3	1,040	15.2	1.23
MW-5A	19-Nov-19	5.94	64.6	1,016	14.3	0.87
MW-5A	23-Apr-20	5.84	-56.4	990	14.2	0.50
MW-5A	10-Nov-20	5.86	61.4	1,062	13.9	0.87
MW-5A	15-Apr-21	5.76	-10.1	1,193	14.6	0.52
MW-5A	17-Nov-21	5.80	21.9	1,220	14.5	0.81
MW-5B	15-Apr-11	7.27	-30.7	589	13.0	1.33
MW-5B	9-Nov-11	6.96	47.4	265	14.0	2.87
MW-5B	1-May-12	7.11	87.8	587	13.9	3.23
MW-5B	18-Dec-12	7.15	-54.6	616	12.2	0.33
MW-5B	11-Apr-13	6.99	-73.9	584	14.5	0.20
MW-5B	30-Apr-14	7.23	-30.4	594	16.1	0.41
MW-5B	6-May-15	6.60	79.4	504	15.0	0.73
MW-5B	2-May-16	7.04	-24.5	571	16.2	0.52
MW-5B	31-Aug-16	7.01	3.4	565	15.5	1.10
MW-5B	18-Apr-17	6.98	5.0	573	15.4	2.29
MW-5B	3-May-18	7.24	-13.9	590	14.9	2.19
MW-5B	25-Apr-19	7.12	8.0	630	18.2	1.59
MW-5B	23-Apr-20	7.22	-33.4	558	14.3	1.64
MW-5B	15-Apr-21	7.07	-54.2	626	15.2	1.91
MW-6A	14-Jul-17	5.94	68.7	338	13.9	1.00
MW-10A	11-Apr-13	7.25	36.8	360	11.2	0.78
MW-10A	25-Apr-18	7.15	-89.2	401.8	11.9	0.21
MW-10B	11-Apr-13	7.25	50.7	515	12.1	0.34
MW-10B	25-Apr-18	7.30	44.7	488.2	13.0	1.27
MW-12A	14-Apr-11	6.11	-63.4	278	8.9	1.19
MW-12A	2-Nov-11	5.91	91.3	242	10.3	2.35

Table A-2 Groundwater
Group 1a: Field Parameters
Riverbend Landfill

Monitoring Location	Sample Date	pH (S.U.)	ORP (mV)	Specific Conductance (µS/cm)	Temperature (°C)	Dissolved Oxygen (mg/L)
	OAR RLs	6.5 to 8.5	NL	NL	NL	NL
	CFR MCLs	6.5 to 8.5	NL	NL	NL	NL
MW-12A	2-May-12	5.82	112.9	275	12.4	0.83
MW-12A	13-Nov-12	5.74	181.5	298	10.7	6.72
MW-12A	15-Apr-13	5.72	128.5	362	10.2	1.58
MW-12A	19-Nov-13	5.71	179.3	390	11.2	5.70
MW-12A	29-Apr-14	5.80	83.1	329	10.2	1.13
MW-12A	18-Nov-14	6.71	109.2	338	11.2	7.31
MW-12A	7-May-15	5.81	125.0	267	11.5	1.64
MW-12A	11-Nov-15	5.96	108.1	300	11.6	8.01
MW-12A	3-May-16	6.15	56.2	409	10.4	0.81
MW-12A[a]	22-Jun-16	6.08	121.4	392	11.2	2.08
MW-12A	31-Aug-16	5.87	223.6	368	11.9	4.29
MW-12A	16-Nov-16	5.99	40.1	668	12.1	2.57
MW-12A[a]	22-Dec-16	6.30	142.0	553	11.1	1.62
MW-12A	19-Apr-17	5.98	130.5	579	8.8	2.32
MW-12A	14-Jul-17	6.20	63.2	475	13.0	1.80
MW-12A	12-Sep-17	5.92	73.1	456	10.9	2.41
MW-12A	9-Nov-17	5.87	187.9	655	10.8	5.47
MW-12A[a]	27-Dec-17	6.06	230.3	668.1	10.8	1.34
MW-12A	7-Feb-18	6.12	155.1	540.0	10.1	0.89
MW-12A	2-May-18	6.27	209.6	456.8	10.6	1.39
MW-12A	6-Nov-18	4.79 [b]	228.8	431	10.4	1.27
MW-12A	17-Dec-18	6.38	2.7	443.2	11.0	6.94
MW-12A	28-Feb-19	6.10	132.2	333.9	10.1	8.22
MW-12A	25-Apr-19	5.92	193.7	361	10.3	2.01
MW-12A	19-Nov-19	5.99	110.6	398	10.9	1.82
MW-12A	22-Apr-20	7.43	109.3	376.2	10.0	3.03
MW-12A	11-Nov-20	5.98	152.9	367.2	10.3	0.53
MW-12A	16-Apr-21	7.20	246.6	403.3	8.9	2.67
MW-12A	19-Nov-21	6.48	167.9	343	11.0	10.43
MW-12B	14-Apr-11	7.16	-79.6	449	10.5	0.55
MW-12B	2-Nov-11	7.02	-11.5	939	10.9	0.85
MW-12B	2-May-12	6.89	-3.2	767	11.0	0.86
MW-12B	13-Nov-12	6.90	-77.4	622	10.9	0.55
MW-12B	15-Apr-13	6.77	-66.0	857	11.0	0.47
MW-12B	20-Nov-13	5.99	-15.9	380	10.2	2.09
MW-12B	29-Apr-14	6.96	-52.8	485	11.5	0.45
MW-12B	18-Nov-14	7.79	-4.9	599	10.9	0.76
MW-12B	7-May-15	6.86	99.1	830	12.6	1.55
MW-12B	11-Nov-15	7.14	-34.0	933	11.4	0.79
MW-12B	3-May-16	7.05	-56.8	738	11.6	0.95
MW-12B	31-Aug-16	6.97	30.1	891	11.6	0.97
MW-12B	16-Nov-16	6.74	-31.2	427	11.1	1.36
MW-12B	19-Apr-17	6.72	-24.4	428	10.5	1.90
MW-12B	9-Nov-17	7.32	-105.6	615	10.8	0.26
MW-12B	30-Apr-18	6.81	-49.6	506	11.1	0.69
MW-12B	6-Nov-18	6.96	90.2	908	11.0	0.75
MW-12B	25-Apr-19	6.96	-59.1	693	11.6	0.61

Table A-2 Groundwater
Group 1a: Field Parameters
Riverbend Landfill

Monitoring Location	Sample Date	pH (S.U.)	ORP (mV)	Specific Conductance (µS/cm)	Temperature (°C)	Dissolved Oxygen (mg/L)
	OAR RLs	6.5 to 8.5	NL	NL	NL	NL
	CFR MCLs	6.5 to 8.5	NL	NL	NL	NL
MW-12B	19-Nov-19	7.12	20.4	972	11.2	0.69
MW-12B	22-Apr-20	6.51	-27.0	889	11.2	0.87
MW-12B	11-Nov-20	7.24	-36.7	967	10.9	0.53
MW-12B	16-Apr-21	6.87	-55.2	766	11.0	1.17
MW-12B	19-Nov-21	7.13	-31.3	494	11.4	1.68
MW-14A	13-Apr-11	6.19	180.6	276	10.0	1.40
MW-14A	12-Jan-12	5.97	113.8	248	10.2	5.89
MW-14A	3-May-12	5.40	130.6	264	9.9	0.83
MW-14A	13-Nov-12	5.69	184.2	339	10.6	2.37
MW-14A	9-Apr-13	5.43	112.4	285	10.2	1.89
MW-14A	20-Nov-13	5.70	179.5	376	10.6	2.45
MW-14A	30-Apr-14	5.35	162.0	298	10.5	1.96
MW-14A	20-Nov-14	6.79	117.6	355	9.7	6.77
MW-14A	12-May-15	5.39	98.3	289	10.5	1.39
MW-14A	28-Dec-15	6.09	105.4	267	10.8	5.49
MW-14A	4-May-16	5.87	160.6	328	10.8	2.08
MW-14A	17-Nov-16	6.15	47.9	336	10.9	4.05
MW-14A	19-Apr-17	5.89	144.5	246	9.7	2.79
MW-14A	8-Nov-17	6.16	173.6	296	10.6	5.37
MW-14A[a]	27-Dec-17	6.10	206.2	291.3	10.9	2.60
MW-14A	1-May-18	6.00	180.2	266.4	10.0	0.93
MW-14A[c]	22-Jan-19	7.17	133.5	267.4	10.4	4.58
MW-14A	25-Apr-19	5.92	113.0	316	10.5	2.60
MW-14A	26-Dec-19	6.00	43.8	320	10.4	5.58
MW-14A	21-Apr-20	6.65	49.2	386.8	10.1	2.69
MW-14A[e]	28-Jan-21	5.88	151.9	275.5	10.3	3.55
MW-14A	13-Apr-21	6.04	124.9	344.2	10.3	2.90
MW-14A[e]	17-Nov-21	6.17	197.8	300	11.6	6.70
MW-14B	13-Apr-11	7.12	-52.6	468	10.6	0.58
MW-14B	1-Nov-11	6.63	-4.4	327	10.4	1.35
MW-14B	3-May-12	6.55	14.9	471	10.8	0.50
MW-14B	13-Nov-12	6.89	24.6	543	10.6	0.83
MW-14B	9-Apr-13	6.96	-64.2	505	10.7	0.34
MW-14B	20-Nov-13	6.40	-54.0	556	10.8	0.68
MW-14B	30-Apr-14	6.93	-22.3	198	11.6	0.72
MW-14B	19-Nov-14	7.93	-2.9	487	10.7	0.78
MW-14B	12-May-15	6.48	24.6	406	10.7	0.81
MW-14B	11-Nov-15	7.17	-57.7	530	10.9	0.79
MW-14B	4-May-16	6.60	-35.9	428	11.1	1.36
MW-14B	17-Nov-16	7.28	-24.6	546	10.7	0.54
MW-14B	19-Apr-17	6.81	-25.1	489	10.5	2.03
MW-14B	8-Nov-17	6.82	-69.9	440	10.5	0.59
MW-14B	2-May-18	6.67	-33.7	438	10.5	1.60
MW-14B	7-Nov-18	6.95	58.8	529.6	10.6	0.83
MW-14B	25-Apr-19	6.85	-43.9	480	16.0	1.47
MW-14B	19-Nov-19	6.72	-27.7	436	10.8	0.47
MW-14B	21-Apr-20	7.33	-14.1	433.7	10.3	1.95

Table A-2 Groundwater
Group 1a: Field Parameters
Riverbend Landfill

Monitoring Location	Sample Date	pH (S.U.)	ORP (mV)	Specific Conductance (µS/cm)	Temperature (°C)	Dissolved Oxygen (mg/L)
	OAR RLs	6.5 to 8.5	NL	NL	NL	NL
	CFR MCLs	6.5 to 8.5	NL	NL	NL	NL
MW-14B	10-Nov-20	7.16	-74.7	499.7	10.6	0.41
MW-14B	13-Apr-21	6.87	-60.5	400.9	11.7	1.39
MW-14B	18-Nov-21	7.42	-42.7	533.6	10.9	2.20
MW-15A	14-Apr-11	6.06	-49.1	197	11.4	4.05
MW-15A	3-Nov-11	5.59	111.2	128	11.5	2.66
MW-15A	2-May-12	5.62	123.3	187	11.8	4.34
MW-15A	13-Nov-12	5.93	165.2	137	13.4	9.41
MW-15A[a]	7-Jan-13	6.51	188.1	176	13.1	8.49
MW-15A	11-Apr-13	5.83	137.7	191	12.5	6.35
MW-15A	19-Nov-13	5.67	158.4	156	14.3	8.29
MW-15A	29-Apr-14	5.97	124.3	185	13.3	4.90
MW-15A	18-Nov-14	6.81	101.6	143	13.9	8.27
MW-15A	7-May-15	6.13	112.8	159	15.2	4.56
MW-15A	28-Dec-15	6.34	97.1	147	14.1	7.58
MW-15A	3-May-16	6.09	44.7	160	14.1	4.92
MW-15A	16-Nov-16	6.14	66.5	157	15.3	7.27
MW-15A	19-Apr-17	6.29	163.5	172	12.4	2.51
MW-15A	8-Nov-17	5.82	178.1	140	13.1	6.19
MW-15A[a]	27-Dec-17	6.30	173.2	208.3	14.2	7.39
MW-15A	2-May-18	6.13	198.6	190.2	13.5	3.10
MW-15A[c]	17-Dec-18	6.42	-38.9	124.4	14.1	6.32
MW-15A	24-Apr-19	6.10	240.7	221.2	12.8	5.12
MW-15A	26-Dec-19	5.99	79.8	134	13.9	5.49
MW-15A	22-Apr-20	6.98	69.1	183.4	12.7	6.36
MW-15A[e]	28-Jan-21	6.12	177.2	154.2	13.1	6.84
MW-15A	15-Apr-21	5.94	190.7	175.2	12.8	6.46
MW-15A[e]	17-Nov-21	6.21	201.5	197	14.8	9.63
MW-15B	14-Apr-11	7.10	-91.3	638	12.2	0.68
MW-15B	2-Nov-11	6.86	63.8	641	12.2	0.86
MW-15B	2-May-12	6.78	92.2	649	12.9	0.25
MW-15B	13-Nov-12	6.77	84.7	751	12.7	0.20
MW-15B	15-Apr-13	6.71	79.8	743	13.3	0.26
MW-15B	19-Nov-13	6.58	117.7	759	12.7	1.07
MW-15B	29-Apr-14	6.94	52.9	639	13.5	0.54
MW-15B	18-Nov-14	7.66	88.7	630	12.6	0.53
MW-15B	7-May-15	6.10	151.7	604	14.1	0.44
MW-15B	11-Nov-15	6.95	100.1	693	13.4	1.16
MW-15B	3-May-16	6.84	27.7	518	14.3	0.64
MW-15B	16-Nov-16	6.76	52.1	475	13.4	0.70
MW-15B	19-Apr-17	7.27	70.3	560	13.4	0.39
MW-15B	8-Nov-17	6.96	89.1	675	12.6	0.54
MW-15B	27-Apr-18	6.73	73.7	579.4	13.3	0.46
MW-15B	6-Nov-18	6.84	157.5	719	13.4	0.57
MW-15B	24-Apr-19	6.93	242.9	583.4	16.0	0.40
MW-15B	20-Nov-19	7.13	69.8	768	13.0	0.61
MW-15B	22-Apr-20	7.77	96.7	733	13.2	0.22
MW-15B	11-Nov-20	7.06	50.0	760	13.1	0.16

Table A-2 Groundwater
Group 1a: Field Parameters
Riverbend Landfill

Monitoring Location	Sample Date	pH (S.U.)	ORP (mV)	Specific Conductance (µS/cm)	Temperature (°C)	Dissolved Oxygen (mg/L)
	OAR RLs	6.5 to 8.5	NL	NL	NL	NL
	CFR MCLs	6.5 to 8.5	NL	NL	NL	NL
MW-15B	15-Apr-21	6.71	19.8	642.3	13.4	0.45
MW-15B	17-Nov-21	6.98	13.7	865	13.5	0.59
MW-16A	14-Apr-11	6.56	94.7	351	12.2	1.69
MW-16A	3-Nov-11	6.22	84.1	253	11.7	0.83
MW-16A	2-May-12	6.10	100.6	333	12.1	1.29
MW-16A	13-Nov-12	6.13	163.0	414	12.4	0.54
MW-16A	11-Apr-13	6.01	114.0	294	12.4	2.14
MW-16A	19-Nov-13	6.17	149.9	366	12.5	2.61
MW-16A	29-Apr-14	6.11	70.2	335	12.3	1.28
MW-16A	18-Nov-14	6.86	107.7	251	12.1	4.19
MW-16A	7-May-15	6.17	109.0	238	12.8	1.58
MW-16A	28-Dec-15	6.45	67.1	331	12.6	3.66
MW-16A	3-May-16	6.24	35.0	241	12.8	2.76
MW-16A	16-Nov-16	6.08	41.4	236	12.5	5.76
MW-16A	19-Apr-17	6.69	125.2	321	12.2	0.95
MW-16A	8-Nov-17	6.15	135.7	311	11.9	1.85
MW-16A[a]	21-Nov-17	5.83	1.2	324.2	12.6	7.08
MW-16A	27-Apr-18	6.16	121.6	327.8	12.1	1.26
MW-16A[c]	17-Dec-18	6.42	-36.8	314.8	12.4	4.12
MW-16A	24-Apr-19	6.20	225.2	314.2	11.9	2.16
MW-16A[d]	26-Dec-19	6.36	103.9	401	12.1	1.67
MW-16A	21-Apr-20	6.85	36.6	288.6	12.1	4.29
MW-16A[e]	28-Jan-21	6.30	188.6	272.1	12.1	4.56
MW-16A	14-Apr-21	6.18	127.0	349.1	12.0	2.66
MW-16A[e]	17-Nov-21	6.44	180.2	448	12.4	9.54
MW-16B	14-Apr-11	7.16	2.0	1,175	12.2	0.55
MW-16B	2-Nov-11	6.86	51.2	788	12.1	1.16
MW-16B	2-May-12	6.83	59.2	1,049	12.3	1.10
MW-16B	13-Nov-12	6.82	84.3	1,097	12.3	0.72
MW-16B	11-Apr-13	6.79	10.5	893	12.5	0.95
MW-16B	19-Nov-13	6.62	92.5	1,251	12.4	1.14
MW-16B	29-Apr-14	6.81	70.7	1,141	12.6	0.70
MW-16B	18-Nov-14	7.76	77.8	1,055	12.0	0.62
MW-16B	7-May-15	6.84	129.6	917	13.1	0.57
MW-16B	11-Nov-15	6.96	82.9	1,087	12.3	1.59
MW-16B	3-May-16	6.90	10.6	909	12.9	0.80
MW-16B	16-Nov-16	6.92	-9.4	1,030	12.2	1.65
MW-16B	19-Apr-17	7.57	-0.5	1,098	12.3	0.30
MW-16B	8-Nov-17	7.06	-9.1	1,044	12.2	0.47
MW-16B[a]	27-Dec-17	6.95	9.2	1,052	12.2	0.66
MW-16B	27-Apr-18	6.75	23.5	1,129	12.5	0.47
MW-16B	6-Nov-18	6.95	68.6	1,054	12.6	1.05
MW-16B	24-Apr-19	6.92	160.2	1,159	12.2	1.69
MW-16B	20-Nov-19	7.09	73.5	1,148	12.0	1.06
MW-16B	21-Apr-20	7.22	64.6	1,090	12.4	0.98
MW-16B	11-Nov-20	7.01	71.0	1,138	12.1	0.75
MW-16B	14-Apr-21	6.88	-48.1	915	12.4	0.73

Table A-2 Groundwater
Group 1a: Field Parameters
Riverbend Landfill

Monitoring Location	Sample Date	pH (S.U.)	ORP (mV)	Specific Conductance (µS/cm)	Temperature (°C)	Dissolved Oxygen (mg/L)
	OAR RLs	6.5 to 8.5	NL	NL	NL	NL
	CFR MCLs	6.5 to 8.5	NL	NL	NL	NL
MW-16B	17-Nov-21	7.00	-1.3	1,281	11.9	1.48
MW-17A	9-Apr-13	7.36	-95.7	418	11.8	0.72
MW-17A	26-Apr-18	7.39	-91.0	403.2	12.6	0.79
MW-18A	10-Apr-13	6.53	75.9	401	12.3	1.04
MW-18A	30-Apr-18	6.25	137.5	359	11.7	0.44
MW-18B	10-Apr-13	7.30	-84.0	707	12.7	1.05
MW-18B	30-Apr-18	7.39	107.1	697	12.2	0.92
MW-19A	12-Apr-11	7.85	-100.5	316	12.0	1.28
MW-19A	1-Nov-11	7.54	-80.2	237	12.6	0.21
MW-19A	7-Feb-12	7.61	-122.0	316	11.9	0.11
MW-19A	1-May-12	7.55	-63.1	373	11.9	0.21
MW-19A	14-Nov-12	7.74	-93.5	381	11.8	0.23
MW-19A	10-Apr-13	7.44	-162.9	420	11.8	0.17
MW-19A	21-Nov-13	7.54	-174.2	390	11.9	0.11
MW-19A	2-May-14	7.51	-120.5	441	12.4	0.20
MW-19A	20-Nov-14	8.41	-107.1	349	11.6	0.36
MW-19A	14-May-15	7.39	-27.7	361	12.4	0.85
MW-19A	12-Nov-15	7.71	-144.7	342	11.8	0.27
MW-19A	5-May-16	7.51	-70.6	369	12.3	1.86
MW-19A	17-Nov-16	7.87	-132.8	319	12.1	1.30
MW-19A	20-Apr-17	8.30	-105.0	364	11.7	0.95
MW-19A	7-Nov-17	7.97	-163.9	316	11.8	0.18
MW-19A	26-Apr-18	7.41	89.3	342.7	12.4	0.97
MW-19A	6-Nov-18	7.48	-120.7	316	12.0	0.29
MW-19A	29-Apr-19	7.60	-24.8	344	12.2	0.58
MW-19A	20-Nov-19	7.64	6.3	317	12.1	1.30
MW-19A	23-Apr-20	7.53	6.2	339	12.0	1.72
MW-19A	10-Nov-20	7.70	-82.3	286.5	11.6	0.20
MW-19A	16-Apr-21	7.44	-53.4	311.3	11.8	1.22
MW-19A	19-Nov-21	7.90	-104.3	298	12.4	0.59
MW-20A	12-Apr-11	6.76	17.9	970	10.6	0.10
MW-20A	1-Nov-11	6.34	-138.4	771	12.3	0.39
MW-20A	9-Feb-12	6.35	44.9	994	10.7	0.80
MW-20A	1-May-12	6.48	52.8	1,038	10.4	0.20
MW-20A	14-Nov-12	6.52	70.7	1,256	12.2	0.56
MW-20A	12-Apr-13	6.30	32.7	1,251	10.6	0.25
MW-20A	25-Oct-13	6.16	63.7	1,315	12.3	0.56
MW-20A	2-May-14	6.45	13.9	1,186	10.7	0.56
MW-20A	19-Nov-14	7.13	56.1	1,163	12.3	0.85
MW-20A	14-May-15	6.14	40.2	1,115	10.9	0.54
MW-20A	12-Nov-15	6.47	40.6	1,228	12.6	0.66
MW-20A	5-May-16	6.47	33.8	1,177	11.2	0.27
MW-20A	17-Nov-16	6.61	-7.9	1,128	12.6	0.47
MW-20A	18-Apr-17	6.86	62.0	906	10.6	0.18
MW-20A	7-Nov-17	6.61	29.7	1,124	12.0	0.20
MW-20A	1-May-18	6.42	99.2	712	10.3	0.23
MW-20A	7-Nov-18	6.43	80.9	1,041	12.0	0.95

Table A-2 Groundwater
Group 1a: Field Parameters
Riverbend Landfill

Monitoring Location	Sample Date	pH (S.U.)	ORP (mV)	Specific Conductance (µS/cm)	Temperature (°C)	Dissolved Oxygen (mg/L)
	OAR RLs	6.5 to 8.5	NL	NL	NL	NL
	CFR MCLs	6.5 to 8.5	NL	NL	NL	NL
MW-20A	23-Apr-19	6.56	144.6	950	10.4	0.35
MW-20A	19-Nov-19	6.56	40.5	998	12.3	0.69
MW-20A	20-Apr-20	6.72	41.6	990	10.5	0.09
MW-20A	10-Nov-20	6.75	-23.0	957	12.7	0.41
MW-20A	13-Apr-21	6.76	-11.2	982	10.4	0.31
MW-20A	16-Nov-21	6.65	34.4	1,547	13.4	1.04
MW-20B	12-Apr-11	7.61	21.6	614	11.5	0.18
MW-20B	1-May-12	7.36	77.0	620	11.7	0.08
MW-20B	12-Apr-13	7.22	51.8	684	11.5	0.12
MW-20B	1-May-14	7.35	-21.9	663	12.4	0.22
MW-20B	11-May-15	6.87	95.2	598	11.8	0.17
MW-20B	5-May-16	7.24	81.8	655	12.6	0.22
MW-20B	18-Apr-17	7.60	79.2	695	11.6	0.24
MW-20B	1-May-18	7.32	89.5	700	11.5	0.36
MW-20B	24-Apr-19	7.38	270.4	688	12.0	0.05
MW-20B	20-Apr-20	7.61	65.3	679	11.9	0.11
MW-20B	13-Apr-21	7.32	105.2	632.1	11.2	0.48
MW-21A	15-Apr-11	6.24	-5.6	318	11.3	1.28
MW-21A	12-Jan-12	6.17	112.2	277	10.7	1.36
MW-21A	1-May-12	5.90	117.2	289	11.4	1.68
MW-21A	14-Nov-12	6.34	122.7	357	13.0	1.80
MW-21A[a]	7-Jan-13	6.32	173.5	344	12.0	6.69
MW-21A	9-Apr-13	6.05	142.0	363	11.4	1.48
MW-21A	20-Nov-13	5.66	193.7	363	11.6	3.34
MW-21A	29-Apr-14	5.91	90.3	331	12.3	0.35
MW-21A	19-Nov-14	6.62	101.2	368	13.7	5.86
MW-21A	12-May-15	5.94	142.6	295	12.3	1.61
MW-21A	12-Nov-15	6.12	115.2	353	13.7	7.83
MW-21A	4-May-16	5.92	82.4	300	13.1	0.68
MW-21A	17-Nov-16	6.23	74.9	312	14.3	5.71
MW-21A	20-Apr-17	6.30	53.1	276	11.6	1.44
MW-21A	8-Nov-17	5.88	186.3	274	13.4	5.25
MW-21A	25-Apr-18	6.02	132.4	289.1	12.1	0.47
MW-21A[c]	17-Dec-18	6.39	-50.5	306.2	13.0	5.81
MW-21A	29-Apr-19	5.82	167.6	303	12.0	1.44
MW-21A[d]	26-Dec-19	6.23	56.8	233	11.4	6.46
MW-21A	21-Apr-20	6.90	44.1	281.9	10.9	3.05
MW-21A[e]	28-Jan-21	6.10	169.0	273.3	11.6	5.04
MW-21A	13-Apr-21	6.04	97.4	289.5	11.9	7.99
MW-21A	18-Nov-21	6.20	201.3	279	14.0	8.07
MW-21B	15-Apr-11	7.03	-35.3	526	11.9	0.22
MW-21B	1-Nov-11	6.50	-108.3	370	12.3	1.62
MW-21B	1-May-12	6.83	-20.5	535	12.2	0.18
MW-21B	14-Nov-12	7.02	-23.5	564	12.2	0.68
MW-21B	12-Apr-13	6.53	-2.2	536	12.6	0.48
MW-21B	20-Nov-13	6.61	-14.0	574	12.3	0.51

Table A-2 Groundwater
Group 1a: Field Parameters
Riverbend Landfill

Monitoring Location	Sample Date	pH (S.U.)	ORP (mV)	Specific Conductance (µS/cm)	Temperature (°C)	Dissolved Oxygen (mg/L)
	OAR RLs	6.5 to 8.5	NL	NL	NL	NL
	CFR MCLs	6.5 to 8.5	NL	NL	NL	NL
MW-21B	30-Apr-14	6.83	-17.3	538	14.2	0.35
MW-21B	19-Nov-14	7.41	31.1	485	12.9	0.49
MW-21B	12-May-15	6.80	62.9	491	12.6	0.41
MW-21B	12-Nov-15	6.81	-37.6	551	12.7	1.06
MW-21B	4-May-16	6.53	26.7	396	13.5	0.44
MW-21B	17-Nov-16	6.97	-37.6	488	13.1	0.56
MW-21B	20-Apr-17	7.11	47.1	505	12.9	0.95
MW-21B	8-Nov-17	6.81	-22.9	528	12.4	0.21
MW-21B	25-Apr-18	6.71	-39.8	549	13.5	0.72
MW-21B	7-Nov-18	6.86	5.5	566.7	12.3	1.88
MW-21B	29-Apr-19	6.86	-54.0	588	13.5	0.19
MW-21B	19-Nov-19	6.88	-12.5	523	12.6	1.41
MW-21B	21-Apr-20	7.25	44.3	477.8	12.3	1.42
MW-21B	10-Nov-20	6.97	-32.0	470.1	13.0	0.54
MW-21B	14-Apr-21	6.55	51.2	435.6	12.4	0.75
MW-21B	16-Nov-21	6.82	39.4	543	13.7	0.49
MW-22A	13-Apr-11	6.37	198.2	310	10.1	6.82
MW-22A	19-Apr-13	5.85	160.4	315	11.2	3.76
MW-22A	30-Apr-14	5.80	133.8	301	11.1	4.36
MW-22A	28-Dec-15	6.30	96.5	327	10.7	6.48
MW-22A	28-Dec-16	6.06	132.3	293	10.4	5.28
MW-22A	18-Apr-17	5.80	86.2	274	10.4	2.59
MW-22A	1-May-18	6.05	266.0	288	10.2	2.75
MW-22A	24-Apr-19	6.15	302.6	287.6	10.3	5.61
MW-22A	16-Nov-21	6.34	187.5	462	11.8	8.43
MW-22B	19-Apr-13	6.33	65.9	656	11.3	0.65
MW-22B	1-May-18	6.51	95.8	577	11.1	0.56
MW-25A	13-Aug-15	7.36	-44.2	517	14.0	0.09
MW-25B	13-Aug-15	7.80	-67.5	517	13.6	0.21
P-01	31-Aug-16	5.92	65.3	813	15.3	1.80
P-01	18-Apr-17	5.84	50.1	932	13.8	2.10
P-01	12-Sep-17	5.92	52.8	893	14.5	1.71
P-01	9-Nov-17	6.25	-13.0	1,058	15.3	0.99
P-02	31-Aug-16	6.05	99.2	957	13.8	2.21
P-02	20-Apr-17	6.20	31.8	1,232	14.0	2.55
P-02	12-Sep-17	6.09	63.7	1,319	13.8	2.60
P-02	9-Nov-17	6.11	118.6	1,325	13.4	1.30
P-03	25-Oct-16	6.04	112.2	867	12.3	5.32
P-03	18-Apr-17	6.10	68.1	831	10.8	3.19
P-03	12-Sep-17	6.23	89.8	493	12.3	4.72
P-03	9-Nov-17	6.15	145.7	842	11.5	3.88
P-04A	8-Feb-12	6.90	65.8	330	13.8	2.96
P-05A	12-Apr-11	7.23	43.8	410	10.0	10.23
P-05A	9-Feb-12	6.81	72.8	401	11.3	6.23
P-05A	3-May-12	6.76	97.8	465	10.9	3.46
P-05A	9-Apr-13	6.36	125.9	496	10.6	1.16

Table A-2 Groundwater
Group 1a: Field Parameters
Riverbend Landfill

Monitoring Location	Sample Date	pH (S.U.)	ORP (mV)	Specific Conductance (µS/cm)	Temperature (°C)	Dissolved Oxygen (mg/L)
	OAR RLs	6.5 to 8.5	NL	NL	NL	NL
	CFR MCLs	6.5 to 8.5	NL	NL	NL	NL
P-05A	2-May-14	6.78	17.6	532	11.9	1.03
P-05A	6-May-15	6.58	37.1	518	11.1	0.82
P-05A	5-May-16	6.73	-68.4	689	12.0	0.65
P-05A	18-Apr-18	7.73	-87.1	640	11.5	0.32
P-05A	30-Apr-18	6.70	-69.4	751	10.9	0.61
P-05A	23-Apr-19	6.58	-11.2	1081	11.8	0.47
P-05A	23-Apr-20	7.04	46.1	965	11.0	2.70
P-05A	13-Apr-21	6.42	25.0	865	11.1	0.58
P-06A	12-Apr-11	7.07	-46.1	839	10.7	0.45
P-06A	9-Feb-12	6.72	-18.3	719	11.1	0.41
P-06A	3-May-12	6.85	-80.0	864	11.4	0.18
P-06A	10-Apr-13	6.69	-51.1	863	11.2	0.76
P-06A	2-May-14	6.91	-71.7	916	13.0	1.29
P-06A	6-May-15	6.88	27.3	800	12.0	1.05
P-06A	6-May-16	6.92	-73.9	875	13.1	0.33
P-06A	19-Apr-17	7.97	96.3	878	12.6	3.33
P-06A	1-May-18	6.82	15.2	714	11.3	2.55
P-06A	24-Apr-19	7.03	-36.0	985	14.6	2.45
P-06A	28-Apr-20	6.82	83.8	919	11.7	1.97
P-06A	14-Apr-21	6.82	11.6	944	11.7	1.60
P-07A	9-Feb-12	6.29	84.5	384	12.2	6.02
P-07A	3-May-12	5.74	122.1	231	11.3	2.86
P-07A	9-Apr-13	5.67	142.7	272	11.8	2.75
P-07A	1-May-14	5.95	93.6	292	13.0	3.21
P-07A	6-May-15	5.64	96.0	151	13.9	0.99
P-07A	5-May-16	5.84	122.4	163	13.0	0.44
P-07A	18-Apr-17	6.22	121.7	161	12.0	0.52
P-07A	30-Apr-18	5.81	195.9	156.1	12.3	0.40
P-07A	24-Apr-19	5.87	187.0	188	12.1	2.82
P-07A	23-Apr-20	5.81	165.2	200	12.1	3.80
P-07A	13-Apr-21	5.82	133.6	195.1	12.3	2.02

NOTE:

The table includes the last 10 years of data. Earlier data can be found in the previous annual reports.

S.U. = standard pH units; mV = millivolts; µS/cm = microSiemens per centimeter;
mg/L = milligrams per liter; NL = no regulatory limit; °C = degrees Celsius;
NT = parameter not tested; NS = not sampled due to water level below pump intake;
NR = no measurement recorded due to water-quality meter/probe malfunction.

OAR RLs = state numerical groundwater quality reference and guidance levels under Oregon Administrative Rule (OAR) 340-40.

CFR MCLs = maximum contaminant levels (MCLs) based on federal primary and secondary drinking water standards under the Safe Drinking Water Act, Code of Federal Regulations (CFR) 40.

[a] Resampling event.

[b] Suspected water-quality meter malfunction or error.

Table A-2 Groundwater
Group 1a: Field Parameters
Riverbend Landfill

Monitoring Location	Sample Date	pH (S.U.)	ORP (mV)	Specific Conductance (µS/cm)	Temperature (°C)	Dissolved Oxygen (mg/L)
	OAR RLs	6.5 to 8.5	NL	NL	NL	NL
	CFR MCLs	6.5 to 8.5	NL	NL	NL	NL

[c] MW-14A, MW-15A, MW-16A, and MW-21A could not be sampled during the Fall 2018 monitoring event because there was insufficient water present in the well to allow for purging and sampling. MW-15A, MW-16A, and MW-21A were sampled on December 17, 2018 and MW-14A was sampled on January 22, 2019 when sufficient water was available for purging and sampling.

[d] MW-14A, MW-15A, MW-16A, and MW-21A could not be sampled during the Fall 2019 monitoring event because there was insufficient water present in the well to allow for purging and sampling. MW-15A, MW-16A, and MW-21A were sampled on December 26, 2019 when sufficient water was available for purging and sampling.

[e] MW-14A, MW-15A, MW-16A, and MW-21A could not be sampled during the Fall 2020 monitoring event because there was insufficient water present in the well to allow for purging and sampling. MW-14A, MW-15A, MW-16A, and MW-21A were sampled on January 28, 2021 when sufficient water was available for purging and sampling.

Field Water Quality Parameters in Leachate Management System Samples

Table A-3 Leachate and LDS Liquid Samples
Group 1a: Field Parameters
Riverbend Landfill

Monitoring Location	Sample Date	pH (S.U.)	ORP (mV)	Specific Conductance (µS/cm)	Temperature (°C)	Dissolved Oxygen (mg/L)
1/5 P	11-Apr-11	7.78	-43.2	12,170	32.0	0.37
1/5 P	1-May-12	7.64	67.3	16,574	33.4	2.02
1/5 P	10-Apr-13	7.38	-78.4	18,718	33.1	0.44
1/5 P	5-May-14	7.48	-17.4	14,221	31.4	0.71
1/5 P	8-May-15	7.92	114.2	12,558	31.1	1.01
1/5 P	6-May-16	7.47	1.5	16,385	34.2	0.66
1/5 P	31-Aug-16	7.56	86.3	19,611	34.0	3.45
1/5 P	18-Apr-17	7.39	2.0	13,672	30.8	0.89
1/5 P	12-Sep-17	7.65	89.0	23,228	35.2	0.10
1/5 P	9-Nov-17	7.76	6.9	16,820	37.1	0.12
1/5 P	2-May-18	7.45	87.8	13,197	36.1	1.36
1/5 P	24-Apr-19	7.89	66.7	12,786	30.7	1.70
1/5 P	22-Apr-20	7.77	60.9	15,248	27.2	1.76
1/5 P	15-Apr-21	7.60	29.7	21,172	31.9	1.31
4/5 S	11-Apr-11	6.50	-34.8	1,439	32.3	1.88
4/5 S	1-May-12	6.32	11.4	1,218	30.2	2.04
4/5 S	11-Apr-13	6.54	-12.5	1,143	16.6	5.94
4/5 S	5-May-14	6.22	-18.8	1,335	34.2	1.19
4/5 S	8-May-15	6.75	13.7	256	35.9	1.56
4/5 S	6-May-16	6.51	31.7	1,275	21.3	5.33
4/5 S	31-Aug-16	6.45	-6.3	1,370	32.3	2.74
4/5 S	18-Apr-17	6.56	19.5	1,304	26.9	2.96
4/5 S	12-Sep-17	6.48	10.7	1,788	34.0	1.35
4/5 S	9-Nov-17	6.61	-12.0	1,727	27.1	2.56
4/5 S	3-May-18	6.31	-30.4	1,421	31.6	2.37
4/5 S	24-Apr-19	6.49	-32.1	1,920	28.7	2.11
4/5 S	22-Apr-20	6.95	-22.1	2,923	27.1	2.42
4/5 S	15-Apr-21	6.51	-65.1	1,955	32.0	1.83
6/7 P	11-Apr-11	7.32	-76.6	12,920	22.7	0.25
6/7 P	1-May-12	7.27	-43.4	14,492	30.5	1.87
6/7 P	10-Apr-13	7.29	-123.9	16,614	25.4	0.50
6/7 P	5-May-14	7.10	51.8	9,948	31.2	4.38
6/7 P	8-May-15	7.84	132.6	12,595	33.2	1.56
6/7 P	28-Apr-16	7.16	-89.0	11,664	31.4	0.33
6/7 P	18-Apr-17	7.12	44.0	9,443	28.4	3.25
6/7 P	12-Sep-17	7.33	171.9	12,618	34.6	0.59
6/7 P	9-Nov-17	7.27	-118.5	10,970	31.8	0.52
6/7 P	1-May-18	7.06	51.0	9,344	28.3	2.54
6/7 P	24-Apr-19	7.49	41.7	9,690	31.3	2.92
6/7 P	22-Apr-20	7.58	27.8	14,209	24.1	1.23
6/7 P	15-Apr-21	7.12	-44.5	14,983	31.6	0.52
6/7 S	13-Apr-11	6.64	-50.5	3,296	22.0	1.83
6/7 S	1-May-12	6.62	-11.2	3,752	31.2	2.07
6/7 S	10-Apr-13	6.32	-50.4	3,671	25.8	1.10
6/7 S	12-Apr-13	6.76	-74.6	3,440	20.2	2.30
6/7 S	5-May-14	6.57	-3.6	4,703	32.8	2.95
6/7 S	8-May-15	7.20	113.9	4,665	29.9	2.18
6/7 S	28-Apr-16	6.80	-52.0	6,571	27.9	1.44
6/7 S	18-Apr-17	6.89	-3.3	8,630	29.7	1.98

Table A-3 Leachate and LDS Liquid Samples
Group 1a: Field Parameters
Riverbend Landfill

Monitoring Location	Sample Date	pH (S.U.)	ORP (mV)	Specific Conductance (µS/cm)	Temperature (°C)	Dissolved Oxygen (mg/L)
6/7 S	12-Sep-17	6.78	118.6	6,259	32.6	0.56
6/7 S	9-Nov-17	6.89	-74.2	5,570	22.9	1.81
6/7 S	1-May-18	6.91	71.9	7,136	26.3	1.58
6/7 S	24-Apr-19	6.85	39.4	5,990	31.6	1.86
6/7 S	22-Apr-20	7.13	58.1	6,927	20.2	2.41
6/7 S	15-Apr-21	6.63	-50.7	5,071	29.9	1.98
8 P	11-Apr-11	7.55	-122.8	12,430	30.0	0.79
8 P	1-May-12	7.69	-175.2	18,592	28.6	0.93
8 P	10-Apr-13	7.36	-109.7	18,492	27.1	0.81
8 P	5-May-14	7.89	-104.6	25,312	24.7	0.91
8 P	8-May-15	7.76	-26.7	11,744	25.0	0.45
8 P	28-Apr-16	7.65	-109.2	23,367	22.3	0.59
8 P	18-Apr-17	7.53	-43.6	23,142	20.3	1.49
8 P	2-May-18	7.62	-245.5	28,093	21.1	1.52
8 P	24-Apr-19	7.77	4.8	26,551	22.0	1.52
8 P	22-Apr-20	7.78	-114.4	26,425	18.4	4.07
8 P	15-Apr-21	7.48	-224.1	16,835	31.1	1.01
8 S	11-Apr-11	6.46	-33.0	2,097	26.6	1.14
8 S	1-May-12	6.90	43.6	1,803	25.9	3.82
8 S	11-Apr-13	6.98	32.7	2,031	26.9	1.89
8 S	5-May-14	6.96	14.3	1,738	23.2	2.76
8 S	8-May-15	7.44	12.1	2,175	24.0	4.01
8 S	28-Apr-16	7.04	-68.5	3,685	26.4	1.80
8 S	18-Apr-17	7.00	198.6	5,008	25.2	2.92
8 S	3-May-18	6.84	-19.7	6,720	28.4	1.57
8S	24-Apr-19	7.22	-7.5	3,651	25.1	1.67
8S	22-Apr-20	7.40	-5.0	3,221	20.6	3.93
8S	15-Apr-21	7.11	29.7	2,220	28.7	2.65
9 P	8-May-15	7.83	-62.6	13,166	27.3	0.21
9 P	6-May-16	7.28	-28.8	9,440	25.6	1.47
9 P	18-Apr-17	7.33	-98.2	7,826	22.3	0.43
9 P	2-May-18	6.91	-46.6	6,325	28.3	2.44
9 P	24-Apr-19	7.63	-27.7	11,209	29.4	2.56
9 P	22-Apr-20	7.72	-19.3	12,467	25.1	0.90
9 P	15-Apr-21	7.15	-86.6	11,507	26.6	0.42
9 S	8-May-15	7.13	-71.7	5,011	24.9	1.59
9 S	6-May-16	7.10	-52.7	8,248	22.3	1.27
9 S	18-Apr-17	6.98	-15.6	6,460	24.5	2.65
9 S	2-May-18	6.89	-68.1	5,015	29.6	1.91
9 S	24-Apr-19	7.02	-24.2	4,141	28.4	2.63
9 S	22-Apr-20	7.13	-51.0	3,794	27.1	1.90
9 S	15-Apr-21	6.57	-68.7	4,005	23.9	1.06
Leachate Pond	11-Apr-11	8.32	91.6	6,183	11.6	4.12
Leachate Pond	31-Oct-11	8.22	153.5	4,957	12.3	5.06
Leachate Pond	1-May-12	8.12	125.7	8,529	16.6	2.79
Leachate Pond	12-Nov-12	8.26	176.6	9,660	11.0	3.42
Leachate Pond	8-Apr-13	8.17	34.9	9,656	14.9	1.06
Leachate Pond	21-Nov-13	8.35	-7.3	12,935	9.8	3.02

Table A-3 Leachate and LDS Liquid Samples
Group 1a: Field Parameters
Riverbend Landfill

Monitoring Location	Sample Date	pH (S.U.)	ORP (mV)	Specific Conductance (µS/cm)	Temperature (°C)	Dissolved Oxygen (mg/L)
Leachate Pond	5-May-14	8.31	-130.6	11,062	16.8	1.97
Leachate Pond	20-Nov-14	8.37	102.3	11,335	7.7	2.29
Leachate Pond	11-May-15	8.68	146.6	7,224	19.1	0.12
Leachate Pond	26-May-15	8.29	NT	NT	NT	NT
Leachate Pond	11-Nov-15	8.22	59.2	12,382	10.6	1.19
Leachate Pond	28-Apr-16	8.36	3.7	8,642	15.7	0.33
Leachate Pond	17-Nov-16	8.77	-14.1	12,934	12.4	0.84
Leachate Pond	18-Apr-17	8.28	22.9	10,962	15.2	1.67
Leachate Pond	9-Nov-17	8.27	66.7	13,110	11.1	2.09
Leachate Pond	3-May-18	8.06	-110.7	10,661	22.3	0.19
Leachate Pond	6-Nov-18	8.42	-72.9	12,410	16.2	0.12
Leachate Pond	24-Apr-19	8.34	-146.8	12,940	22.9	0.15
Leachate Pond	20-Nov-19	8.94	164.0	13,517	10.1	6.83
Leachate Pond	22-Apr-20	8.43	81.5	10,700	16.7	1.28
Leachate Pond	11-Nov-20	8.70	127.9	12,537	12.0	5.79
Leachate Pond	15-Apr-21	8.35	161.6	10,043	14.3	0.73
Leachate Pond	18-Nov-21	9.00	188.1	9,574	7.1	7.90
Leachate Pond LDS	11-Apr-13	7.46	-88.2	9,779	12.1	2.57
Leachate Pond LDS	21-Nov-13	7.72	-109.3	7,876	10.9	3.53
Leachate Pond LDS	5-May-14	7.96	-104.3	11,080	15.6	3.23
Leachate Pond LDS	20-Nov-14	6.35	197.0	11,009	9.2	3.82
Leachate Pond LDS	11-May-15	7.63	125.7	6,829	18.5	2.24
Leachate Pond LDS	26-May-15	7.20	NT	NT	NT	NT
Leachate Pond LDS	11-Nov-15	7.15	-19.6	5,570	12.7	2.30
Leachate Pond LDS	28-Apr-16	7.57	-24.7	8,204	16.1	1.55
Leachate Pond LDS	17-Nov-16	7.67	-80.1	8,752	13.8	2.01
Leachate Pond LDS	18-Apr-17	7.59	-11.8	11,046	14.1	2.24
Leachate Pond LDS	9-Nov-17	7.49	-103.9	11,320	13.8	1.23
Leachate Pond LDS	3-May-18	7.23	-36.6	10,433	21.0	2.32
Leachate Pond LDS	28-Apr-20	7.40	161.3	8,040	18.0	2.19
Leachate Pond LDS	11-Nov-20	7.16	148.2	7,119	14.3	1.45
Leachate Pond LDS	15-Apr-21	6.97	4.5	8,221	14.4	0.84
Leachate Pond LDS	18-Nov-21	7.23	213.5	5,118	8.5	7.49

NOTE:
This table includes the last 10 years of data. Earlier data can be found in previous annual reports.
S.U. = standard pH units; mV = millivolts; µS/cm = microSiemens per centimeter;
mg/L = milligrams per liter; LDS = secondary leak detection system; °C = degrees Celsius
NS = not sampled because no liquid discharged when the sump pump was turned on; NT = not tested
ORP = oxidation -reduction potential.

APPENDIX B

Field Documentation

Groundwater Elevation Survey Forms

Riverbend Landfill
Groundwater Elevation Survey

Project #: 04208022.21

Sampler: I. Hultquist / K. Kingen

Quarter: 1 (2) 3 4

Date: 4/12/2021

Monitoring Point Designation	Reference Elevation (ft. msl)	DTB (ft. btoc)	DTW (ft. btoc)	Time	Comments
Monitoring Wells					
MW-1A (Deep)	155.30	62.50	21.37	0753	
MW-1B (Shallow)	155.00	27.50	7.02	0750	
MW-2R (Shallow)	147.02	32.52	18.21	1409	
MW-3A (Shallow)	140.81	37.30	17.02	1021	
MW-3B (Deep)	140.57	57.91	18.21	1018	
MW-4A (Shallow)	142.31	38.81	25.32	1039	
MW-4B (Deep)	141.81	65.03	26.66	1037	
MW-5A (Shallow)	138.73	34.40	~~27.45~~	1120	21.15 - DTW
MW-5B (Deep)	138.82	42.40	29.38	1128	
MW-6A (Shallow)		23.28	7.77	1223	
MW-6B (Deep)	128.59	48.90	~~16.65~~	1228	14.60 - DTW
MW-9A (Shallow)	128.42	26.93	9.55	1400	
MW-9BR (Deep)	127.40	36.25	1.09	1406	
MW-10A (Shallow)	153.21	29.71	6.05	0822	
MW-10B (Deep)	152.87	55.83	6.76	0824	
MW-12A (Shallow)	126.00	27.60	13.64	1147	
MW-12B (Deep)	126.54	46.20	18.83	1144	
MW-14A (Shallow)	121.87	23.60	16.77	1045	
MW-14B (Deep)	123.32	44.60	17.21	1048	
MW-15A (Shallow)	130.07	24.00	9.50	1237	
MW-15B (Deep)	129.73	45.95	17.11	1234	
MW-16A (Shallow)	128.89	25.00	15.76	1308	
MW-16B (Deep)	128.95	46.00	16.07	1306	
MW-17A (Shallow)	153.83	27.90	9.81	1526	
MW-18A (Shallow)	148.77	27.05	13.21	1636	
MW-18B (Deep)	148.57	56.10	13.71	1633	
MW-19A (Shallow)	151.27	32.00	8.31	1513	
MW-20A (Shallow)	129.92	23.60	3.85	0852	
MW-20B (Deep)	129.72	37.85	2.53	0850	
MW-21A (Shallow)	120.02	15.42	10.12	1052	
MW-21B (Deep)	119.53	30.40	9.78	1053	
MW-22A (Shallow)	125.38	22.50	19.48	0930	
MW-22B (Deep)	125.43	40.15	20.47	0925	
MW-23A (Shallow)	131.79	28.95	17.10	0919	
MW-23B (Deep)	131.60	44.49	21.41	0917	
MW-24 (Shallow)	149.93	27.81	12.31	1615	
MW-25A (Shallow)	155.26	28.22	8.60	0805	
MW-25B (Deep)	155.54	87.95	22.73	0802	

Riverbend Landfill
Groundwater Elevation Survey

Project #: 0420080022-21

Sampler: K. Reinsen, T. Hultquist

Quarter: 1 (2) 3 4

Date: 4/12/2021

Monitoring Point Designation	Reference Elevation (ft. msl)	DTB (ft. btoc)	DTW (ft. btoc)	Time	Comments
Piezometers					
P-01	125.93	20.00	11.06	1134	
P-02	123.88	18.80	9.67	1136	
P-03	123.63	21.83	10.85	1152	
P-05A	140.70	21.44	3.77	0900	
P-06A	131.60	21.82	5.47	0856	
P-07A	147.90	28.45	14.24	0846	
SA-BH-1	155.21	25.09	8.18	1507	
SA-BH-3	155.07	25.33	8.73	1500	
SA-BH-5	151.01	30.70	16.09	1602	
SA-BH-6	125.93	26.30	13.47	1556	
GT10-1	145.46	27.29	2.22	0834	
GT10-11	150.08	27.17	3.96	0912	
GT10-12	152.41	26.06	4.97	0956	
Production Wells					
MB-1	149.10	---			Inaccessible
PW-1	151.71	---	18.22	0757	

Notes: Sunny 45°F
Probe decontd between readings

Riverbend Landfill
Groundwater Elevation Survey

Project #: 0420B022.21

Sampler: T. Holtquist

Quarter: 1 2 3 (4)

Date: 11/15/2021

Monitoring Point Designation	Reference Elevation (ft. msl)	DTB (ft. btoc)	DTW (ft. btoc)	Time	Comments
Monitoring Wells					
MW-1A (Deep)	155.30	62.50	25.87	0825	
MW-1B (Shallow)	155.00	27.50	6.37	0830	
MW-2R (Shallow)	147.02	32.52	10.75	1250	
MW-3A (Shallow)	140.81	37.30	17.63	1039	
MW-3B (Deep)	140.57	57.91	19.47	1037	
MW-4A (Shallow)	142.31	38.81	21.70	1046	
MW-4B (Deep)	141.81	65.03	22.78	1048	
MW-5A (Shallow)	138.73	34.40	15.58	1143	
MW-5B (Deep)	138.82	42.40	19.39	1146	
MW-6A (Shallow)		23.28	6.37	1223	
MW-6B (Deep)	128.59	48.90	14.36	1225	
MW-9A (Shallow)	128.42	26.93	13.73	1241	DTW 13.73
MW-9BR (Deep)	127.40	36.25	4.82	1246	
MW-10A (Shallow)	153.21	29.71	14.52	0842	
MW-10B (Deep)	152.87	55.83	22.56	0844	
MW-12A (Shallow)	126.00	27.60	5.60	1127	
MW-12B (Deep)	126.54	46.20	7.81	1129	
MW-14A (Shallow)	121.87	23.60	2.36	1103	
MW-14B (Deep)	123.32	44.60	3.68	1105	
MW-15A (Shallow)	130.07	24.00	7.26	1217	
MW-15B (Deep)	129.73	45.95	14.60	1219	
MW-16A (Shallow)	128.89	25.00	15.56	1233	
MW-16B (Deep)	128.95	46.00	17.56	1235	
MW-17A (Shallow)	153.83	27.90	10.77	1319	
MW-18A (Shallow)	148.77	27.05	12.51	1409	
MW-18B (Deep)	148.57	56.10	20.31	1407	
MW-19A (Shallow)	151.27	32.00	22.32	1337	
MW-20A (Shallow)	129.92	23.60	5.12	0922	
MW-20B (Deep)	129.72	37.85	6.84	0924	
MW-21A (Shallow)	120.02	15.42	2.91	1115	
MW-21B (Deep)	119.53	30.40	0.43	1113	
MW-22A (Shallow)	125.38	22.50	3.20	1027	
MW-22B (Deep)	125.43	40.15	4.78	1029	
MW-23A (Shallow)	131.79	28.95	8.82	1020	
MW-23B (Deep)	131.60	44.49	11.03	1018	
MW-24 (Shallow)	149.93	27.81	19.27	1341	
MW-25A (Shallow)	155.26	28.22	7.08	0831	
MW-25B (Deep)	155.54	87.95	27.35	0829	

Riverbend Landfill
Groundwater Elevation Survey

Project #: 04208022.21

Quarter: 1 2 3 (4)

Sampler: I. Hultquist

Date: 11/15/2021

Monitoring Point Designation	Reference Elevation (ft. msl)	DTB (ft. btoc)	DTW (ft. btoc)	Time	Comments
Piezometers					
P-01	125.93	20.00	2.87	1131	
P-02	123.88	18.80	1.22	1134	
P-03	123.63	21.83	2.12	1140	
P-05A	140.70	21.44	Dry	0916	TD 21.46 ✓
P-06A	131.60	21.82	5.63	0904	DTW - 5.63
P-07A	147.90	28.45	15.53	0928	
SA-BH-1	155.21	25.09	7.39	1310	
SA-BH-3	155.07	25.33	7.46	1304	
SA-BH-5	151.01	30.70	6.18	1346	
SA-BH-6	125.93	26.30	2.98	1352	
GT10-1	145.46	27.29	10.43	0853	
GT10-11	150.08	27.17	20.31	0936	
GT10-12	152.41	26.06	17.53	0956	
Production Wells					
MB-1	149.10	---	-	-	Inaccessible
PW-1	151.71	---	22.69	~~13~~ 1411	

Notes: Overcast, light Rain 45°F

Spring 2021

Compliance Groundwater

Field Sampling Data Sheets

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-12A
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	(NE)	E	SE	S	SW	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(F) 60.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
4/16/21	07:58	27.60	*	14.37	.	13.23	X 1	2.15
/ /	:	.	.	.	.		X 3	6.45

Gal/ft = (dia./2)² x 0.163	1" = 0.041	(2") = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	√
VOA Glass	4/16/21	09:00	F	3	40 ml	(HCl)	(YES)	(NO)		
VOA Glass	4/16/21	09:00	F	3	40 ml	($Na_2S_2O_3$)	(YES)	(NO)		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/16/21	09:00	F	2	(250), 500, (1L)	(None)	(YES)	(NO)	NA	
Yellow Glass	4/16/21	09:00	F	2	(250) 500, 1L	(H_2SO_4)	(YES)	(NO)		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/16/21	09:00	F	1	250, (500), 1L	(HNO_3)	(YES)	(YES)		
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 | 11 | Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [ ] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: 07:59 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O_2 (mg/l)	Water Quality
0	F(0800)	0.00	6.86	189.2	396.4	9.5	14.64	2.26	clear/colorless
1	F(0815)	2.15	5.17*	204.3	401.6	8.9	15.01	1.92	Clear/colorless
2	F(0832)	4.30	6.93	196.1	400.6	8.9	15.13	1.79	Clear/colorless
3	F(0848)	6.45	6.20	242.0	403.1	8.9	15.22	2.36	Clear/colorless
4	F(0850)	6.70	6.23	244.9	402.6	9.0	15.22	2.31	Clear/colorless
5	F(0852)	6.95	6.23	244.7	402.4	9.0	15.23	2.69	Clear/colorless
6	F(0854)	7.20	6.21	246.6	403.3	8.9	15.23	2.67	Clear/colorless

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

* Checked pH calibration due to low pH reading. pH readings low vs 7.00 standard. Calibrated backup YSI (17J102717) and used 17J102717 for rest of purge.
Standard purge method (20/10/20psi) ~500 ml/min

SAMPLER: I. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** FB4
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	(NE)	E	SE	S	SW	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(F) 50.0 °C	

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
/ /	:	.	.	.	.	.	X 1	.
/ /	:	.	.	.			X 3	.

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other = transfer

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	√
VOA Glass	4/16/21	08:05	G	3	~~40 ml~~	HCl	YES NO		
VOA Glass	4/16/21	08:05	G	3	~~40 ml~~	$Na_2S_2O_3$	YES NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO	
White Poly	4/16/21	08:05	G	2	~~250~~, 500, 1L	None	YES NO	NA	
Yellow Glass	4/16/21	08:05	G	2	~~250~~, 500, 1L	H_2SO_4	YES NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES NO		
Red Diss. Poly	4/16/21	08:05	G	1	250, ~~500~~, 1L	HNO_3	YES	YES	
White Poly	/ /	:			250, 500, 1L	None	YES	YES	
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO	

White no acid, Yellow H2SO4, Red HNO3 — 11 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	G (0805)	0.00	.	.	.	.	.	.	.
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Collected near MW-12A using lab supplied DI water

SAMPLER: Elizabeth Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill
SITE ADDRESS: McMinnville , Oregon
WELL ID: MW-12B
BLIND ID:
DUP ID: NA

WIND FROM: N | (NE) | E | SE | S | SW | W | NW
WEATHER: (SUNNY) | CLOUDY | RAIN | ?
(LIGHT) | MEDIUM | HEAVY
TEMPERATURE: °F (60.0) °C [Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW	[Water Column x Gal/ft]	Volume (gal)
4/16/21	09:39	46.20	.	19.31	.	26.89	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)^2 x 0.163 | 1" = 0.041 | (2") = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	[√ if used] √
VOA Glass	4/16/21	10:05	F	3	(40 ml)	(HCl)	(YES)	NO		
VOA Glass	4/16/21	10:05	F	3	(40 ml)	($Na_2S_2O_3$)	(YES)	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/16/21	10:05	F	2	(250, 500, 1L)	(None)	(YES)	NO	NA	
Yellow Glass	4/16/21	10:05	F	2	(250), 500, 1L	(H_2SO_4)	(YES)	NO		
Red Total Poly	/ /	:		1	125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/16/21	10:05	F	1	250, (500), 1L	(HNO_3)	(YES)	(YES)		
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 | 11 | Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011)
AMBER - Glass	(8080) (8150) (TOX) OR [X] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO) (Silica, T.) (NO3) (BOD) OR [ ] WA [ ]
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA

Purge Start Time: 09:40

Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O_2 (mg/l)	Water Quality
0	F(0942)	0.00	7.05	151.0	834	11.3	19.36	6.96	Clear/colorless
1	F(0952)	0.75	6.82	-45.8	785	11.0	19.54	1.02	cloudy/light tan
2	F(0954)	0.85	6.83	-48.0	776	11.0	19.54	1.03	cloudy/light tan
3	F(0956)	0.95	6.85	-51.9	767	11.0	19.54	1.04	clear/colorless
4	F(0958)	1.05	6.87	-54.0	764	11.0	19.54	1.16	clear/colorless
5	F(1000)	1.15	6.87	-55.2	766	11.0	19.54	1.17	clear/colorless
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Low flow purge (20/10/20psi) ~ 200 ml/min

SAMPLER: I. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** DUP4
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	(NE)	E	SE	S	SW	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(°F) 60.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		[Water Column x Gal/ft] Volume (gal)
/ /	:	.	.	.	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)² x 0.163	1" = 0.041	(2") = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	√
VOA Glass	4/16/21	10 : 10	F	3	(40 ml)	(HCl)	(YES)	(NO)		
VOA Glass	4/16/21	10 : 10	F	3	(40 ml)	($Na_2S_2O_3$)	(YES)	(NO)		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/16/21	10 : 10	F	2	(250), 500, 1L	(None)	(YES)	(NO)	NA	
Yellow Glass	4/16/21	10 : 10	F	2	(250), 500, 1L	(H_2SO_4)	(YES)	(NO)		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/16/21	10 : 10	F	1	250, (500), 1L	(HNO_3)	(YES)	(YES)		
	/ /	:			250, 500, 1L		YES			

White no acid, Yellow H2SO4, Red HNO3 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3)
YELLOW - Glass	(COD) (TOC) (NH3) (NO_3/NO_2) (Tannin/Lignin)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	F (1010)	0.00	.	.	-	-	.	-	-
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Collected at MW-12B

SAMPLER: Tillquist
(PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-14A
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	(NE)	E	SE	S	SW	W	NW	LIGHT	(MEDIUM)	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(°F) 54.	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
4/13/21	~~12:40~~	23.00	.	17.85	.	5.75	X 1	0.94
/ /	12:40	.	.	.	.		X 3	2.81

Gal/ft = (dia./2)^2 x 0.163 | 1" = 0.041 | (2" = 0.163) | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	[√ if used] √
VOA Glass	4/13/21	13:30	F	3	(40 ml)	(HCl)	(YES)	NO		
VOA Glass	4/13/21	13:30	F	3	40 ml	($Na_2S_2O_3$)	(YES)	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/13/21	13:30	F	2	(250, 500, 1L)	(None)	(YES)	NO	NA	
Yellow Glass	4/13/21	13:30	F	2	(250, 500, 1L)	(H_2SO_4)	(YES)	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/13/21	13:30	F	1	250, (500, 1L)	(HNO_3)	(YES)	(YES)		
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 | 11 | Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011)
AMBER - Glass	(8080) (8150) (TOX) OR [X] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD) OR [ ] WA [ ]
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA

Purge Start Time: 12:40

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Pump/Bailer Inlet Depth: Diss O_2 (mg/l)	Water Quality
0	F(1240)	0.00	5.84	67.9	~~3~~ 413.6	11.0	17.85	2.77	clear/colorless
1	F(1251)	1.0	6.01	~~89.0~~	322.7	10.2	17.~~58~~	1.08	clear/colorless
2	F(1304)	2.0	6.05	104.0	336.3	10.4	17.61	1.18	clear/colorless
3	F(1317)	3.0	6.05	120.8	346.0	10.5	17.74	2.98	clear/colorless
4	F(1329)	3.3	6.05	123.3	345.0	10.4	17.73	2.93	clear/colorless
5	F(1322)	3.5	6.04	124.9	344.2	10.3	17.78	2.90	clear/colorless
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

standard purge method (20/10/20psi) ~ 400mL/min

SAMPLER: Kara Kingen
(PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-14B
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		**TEMPERATURE:**	°F 54 .	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
4/13/21	14:00	44.00	18.07	.	.	26.53	X 1	4.33
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)^2 x 0.163	1" =	0.041	2" =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	[√ if used] √
VOA Glass	4/13/21	14:40	F	3	40 ml	HCl	YES	NO		√
VOA Glass	4/13/21	14:40	F	3	40 ml	$Na_2S_2O_3$	YES	NO		√
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/13/21	14:40	F	2	250, 500, 1L	None	YES	NO	NA	√
Yellow Glass	4/13/21	14:40	F	2	250, 500, 1L	H_2SO_4	YES	NO		√
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/13/21	14:40	F	1	250, 500, 1L	HNO_3	YES	YES		√
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 11 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [√] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA

Purge Start Time: 14:05 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	F(1406)	0.00	6.50	97.4	467.5	13.4	18.22	3.88	Clear/colorless
1	F(1431)	0.75	6.85	-57.8	407.1	11.6	18.26	1.66	Clear/colorless
2	F(1433)	0.80	6.86	-58.5	405.5	11.7	18.26	1.60	Clear/colorless
3	F(1435)	0.85	6.87	-59.9	402.5	11.9	18.26	1.41	Clear/colorless
4	F(1437)	0.90	6.87	-60.5	400.9	11.7	18.26	1.39	Clear/colorless
5		.	.			.	.	.	
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Low flow purge method (20/10/20 psi) ~100 ml/min

SAMPLER: K. Kingen (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill
SITE ADDRESS: McMinnville , Oregon
WELL ID: MW-15A
BLIND ID:
DUP ID: NA

WIND FROM: N | NE | (E) | SE | S | SW | W | NW
WEATHER: (SUNNY) | CLOUDY | RAIN | ? — (LIGHT) | MEDIUM | HEAVY
TEMPERATURE: (°F) 55. °C [Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW	[Water Column x Gal/ft] Volume (gal)
4/15/21	09:38	24.00	—	9.59	—	14.41	X 1 2.35
/ /	:	.	.	.	.		X 3 7.05

Gal/ft = (dia./2)² x 0.163 | 1" = 0.041 | (2") = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	[√ if used]
VOA Glass	4/15/21	10:41	F	3 (40 ml)	(HCl)	(YES)	NO		√
VOA Glass	4/15/21	10:41	F	3 (40 ml)	($Na_2S_2O_3$)	(YES)	NO		√
Amber Glass	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/15/21	10:41	F	2 (250, 500, 1L)	(None)	(YES)	NO	NA	√
Yellow Glass	4/15/21	10:41	F	2 (250, 500, 1L)	(H_2SO_4)	(YES)	NO		√
Red Total Poly	/ /	:		125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/15/21	10:41	F	1 250, (500) 1L	(HNO3)	(YES)	(YES)		√
White Poly	/ /	:		250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:		100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — 11 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011)
AMBER - Glass	(8080) (8150) (TOX) — OR [X] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD) — OR [ ] WA [ ]
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA

Purge Start Time: 09:33

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Pump/Bailer Inlet Depth: Diss O_2 (mg/l)	Water Quality
0	F(09:34)	0.00	5.75	148.8	194.3	12.6	10.29	9.14	tan/cloudy
1	F(09:44)	1.32	5.89	166.6	195.0	12.0	15.08	9.32	Light tan/cloudy
2	F(10:02)	4.10	5.97	175.4	191.9	12.1	16.56	8.73	Light tan/cloudy
3	F(10:27)	7.05	6.00	180.8	174.7	12.7	18.31	7.60	Light tan/cloudy
4	F(10:30)	7.45	5.97	186.6	176.3	12.6	BTOP	6.34	Light tan/cloudy
5	F(10:33)	7.85	5.90	190.4	174.6	12.6	BTOP	6.21	Light tan/cloudy
6	F(10:36)	8.25	5.94	190.7	175.2	12.8	BTOP	6.46	Light tan/cloudy

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Standard Purge Method 20/10/20 psi 250ml/pulse

SAMPLER: Chris Perra (PRINTED NAME) Chris Perra (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** DUP3
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	(E)	SE	S	SW	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)	CLOUDY		RAIN		?			**TEMPERATURE:**	°F 55.	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW	[Water Column x Gal/ft] Volume (gal)
/ /	:	.	.	.	.	.	X 1 .
/ /	:	.	.	.	.	.	X 3 .

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth:

Bottle Type	Date	Time	Method §	Amount	Volume	Preservative	Ice	Filter	pH	[√ if used] √
VOA Glass	4/15/21	10 :42	F	3	(40 ml)	(HCl)	(YES)	NO		✓
VOA Glass	4/15/21	10 :42	F	3	(40 ml)	($Na_2S_2O_3$)	(YES)	NO		✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/15/21	10 :42	F	2	(250, 500, 1L)	(None)	(YES)	NO	NA	✓
Yellow Glass	4/15/21	10 :42	F	2	(250), 500, 1L	(H_2SO_4)	(YES)	NO		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	(YES)	NO		
Red Diss. Poly	4/15/21	10 :42	F	1	250, (500) 1L	(HNO_3)	(YES)	(YES)		✓
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — 11 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8260) (8011)
	AMBER - Glass	(8080) (8150) (TOX) OR [X] WA [ ]
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD) OR [ ] WA [ ]
	YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
	RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
	RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
	WHITE - Poly	(Orthophosphate)
	Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA

Purge Start Time: :

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Pump/Bailer Inlet Depth: Diss O_2 (mg/l)	Water Quality
0		0.00	.			.	.	.	
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Collected at MW-15A

SAMPLER: Chris Perra (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-15B
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	(E)	SE	S	SW	W	NW	LIGHT	(MEDIUM)	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN			?	**TEMPERATURE:**	(°F) 60 .	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW	[Water Column x Gal/ft] Volume (gal)
4/15/21	12:13	45.95	—	17.33	—	—	X 1 —
/ /	:	.	.	.	.		X 3 —

Gal/ft = (dia./2)² x 0.163	1" = 0.041	(2") = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	[√ if used] √
VOA Glass	4/15/21	12:49	F	3	(40 ml)	(HCl)	(YES)	NO		√
VOA Glass	4/15/21	12:49	F	3	(40 ml)	$Na_2S_2O_3$	(YES)	NO		√
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/15/21	12:49	F	2	(250) 500 (1L)	(None)	(YES)	NO	NA	√
Yellow Glass	4/15/21	12:49	F	2	(250, 500, 1L	(H_2SO_4)	(YES)	NO		√
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/15/21	12:49	F	1	250, (500) 1L	(HNO_3)	(YES)	(YES)		√
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — 11 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011)
AMBER - Glass	(8080) (8150) (TOX) OR [X] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD) OR [ ] WA [ ]
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA

Purge Start Time: 12 : 25

Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O_2 (mg/l)	Water Quality
0	F(1226)	0.00	7.01	191.4	760.0	14.9	18.54	4.56	Clear/colorless
1	F(1231)	0.33	6.55	80.9	560.0	13.4	18.55	0.62	Clear/colorless
2	F(1236)	0.66	6.63	37.2	610.3	13.5	18.55	0.51	Clear/colorless
3	F(1238)	0.86	6.69	21.1	633.1	13.4	1855	0.42	Clear/colorless
4	F(1240)	1.06	6.71	20.6	639.7	13.4	18.55	0.48	Clear/colorless
5	F(1242)	1.26	6.72	20.1	648.3	13.4	1855	0.44	Clear/colorless
6	F(1244)	1.46	6.71	19.8	642.3	13.4	1855	0.45	Clear/colorless

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Low Flow Purge Method: 20/10/20psi 250/pulse

SAMPLER: Chris Perra (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET pg 1/2

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-16A

SITE ADDRESS: McMinnville , Oregon **BLIND ID:**

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		TEMPERATURE:	(°F) 59 .	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		[Water Column x Gal/ft] Volume (gal)
4/14/21	09:49	25.00	.	15.83	.	9.17	X 1	1.49
/ /	:	.	.	.	.		X 3	4.48

Gal/ft = (dia./2)² x 0.163	1" = 0.041	(2" = 0.163)	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	√
VOA Glass	4/14/21	10:50	F	3	(40 ml)	HCl	YES	NO		
VOA Glass	4/14/21	10:50	F	3	(40 ml)	$Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/14/21	10:50	F	2	250, 500, (1L)	None	YES	NO	NA	
Yellow Glass	4/14/21	10:50	F	2	250, 500, 1L	H_2SO_4	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/14/21	10:50	F	1	250, 500, 1L	HNO_3	YES	YES		
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — 11 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA

Purge Start Time: 09:50 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	0950	0.00	5.93	113.0	334.8	12.0	15.83	7.10	clear/colorless
1	1006	1.5	6.08	126.6	315.2	11.8	17.69	6.13	clear/colorless
2	1018	3.0	6.09	131.4	314.7	11.8	18.59	4.01	clear/colorless
3	1030	4.5	6.15	135.0	329.4	11.9	19.60	3.04	clear/colorless
4	1032	4.7	6.15	134.4	329.9	11.9	19.73	3.23	clear/colorless
5	1034	4.9	6.17	133.3	335.7	12.0	19.89	2.93	clear/colorless
6	1036	5.1	6.17	130.9	338.0	12.1	19.92	2.57	clear/colorless

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

standard purge: (20/10/20psi) ~ 400 mL/min

SAMPLER: Kara Ringen
(PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

pg 2/2

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-16A

SITE ADDRESS: McMinnville , Oregon **BLIND ID:**

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY	CLOUDY	RAIN	?	**TEMPERATURE:**	(°F) 59.	° C			

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
4/14/21	09:49	25.00	.	15.83	.	9.17	X 1	1.49
/ /	:	.	.	.	.		X 3	4.48

Gal/ft = (dia./2)² x 0.163	1" =	0.041	2" =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	√
VOA Glass	4/14/21	10:50	F	3	40 ml	HCl	YES	NO		
VOA Glass	4/14/21	10:50	F	3	40 ml	$Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/14/21	10 50	F	2	250, 500, 1L	None	YES	NO	NA	
Yellow Glass	4/14/21	10:50	F	2	250, 500, 1L	H_2SO_4	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/14/21	10 :50	F	1	250, 500, 1L	HNO_3	YES	YES		
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 11 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8260) (8011) OR [X] WA [ ]
	AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
	YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
	RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
	RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
	WHITE - Poly	(Orthophosphate)
	Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: 09:50 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	1040	~~0.00~~ 6.1	6.16	132.0	342.2	12.0	20.31	2.85	clear/colorless
1	1042	6.3	6.17	128.6	346.7	12.0	20.40	2.85	clear/colorless
2	1044	6.5	6.18	127.0	349.1	12.0	20.41	2.66	clear/colorless
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: Kara Kingery (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** FB2
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	(NE)	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(°F) 58.0 °C	

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
/ /	:						X 1	
/ /	:						X 3	

Gal/ft = (dia./2)^2 x 0.163 | 1" = 0.041 | 2" = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other = Transfer

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	√
VOA Glass	4/14/21	10:10	G	3	(40 ml)	(HCl)	(YES)	NO		
VOA Glass	4/14/21	10:10	G	3	(40 ml)	($Na_2S_2O_3$)	(YES)	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/14/21	10:10	G	2	(250), 500, 1L	(None)	(YES)	(NO)	NA	
Yellow Glass	4/14/21	10:10	G	~~2~~ 1	250, (500), 1L	(H_2SO_4)	(YES)	(NO)		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/14/21	10:10	G	1	250, (500), 1L	(HNO_3)	(YES)	(YES)		
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 | 11 | Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH3) (NO3/NO2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	G (1010)	0.00	—	—	—	—	—	—	—
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Collected near MW-16A using lab supplied DI water

SAMPLER: Kyra Krueger (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-16R
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	(NE)	E	SE	S	SW	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN			?	**TEMPERATURE:**	(°F) 55.0 °C	

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		[Water Column x Gal/ft] Volume (gal)
4/14/21	09:45	46.00	.	16.17	.	29.83	X 1	4.86
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)² x 0.163 | 1" = 0.041 | (2") = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	√
VOA Glass	4/14/21	10:10	F	3	(40 ml)	(HCl)	(YES)	NO		
VOA Glass	4/14/21	10:10	F	3	(40 ml)	$Na_2S_2O_3$	(YES)	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/14/21	10:10	F	2	(250, 500, 1L)	(None)	(YES)	NO	NA	
Yellow Glass	4/14/21	10:10	F	2	(250, 500, 1L)	(H_2SO_4)	(YES)	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/14/21	10:10	F	1	250, (500), 1L	(HNO_3)	(YES)	(YES)		
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 (1) Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA

Purge Start Time: 09:48 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	F(0949)	0.00	7.54	40.4	911	12.1	16.18	5.92	clear/colorless
1	F(1001)	0.75	6.80	-42.8	909	12.4	16.19	0.89	cloudy/colorless
2	F(1003)	0.95	6.86	-45.8	912	12.4	16.19	0.76	clear/colorless
3	F(1005)	1.15	6.87	-46.5	913	12.4	16.19	0.74	clear/colorless
4	F(1007)	1.35	6.88	-48.1	915	12.4	16.19	0.73	clear/colorless
5		.	.			.	.	.	
6		.	.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Low flow purge method (20/10/30psi) ~ 400 ml/min

SAMPLER: J. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** DUP2
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	(NE)	E	SE	S	SW	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(°F) 55.0 °C	

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
/ /	:	.	.	.	.	.	X 1	.
/ /	:	.	.	.	.	.	X 3	.

Gal/ft = (dia./2)^2 x 0.163 | 1" = 0.041 | (2" =) 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	[√ if used]
VOA Glass	4/14/21	10:15	F	3	(40 ml)	(HCl)	YES	(NO)		√
VOA Glass	4/14/21	10:15	F	3	(40 ml)	($Na_2S_2O_3$)	(YES)	(NO)		√
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/14/21	10:15	F	2	(250), 500, (1L)	(None)	(YES)	(NO)	NA	√
Yellow Glass	4/14/21	10:15	F	2	(250), 500, 1L	(H_2SO_4)	(YES)	(NO)		√
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/14/21	10:15	F	1	250, (500), 1L	(HNO_3)	(YES)	(YES)		√
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 | (1) | Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA

Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	F(10/5)	0.00	~	~	~	.	.	~	~
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Collected at MW-16B

SAMPLER: I. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-21A
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	(NE)	E	SE	S	SW	W	NW	LIGHT	(MEDIUM)	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(F) 63 .	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
4/13/21	15:26	15.42	.	10.31	.	5.11	X 1	0.83
/ /	:	.	.	.	.		X 3	2.50

Gal/ft = (dia./2)^2 x 0.163 | 1" = 0.041 | (2") = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) ~~Dedicated Pump~~ (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	[√ if used] √
VOA Glass	4/13/21	15:55	F	3	(40 ml)	(HCl)	(YES)	NO		
VOA Glass	4/13/21	15:55	F	3	(40 ml)	($Na_2S_2O_3$)	(YES)	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/13/21	15:55	F	2	(250, 500, 1L)	(None)	(YES)	NO	NA	
Yellow Glass	4/13/21	15:55	F	2	(250), 500, 1L	(H_2SO_4)	(YES)	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/13/21	15:55	F	1	250, (500), 1L	(HNO_3)	(YES)	(YES)		
White Poly	/ /	:		~~KK~~	250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 | 11 | Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011)
AMBER - Glass	(8080) (8150) (TOX) OR [X] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD) OR [ ] WA [ ]
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA

Purge Start Time: 15:28

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Pump/Bailer Inlet Depth: Diss O_2 (mg/l)	Water Quality
0	F(1529)	0.00	6.00	31.0	289.3	12.4	10 31	5.03	clear/colorless
1	F(1534)	1.0	6.04	70.4	282.6	11.8	11.22	3.31	clear/colorless
2	F(1544)	2.0	6.04	83.8	284.7	11.8	11.41	1.39	clear/colorless
3	F(1549)	2.75	6.03	90.4	276.5	11.8	11.49	8.23	clear/colorless
4	F(1554)	3.05	6.02	92.0	286.4	11.7	11.57	7.95	clear/colorless
5	F(1551)	3.35	6.04	97.4	289.5	11.9	11.62	7.99	clear/colorless
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

~~SP~~ standard purge method (10/5/25psi) ~ 600 mL/min

SAMPLER: (PRINTED NAME) (SIGNATURE) Kara Kingen

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-213
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	E	(SE)	S	SW	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(°F) 52 .	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
4/14/21	08:30	30.40	.	9.91	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)² x 0.163	1" = 0.041	(2") = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	√
VOA Glass	4/14/21	08:55	F	3	(40 ml)	HCl	(YES)	(NO)		
VOA Glass	4/14/21	08:55	F	3	(40 ml)	$Na_2S_2O_3$	(YES)	(NO)		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/14/21	08:55	F	2	(250), 500, (1L)	None	(YES)	(NO)	NA	
Yellow Glass	4/14/21	08:55	F	2	(250), 500, 1L	H_2SO_4	(YES)	(NO)		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/14/21	08:55	F	1	250, (500), 1L	HNO_3	(YES)	(YES)		
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 | 11 | Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_4) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: 08:30 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	F(0831)	0.00	6.24	128.0	322.2	12.3	9.91	5.19	cloudy/tan
1	F(0843)	1.0	6.44	76.0	398.3	12.4	10.24	0.98	cloudy/tan
2	F(0845)	1.2	6.49	69.8	410.1	12.4	10.25	0.94	cloudy/tan
3	F(0847)	1.4	6.51	59.9	422.4	12.4	10.24	0.85	cloudy/pale tan
4	F(0849)	1.7	6.53	55.3	430.5	12.4	10.24	0.79	cloudy/pale tan
5	F(0851)	2.0	6.55	51.2	435.6	12.4	10.24	0.75	cloudy/pale tan
6		.				.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

low flow purge method (7/3/20psi) ~ 60mL/purge ~ 360mL/min

SAMPLER: Yara Morgen (PRINTED NAME) (SIGNATURE)

Spring 2021

Detection Groundwater

Field Sampling Data Sheets

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-5A
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	(E)	SE	S	SW	W	NW	LIGHT	(MEDIUM)	HEAVY
WEATHER:	(SUNNY)	CLOUDY		RAIN		?			**TEMPERATURE:**	(°F) 71 .	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product [Product Thickness]	DT-Water [Water Column]	DTP-DTW	DTB-DTW		[Water Column x Gal/ft] Volume (gal)
4/15/21	13:50	34.40	—	21.36	—	13.04	X 1	2.13
/ /	:	.	.	.	.		X 3	6.38

Gal/ft = (dia./2)² x 0.163 | 1" = 0.041 | (2") = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	[√ if used] √
VOA Glass	4/15/21	14:51	F	3	(40 ml)	(HCl)	(YES)	NO		√
VOA Glass	4/15/21	14:51	F	3	(40 ml)	($Na_2S_2O_3$)	(YES)	NO		√
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L	HNO_3	YES	YES		
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — 6 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011)
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD) OR [ ] WA [ ]
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: 13:58

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Pump/Bailer Inlet Depth: Diss O_2 (mg/l)	Water Quality
0	F(1359)	0.00	5.77	-12.0	1263	14.5	22.45	0.65	Clear/colorless
1	F(1413)	2.13	5.78	5.5	1160	14.3	25.76	0.56	Clear/colorless
2	F(1428)	4.26	5.77	2.5	1159	14.3	27.31	0.52	Clear/colorless
3	F(1442)	6.38	5.77	-9.6	1189	14.6	28.01	0.51	Clear/colorless
4	F(1444)	6.68	5.76	-9.6	1188	14.6	28.00	0.53	Clear/colorless
5	F(1446)	6.98	5.76	-10.1	1193	14.6	28.01	0.52	Clear/colorless
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Standard Purge Method: 11/9/25 psi 550mL/min

SAMPLER: Chris Perra (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-5B
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	(E)	SE	S	SW	W	NW	LIGHT	(MEDIUM)	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN			?	**TEMPERATURE:**	(°F) 54	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW	[Water Column x Gal/ft]	Volume (gal)
4/15/20	15:10	42.40	—	28.77	—	—	X 1	—
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)^2 x 0.163 | 1" = 0.041 | 2" = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	[√ if used] √
VOA Glass	4/15/20	15:41	F	3	(40 ml)	(HCl)	(YES)	NO		√
VOA Glass	4/15/20	15:41	F	3	(40 ml)	$Na_2S_2O_3$	(YES)	NO		√
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L	HNO_3	YES	YES		
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — 6 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011)
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD) OR [ ] WA [ ]
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA

Purge Start Time: 15:13 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	FC(5:14)	0.00	7.26	45.5	619	15.4	28.89	4.63	Clear/colorless
1	FC(5:19)	0.26	7.11	-20.8	622	15.3	28.97	2.23	Cloudy/colorless
2	FC(5:24)	0.52	7.08	-47.8	624	15.2	28.98	2.35	Cloudy/light tan
3	FC(5:29)	0.78	7.07	-53.5	623	15.2	28.98	2.01	Cloudy/light tan
4	FC(5:34)	1.04	7.07	-53.6	625	15.2	28.98	1.92	Cloudy/light tan
5	FC(5:36)	1.09	7.07	-54.2	626	15.2	28.98	1.91	Cloudy/light tan
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Low Flow Purge Method: 20/10/2 spsi ~200 ml/min

SAMPLER: Chris Parra
(PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill
SITE ADDRESS: McMinnville , Oregon
WELL ID: MW-19A
BLIND ID:
DUP ID: NA

WIND FROM:	N	(NE)	E	SE	S	SW	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(°F) 65.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
4/16/21	10:53	32.00	.	8.81	.	23.19	X 1	3.77
/ /	:	.	.	.	.		X 3	11.31

Gal/ft = (dia./2)^2 x 0.163 | 1" = 0.041 | (2") = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	[√ if used] √
VOA Glass	4/16/21	12:15	F	3	(40 ml)	(HCl)	(YES)	NO		
VOA Glass	4/16/21	12:15	F	3	(40 ml)	$Na_2S_2O_3$	(YES)	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/16/21	12:15	F	2	(250) 500 (1L)	(None)	(YES)	NO	NA	
Yellow Glass	4/16/21	12:15	F	1	250, (500) 1L	(H_2SO_4)	(YES)	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/16/21	12:15	F	1	250, (500) 1L	(HNO_3)	(YES)	(YES)		
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 | 10 | Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8260) (8011)
	AMBER - Glass	(8080) (8150) (TOX) OR [X] WA [ ]
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD) OR [ ] WA [ ]
	YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
	RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
	RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
	WHITE - Poly	(Orthophosphate)
	Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA

Purge Start Time: 10:55

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Pump/Bailer Inlet Depth: Diss O_2 (mg/l)	Water Quality
0	F(1056)	0.00	7.35	32.3	302.4	12.1	9.13	4.78	Clear / colorless
1	F(1120)	3.77	7.28	-9.9	326.4	11.7	9.73	1.27	clear / colorless
2	F(1143)	7.54	7.38	-41.0	315.0	11.9	9.81	1.16	clear / colorless
3	F(1206)	11.31	7.40	-50.9	311.1	11.9	9.83	1.31	clear / colorless
4	F(1208)	11.71	7.43	-52.8	311.2	11.9	9.83	1.30	clear / colorless
5	F(1210)	12.01	7.44	-53.4	311.3	11.8	9.83	1.22	clear / colorless
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Standard purge method (7/5/25 mL) ~750 ml/min

SAMPLER: I. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-20B
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	(NE)	E	SE	S	SW	W	NW	LIGHT	(MEDIUM)	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?				

TEMPERATURE: (°F) 49.0 °C [Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW	[Water Column x Gal/ft] Volume (gal)
4/13/21	08:13	37.86	.	2.52	—	—	X 1 .
/ /	:	.	.	.	.		X 3 .

Gal/ft = (dia./2)² x 0.163 | 1" = 0.041 | (2") = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	[√ if used] √
VOA Glass	4/13/21	08:50	F	3	(40 ml)	(HCl)	(YES)	NO		
VOA Glass	4/13/21	08:50	F	3	(40 ml)	($Na_2S_2O_3$)	(YES)	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/13/21	08:50	F	2	(250, 500, 1L)	(None)	(YES)	NO	NA	
Yellow Glass	4/13/21	08:50	F	1	(250), 500, 1L	(H_2SO_4)	(YES)	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/13/21	08:50	F	1	250, (500) 1L	(HNO_3)	(YES)	(YES)		
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 | 10 | Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011)
AMBER - Glass	(8080) (8150) (TOX) OR [X] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD) OR [ ] WA [ ]
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: 08:24 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O_2 (mg/l)	Water Quality
0	F(0824)	0.00	6.82	170.6	778	10.4	2.54	3.92	Clear/colorless
1	F(0834)	0.75	7.28	118.0	634.6	11.1	2.56	0.60	Clear/colorless
2	F(0836)	0.95	7.28	113.9	634.5	11.1	2.56	0.64	clear/colorless
3	F(0838)	(1.15)	7.30	110.2	633.4	11.1	2.56	0.46	Clear/colorless
4	F(0840)	1.35	7.31	108.2	633.2	11.2	2.56	0.47	Clear/colorless
5	F(0842)	1.55	7.32	105.2	632.1	11.2	2.56	0.48	Clear/colorless
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Low flow purge method (20/10/20psi) ~ 400 ml/min

SAMPLER: T. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** FB1
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	(NE)	E	SE	S	SW	W	NW	LIGHT	(MEDIUM)	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(F) 44.0 °C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW	[Water Column x Gal/ft] Volume (gal)
/ /	:	.	.	.	.	.	X 1 .
/ /	:	.	.	.	.		X 3 .

Gal/ft = (dia./2)^2 x 0.163 | 1" = 0.041 | 2" = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other = Transfer

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	[√ if used]
VOA Glass	4/13/21	09:05	G	3 (40 ml)	(HCl)	(YES) NO	(NO)		√
VOA Glass	4/13/21	09:05	G	3 (40 ml)	($Na_2S_2O_3$)	(YES) NO	(NO)		√
Amber Glass	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/13/21	09:05	G	2 (250, 500, 1L)	(None)	(YES) NO	(NO)	NA	√
Yellow Glass	4/13/21	09:05	G	1 250, (500), 1L	(H_2SO_4)	YES	NO		√
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/13/21	09:05	G	1 250, (500), 1L	(HNO_3)	(YES)	(YES)		√
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — 10 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA

Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	(G) 0905	0.00	-	-	-	- .	- .	-	-
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Collected near MW-203 using Lab-Supplied VOC free water

SAMPLER: T. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-20A

SITE ADDRESS: McMinnville , Oregon **BLIND ID:**

DUP ID: NA

WIND FROM:	N	(NE)	E	SE	S	SW	W	NW	LIGHT	(MEDIUM)	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(°F) 45.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
4/13/21	09:33	23.00	.	4.07	.	19.53	X 1	3.18
/ /	:	.	.	.	.		X 3	9.54

Gal/ft = (dia./2)² x 0.163	1" = 0.041	(2") = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth:

Bottle Type	Date	Time	Method §	Amount	Volume	Preservative	Ice	Filter	pH	[√ if used] √
VOA Glass	4/13/21	10:25	F	3	(40 ml)	(HCl)	(YES)	NO		
VOA Glass	4/13/21	10:25	F	3	(40 ml)	($Na_2S_2O_3$)	(YES)	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/13/21	10:25	F	2	(250), 500, (1L)	(None)	(YES)	NO	NA	
Yellow Glass	4/13/21	10:25	F	1	250, (500) 1L	(H_2SO_4)	(YES)	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/13/21	10:25	F	1	250, (500) 1L	(HNO_3)	(YES)	(YES)		
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — 10 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011)
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD) OR [ ] WA [ ]
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA

Purge Start Time: 09:39

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Pump/Bailer Inlet Depth: Diss O_2 (mg/l)	Water Quality
0	F(0939)	0.00	7.27	1088	954	10.8	5.01	9.68	clear/colorless
1	F(0950)	3.20	6.74	13.2	974	10.4	10.18	~~3.1~~ 4.38 x1.1	clear/pale tan
2	F(1000)	6.40	6.75	-1.2	979	10.4	10.99	3.70	clear/colorless
3	F(1010)	9.60	6.76	-6.1	982	10.4	11.95	2.48	clear/colorless
4	F(1014)	10.6	6.74	-8.9	983	10.4	12.02	0.31	clear/colorless
5	F(1016)	11.1	6.75	-10.4	982	10.4	12.19	0.29	clear/colorless
6	F(1018)	11.6	6.76	-11.2	982	10.4	12.21	0.31	clear/colorless

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Standard purge (11/9/20psi) ~1 L/min

SAMPLER: K. Kingon (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** DUP1

SITE ADDRESS: McMinnville , Oregon **BLIND ID:**

DUP ID: NA

WIND FROM:	N	(NE)	E	SE	S	SW	W	NW	LIGHT	(MEDIUM)	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(°F 45 . °C)	

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW	[Water Column x Gal/ft]	Volume (gal)
/ /	:	.	.	.	.	.	X 1	.
/ /	:	.	.	.	.	.	X 3	.

Gal/ft = (dia./2)^2 x 0.163	1" =	0.041	(2" =)	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth:

Bottle Type	Date	Time	Method §	Amount	Volume	Preservative	Ice	Filter	pH	[√ if used] √
VOA Glass	4/13/21	10 :30	F	3	(40 ml)	(HCl)	(YES)	NO		✓
VOA Glass	4/13/21	10 :30	F	3	(40 ml)	($Na_2S_2O_3$)	(YES)	NO		✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/13/21	10 :30	F	2	(250, 500, 1L)	(None)	(YES)	(NO)	NA	✓
Yellow Glass	4/13/21	10 :30	F	1	250, (500), 1L	(H_2SO_4)	(YES)	(NO)		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/13/21	10 : 30	F	1	250, (500), 1L	(HNO_3)	(YES)	(YES)		✓
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 (10) Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8260) (8011) OR [ ] WA [ ]
	AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
	YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
	RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
	RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
	WHITE - Poly	(Orthophosphate)
	Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	F (1030)	0.00				.	.	.	
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Collected @ MW-20A

SAMPLER: K. Kingen (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** P-05A

SITE ADDRESS: McMinnville , Oregon **BLIND ID:**

DUP ID: NA

WIND FROM:	N	(NE)	E	SE	S	SW	W	NW	LIGHT	(MEDIUM)	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(F) 50 .0 °C	

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
4/13/21	10 :48	21.44	.	3.55	.	17.89	X 1	0 .73
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)² x 0.163 | (1") = 0.041 | 2" = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	[√ if used] √
VOA Glass	/ /	:		40 ml	HCl	YES	NO		
VOA Glass	/ /	:		40 ml	$Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/13/21	11 :40	~~B~~ B	2 (250, 500, 1L)	None	(YES)	NO	NA	
Yellow Glass	4/13/21	11 :40	B	1 250, (500) 1L	H_2SO_4	(YES)	NO		
Red Total Poly	/ /	:		125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/13/21	11 :40	B	1 250, 500 1L	HNO_3	YES	YES		
White Poly	/ /	:		250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:		100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — 4 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011)
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD) OR [ ] WA [ ]
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA

Purge Start Time: 10 :40

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Pump/Bailer Inlet Depth: Diss O_2 (mg/l)	Water Quality
0	B(1050)	0.00	6.83	10.2	912	11.5	4.98	1 .19	Clear/colorless
1	B(1103)	0 .75	6.84	28.2	859	11.1	10.95	0 .39	Clear/colorless
2	B(1117)	1 .50	6.42	20.1	858	11.2	12.51	0 .38	Clear/colorless
3	B(1135)	2 .25	6.45	22.8	861	11.2	13.01	0 .55	clear/colorless
4	B(1137)	2 .38	6.44	23.5	861	11.1	13.16	0 .56	clear/colorless
5	B(1139)	2 .51	6.42	25.0	865	11.1	13.37	0 .58	clear/colorless
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Standard purge method ~250 ml/min

SAMPLER: I. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill
SITE ADDRESS: McMinnville , Oregon
WELL ID: P-06A
BLIND ID:
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY	CLOUDY	RAIN	?						

TEMPERATURE: F 48.0 °C [Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
4/13/21	09:48	21.82	.	5.32	.	16.50	X 1	0.67
4/14/21	08:26	.	.	15.86	.		X 3	.

Gal/ft = (dia./2)^2 x 0.163 | 1" = 0.041 | 2" = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	√ [√ if used]
VOA Glass	/ /	:			40 ml	HCl	YES	NO		
VOA Glass	/ /	:			40 ml	$Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/14/21	08:50	B	2	250, 500, 1L	None	YES	NO	NA	✓
Yellow Glass	4/14/21	08:50	B	1	250, 500, 1L	H_2SO_4	YES	NO		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/14/21	08:50	B	1	250, 500, 1L	HNO_3	YES	YES		✓
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 | 4 | Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011)
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD) OR [ ] WA [ ]
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA

Purge Start Time: 09:58

Pump/Bailer Inlet Depth:

	Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
4/13/21	0	B(0959)	0.00	6.39	22.0	950	11.7	7.07	1.40	Cloudy/light tan
	1	B(1012)	0.67	6.88	18.0	923	11.4	13.82	1.16	Cloudy/light tan
	2	B(1026)	1.34	6.84	-34.8	932	12.8	18.32	1.10	Clearing/colorless
	3	B(1031)	1.42	6.80	-36.1	930	12.8	21.82	1.06	Cloudy/~~light~~ light tan
4/14/21	4	B(0845)	1.62	6.82	11.6	944	11.7	16.86	1.60	Cloudy/light tan
	5		.	.			.	.	.	
	6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Standard purge method (~200 ml/min)
Well dewatered at 1031 On 4/13/2021. Returned on 4/14/2021 to sample

SAMPLER: I. Hultquist
(PRINTED NAME)

(SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** P-07A
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	(NE)	E	SE	S	SW	W	NW	LIGHT	(MEDIUM)	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN			?	**TEMPERATURE:**	(55 .0 °C	

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW	[Water Column x Gal/ft]	Volume (gal)
4/13/21	12 :33	28.48	.	14.38	.	14.10	X 1	2 .29
/ /	:	.	.	.	.		X 3	6 .87

Gal/ft = (dia./2)^2 x 0.163 | 1" = 0.041 | (2") = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	[√ if used] √
VOA Glass	/ /	:			40 ml	HCl	YES	NO		
VOA Glass	/ /	:			40 ml	$Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/13/21	13 :35	B	2	(250, 500, 1L)	(None)	(YES)	NO	NA	
Yellow Glass	4/13/21	13 :35	B	1	250, (500), 1L	(H_2SO_4)	(YES)	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/13/21	13 :35	B	1	250, (500), 1L	(HNO_3)	(YES)	(YES)		
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — 4 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [ ] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: 12 :35 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O_2 (mg/l)	Water Quality
0	B(1237)	0.00	6.20	132.6	211.6	12 .6	14.68	2 .65	clear/colorless
1	B(1253)	2 .30	5.55	167.2	190.4	12 .3	17.76	2 .33	clear/colorless
2	B(1309)	4 .60	5.62	178.1	189.1	12 .3	18.52	2 .23	clear/colorless
3	B(1326)	6 .90	5.80	135.6	193.6	12 .3	18.83	2 .00	clear/colorless
4	B(1338)	7 .20	5.82	135 1	194.7	12 .3	18.85	2 .00	clear/colorless
5	B(1350)	7 .50	5.82	133.6	195.1	12 .3	18.87	2 .02	clear/colorless
6		.	.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Standard purge method (~600ml/min)

SAMPLER: I Hultquist (PRINTED NAME) (SIGNATURE)

Spring 2021

Surface Water

Field Sampling Data Sheets

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** SPR SW-1
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	~~LIGHT~~	MEDIUM	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(F) 60.0 °C	

(Circle appropriate units)

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
/ /	:	.	.	.	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other = SS dipper

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	√
VOA Glass	4/14/21	13:30	G	3	40 ml	(HCl)	(YES)	(NO)		
VOA Glass	/ /	:			40 ml	$Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/14/21	13:30	G	4	250, 500, (1L)	(None)	(YES)	(NO)	NA	
Yellow Glass	4/14/21	13:30	G	3	250, (500), 1L	(H_2SO_4)	(YES)	(NO)		
Red Total Poly	4/14/21	13:30	G	2	125, 250, (500)	(HNO_3)	(YES)	(NO)		
Red Diss. Poly	/ /	:			250, 500, 1L	HNO_3	YES	YES		
White Poly	4/14/21	13:30	G	1	(250), 500, 1L	(None)	(YES)	(YES)		
Clear Poly	4/14/21	13:30	G	2	(100) 250, 500	$Na_2S_2O_3$	YES	NO		
White no acid, Yellow H2SO4, Red HNO3				15	Total Bottles (include duplicate count):					

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	G (1330)	0.00	6.73	109.8	105.1	12.8	-	8.45	Clear / ~~Cloudy~~ colorless IA
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Grab sample with Stainless Steel dipper

SAMPLER: J. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** SYR SW-2
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	(NE)	E	SE	S	SW	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(F) 60.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		[Water Column x Gal/ft] Volume (gal)
/ /	:	.	.	.	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other = Grab with SS dipper

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	√
VOA Glass	4/14/21	11 :30	G	3	40 ml	HCl	YES	NO		
VOA Glass	/ /	:			40 ml	$Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/14/21	11 :30	G	4	(250), 500, (1L)	None	YES	NO	NA	
Yellow Glass	4/14/21	11 :30	G	3	250, (500), 1L	H_2SO_4	YES	NO		
Red Total Poly	4/14/21	11 :30	G	2	125, 250, (500)	HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L	HNO_3	YES	YES		
White Poly	4/14/21	11 :30	G	1	(250), 500, 1L	None	YES	YES		
Clear Poly	4/14/21	11 :30	G	2	(100), 250, 500	$Na_2S_2O_3$	YES	NO		
White no acid, Yellow H2SO4, Red HNO3				15	Total Bottles (include duplicate count):					

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	~~(8260)~~ (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O_2 (mg/l)	Water Quality
0	G (1130)	0.00	7.22	75.5	131.8	13.6	-	11.50	Clear / ~~Cloudy~~ Colorless IH
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Grab Sample with SS dipper

SAMPLER: I. Hultquist
(PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** SYR MW-12A
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	(NE)	E	SE	S	SW	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(F) 60.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
/ /	:	.	.	.	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = $(dia./2)^2$ x 0.163	1" =	0.041	2" =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other = Grab with SS dipper

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	√
VOA Glass	4/14/21	12:30	G	3	(40 ml)	(HCl)	(YES)	(NO)		
VOA Glass	/ /	:			40 ml	$Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/14/21	12:30	G	4	(250, 500, (1L))	(None)	(YES)	(NO)	NA	
Yellow Glass	4/14/21	12:30	G	3	250, (500), 1L	(H_2SO_4)	(YES)	(NO)		
Red Total Poly	4/14/21	12:30	G	2	125, 250, (500)	(HNO_3)	(YES)	(NO)		
Red Diss. Poly	/ /	:			250, 500, 1L	HNO_3	YES	YES		
White Poly	4/14/21	12:30	G	1	(250), 500, 1L	(None)	(YES)	(YES)		
Clear Poly	4/14/21	12:30	G	2	(100), 250, 500	($Na_2S_2O_3$)	(YES)	(NO)		

White no acid, Yellow H2SO4, Red HNO3 — 15 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O_2 (mg/l)	Water Quality
0	G (1230)	0.00	7.15	72.6	115.2	11.8	—	12.64	clear/colorless
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Grab with SS dipper

SAMPLER: I. Hultquist (PRINTED NAME) (SIGNATURE)

Spring 2021

Leachate Management System Liquids

Field Sampling Data Sheets

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** Leach Pond

SITE ADDRESS: McMinnville , Oregon **BLIND ID:**

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)	CLOUDY	RAIN	?					**TEMPERATURE:**	(F) 53 .0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW	[Water Column x Gal/ft] Volume (gal)
/ /	:	.	.	.	.	.	X 1 .
/ /	:	.	.	.	.	.	X 3 .

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other = Grab

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	[√ if used] √
VOA Glass	4/15/21	09:10	G	3	(40 ml)	(HCl)	(YES)	NO		
VOA Glass	/ /	:			40 ml	$Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/15/21	09:10	G	2	250, 500, (1L)	None	(YES)	NO	NA	
Yellow Glass	4/15/21	09:10	G	2	250, (500), 1L	(H_2SO_4)	(YES)	NO		
Red Total Poly	4/15/21	09:10	G	1	125, 250, (500)	(HNO_3)	(YES)	NO		
Red Diss. Poly	4/15/21	09:10	G	1	250, (500), 1L	(HNO_3)	(YES)	(YES)		
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — 9 — Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA

Purge Start Time: :

Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (C)	DTW	Diss O_2 (mg/l)	Water Quality
0	G (Grab)	0.00	8.35	161.6	10043	14.2	-	0.73	Clear/Dark brown
1		.	.			.	.	.	Mild odor
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Grab from truck hauling pipe port
Pond liquid level 14.9"

SAMPLER: I. Hultz

(PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** FB3
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(°F 58.0 °C)	

(Circle appropriate units)

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
/ /	:	.	.	.	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other = Turbidity

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	√
VOA Glass	4/15/21	09:45	G	3	(40 ml)	(HCl)	YES	NO		
VOA Glass	/ /	:			40 ml	$Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/15/21	09:45	G	2	250, 500, (1L)	(None)	YES	NO	NA	
Yellow Glass	4/15/21	09:45	G	2	250, (500), 1L	(H_2SO_4)	YES	NO		
Red Total Poly	4/15/21	09:45	G	1	125, 250, (500)	(HNO_3)	YES	NO		
Red Diss. Poly	4/15/21	09:45	G	1	250, (500), 1L	(HNO_3)	YES	YES		
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — 9 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	(G 0945)	0.00	~	~	~	~ .	~	~	~
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Collected near LPond LDS using lab supplied DI water

SAMPLER: D. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224

Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** LPond LDS

SITE ADDRESS: McMinnville , Oregon **BLIND ID:**

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		**TEMPERATURE:**	F 55.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
/ /	:	.	.	.	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)^2 x 0.163	1" =	0.041	2" =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	√
VOA Glass	4/15/21	10:00	A	3	40 ml	HCl	YES	NO		
VOA Glass	/ /	:			40 ml	$Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/15/21	10:00	A	2	250, 500, 1L	None	YES	NO	NA	
Yellow Glass	4/15/21	10:00	A	2	250, 500, 1L	H_2SO_4	YES	NO		
Red Total Poly	4/15/21	10:00	A	1	125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/15/21	10:00	A	1	250, 500, 1L	HNO_3	YES	YES		
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 9 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	A(1000)	0.00	6.97	4.5	822	14.4	–	0.84	Clear/Amber
1		.	.			.	.	.	Mild odor
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Liquid level 7.5"

SAMPLER: Ichultquist (PRINTED NAME) [signature] (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** 1 GP
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY	CLOUDY	RAIN	?					**TEMPERATURE:**	°F 60 . 0	°C

(Circle appropriate units)

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]	[Water Column x Gal/ft]	Volume (gal)
/ /	:	.	.			.	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	[√ if used] √
VOA Glass	4/15/21	10 :30	A	3	40 ml	HCl	YES	NO		
VOA Glass	/ /	:			40 ml	$Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/15/21	10 :30	A	2	250, 500 1L	None	YES	NO	NA	
Yellow Glass	4/15/21	10 :30	A	4	250, 500, 1L	H_2SO_4	YES	NO		
Red Total Poly	4/15/21	10 :30	A	1	125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/15/21	10 :30	A	1	250, 500, 1L	HNO_3	YES	YES		
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — 11 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [ ] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA

Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O_2 (mg/l)	Water Quality
0	A (1030)	0.00	7.60	29.7	21172	31.9	-	1.31	Dark Brown/clear
1		.	.			.	.	.	Odor
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

liquid level 17.0''

SAMPLER: T. Hultgren (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** 4/55
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	(SUNNY)	CLOUDY	RAIN	?							

TEMPERATURE: (F) 60.0 °C (Circle appropriate units)

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW	[Water Column x Gal/ft] Volume (gal)
/ /	:	.	.	.	.	.	X 1 .
/ /	:	.	.	.	.	.	X 3 .

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	√
VOA Glass	4/15/21	11:00	A	3 (40 ml)	(HCl)	(YES)	NO		
VOA Glass	/ /	:		40 ml	$Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/15/21	11:00	A	2 (250, 500, 1L)	(None)	(YES)	NO	NA	
Yellow Glass	4/15/21	11:00	A	4 (250) 500, 1L	(H_2SO_4)	(YES)	NO		
Red Total Poly	4/15/21	11:00	A	1 125, 250, (500)	(HNO_3)	(YES)	NO		
Red Diss. Poly	4/15/21	11:00	A	1 250, (500), 1L	(HNO_3)	(YES)	(YES)		
White Poly	/ /	:		250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:		100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 11 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [ ] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O_2 (mg/l)	Water Quality
0	A(1100)	0.00	6.51	-65.1	1955	32.0	-	1.83	Clear/light yellow
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

liquid level 17.6'

SAMPLER: (PRINTED NAME) I. Hultqvist (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** 6/MP

SITE ADDRESS: McMinnville , Oregon **BLIND ID:**

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	LIGHT	(MEDIUM)	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(F) 62.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW	[Water Column x Gal/ft] Volume (gal)
/ /	:	.	.	.	.	.	X 1 .
/ /	:	.	.	.	.	.	X 3 .

Gal/ft = (dia./2)² x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	[√ if used] √
VOA Glass	4/15/21	12:30	A	3	(40 ml)	(HCl)	(YES)	NO		
VOA Glass	/ /	:			40 ml	$Na_2S_2O_3$	YES	NO		
Amber Glass	4/15/21	12:30			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/15/21	12:30	A	2	250, 500 (1L)	(None)	(YES)	NO	NA	
Yellow Glass	4/15/21	12:30	A	4	(250) 500, 1L	(H_2SO_4)	(YES)	NO		
Red Total Poly	4/15/21	12:30	A	1	125, 250, (500)	(HNO_3)	(YES)	NO		
Red Diss. Poly	4/15/21	12:30	A	1	250 (500) 1L	(HNO_3)	(YES)	(YES)		
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 11 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O_2 (mg/l)	Water Quality
0	A (1230)	0.00	7.12	-44.5	14983	31.6	-	0.52	light Brown/
1		.	.			.	.	.	clear Strong
2		.	.			.	.	.	odor
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Liquid level 32.5 "

SAMPLER: I. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** 6|7S

SITE ADDRESS: McMinnville , Oregon **BLIND ID:**

DUP ID: NA

WIND FROM:	N	(NE)	E	SE	S	SW	W	NW	LIGHT	(MEDIUM)	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN			?	**TEMPERATURE:**	(°F) 68 (°C)	

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW	[Water Column x Gal/ft]	Volume (gal)
/ /	:	.	.	.	.		X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	[√ if used] √
VOA Glass	4/15/21	13 :00	A	3	40 ml	(HCl)	(YES)	NO		
VOA Glass	/ /	:			40 ml	$Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/15/21	13 :00	A	2	250, 500, (1L)	None	(YES)	NO	NA	
Yellow Glass	4/15/21	13 :00	A	4	(250), 500, 1L	(H_2SO_4)	(YES)	NO		
Red Total Poly	4/15/21	13 :00	A	1	125, 250, (500)	(HNO_3)	(YES)	NO		
Red Diss. Poly	4/15/21	13 :00	A	1	250, (500), 1L	(HNO_3)	(YES)	(YES)		
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 11 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	A (1300)	0.00	6.63	-50.7	5071	29.9	-	1.98	clear/lightyellow
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Liquid level 11.4' Ran sump repeatedly due to low purge volume

SAMPLER: I. Hedquist
(PRINTED NAME)

(SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** BP
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY	CLOUDY	RAIN	?							

TEMPERATURE: °F 60.0 °C (Circle appropriate units)

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW	[Water Column x Gal/ft] Volume (gal)
/ /	:	.	.	.	.	.	X 1
/ /	:	.	.	.	.	.	X 3 .

Gal/ft = (dia./2)^2 x 0.163 | 1" = 0.041 | 2" = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	[√ if used] √
VOA Glass	4/15/21	11 : 30	A	3	40 ml	HCl	YES	NO		
VOA Glass	/ /	:			40 ml	$Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/15/21	11 : 30	A	2	250, 500, 1L	None	YES	NO	NA	
Yellow Glass	4/15/21	11 : 30	A	4	250, 500, 1L	H_2SO_4	YES	NO		
Red Total Poly	4/15/21	11 : 30	A	1	125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/15/21	11 : 30	A	1	250, 500, 1L	HNO_3	YES	YES		
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 | 11 | Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA

Purge Start Time: :

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Pump/Bailer Inlet Depth: Diss O_2 (mg/l)	Water Quality
0	A (1130)	0.00	7.48	-224.1	16835	31.1	-	1.01	Dark Brown / clear
1		.	.			.	.	.	Strong odor
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Liquid level 12.41'

SAMPLER: T. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** 68
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		**TEMPERATURE:**	(F) 60.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
/ /	:	.	.	.	.	.	X 1	.
/ /	:	.	.	.	.	.	X 3	.

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	[√ if used] √
VOA Glass	4/15/21	12:00	A	3	40 ml	HCl	YES	NO		
VOA Glass	/ /	:			40 ml	$Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/15/21	12:00	A	2	250, 500, 1L	None	YES	NO	NA	
Yellow Glass	4/15/21	12:00	A	4	250, 500, 1L	H_2SO_4	YES	NO		
Red Total Poly	4/15/21	12:00	A	1	125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/15/21	12:00	A	1	250, 500, 1L	HNO_3	YES	YES		
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — 11 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O_2 (mg/l)	Water Quality
0	A (1200)	0.00	7.11	29.7	2220	28.7	-	2.65	clear/colorless
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Liquid level 11.4"

SAMPLER: I. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** OFP

SITE ADDRESS: McMinnville , Oregon **BLIND ID:**

DUP ID: NA

WIND FROM:	N	(NE)	E	SE	S	SW	W	NW	LIGHT	(MEDIUM)	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(°F) 65.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
/ /	:						X 1	
/ /	:						X 3	

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	[√ if used] √
VOA Glass	4/15/21	14 : 15		3	(40 ml)	(HCl)	(YES)	NO		
VOA Glass	/ /	:			40 ml	$Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/15/21	14 : 15		2	250, 500 (1L)	(None)	(YES)	NO	NA	
Yellow Glass	4/15/21	14 : 15		4	(250) 500, 1L	(H_2SO_4)	(YES)	NO		
Red Total Poly	4/15/21	14 : 15		1	125, 250, (500)	(HNO_3)	(YES)	NO		
Red Diss. Poly	4/15/21	14 : 15		1	250, (500) 1L	(HNO_3)	(YES)	(YES)		
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — 11 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	A (1415)	0.00	7.15	-86.6	11507	26.6	—	0.42	Cloudy / Dark brown
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

liquid level 43.0 "

SAMPLER: I. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** 9S
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	(NE)	E	SE	S	SW	W	NW	LIGHT	(MEDIUM)	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(°F 68.0)	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
/ /	:	.	.	.	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	[√ if used] √
VOA Glass	4/15/21	14:45	A	3	40 ml (HCl)	(YES)	NO		
VOA Glass	/ /	:			40 ml $Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
White Poly	4/15/21	14:45	A	2	250, 500, (1L) None	(YES)	NO	NA	
Yellow Glass	4/15/21	14:45	A	4	250, 500, 1L H_2SO_4	(YES)	NO		
Red Total Poly	4/15/21	14:45	A	1	125, 250, 500 HNO_3	(YES)	NO		
Red Diss. Poly	4/15/21	14:45	A	1	250, (500), 1L HNO_3	(YES)	(YES)		
White Poly	/ /	:			250, 500, 1L None	YES	YES		
Clear Poly	/ /	:			100, 250, 500 $Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 | 11 | Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method § [Select A-G]	Purged (gal) [Cumulative Totals]	pH	ORP	E Cond (µS)	°F Temp (C) [Circle units]	DTW	Diss O_2 (mg/l)	Water Quality [Clarity, Color]
0	A(1445)	0.00	6.57	-68.7	4005	23.9	-	1.06	clear / light yellow
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

[Casing]

Liquid level 13.01'

SAMPLER: I. Hultquist (PRINTED NAME) (SIGNATURE)

Fall 2021

Detection Groundwater

Field Sampling Data Sheets

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-5A
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	(N)	NE	E	SE	S	SW	W	NW	LIGHT	(MEDIUM)	HEAVY
WEATHER:	(SUNNY)	CLOUDY	RAIN	?	**TEMPERATURE:**	(°F) 50.0 °C				

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		[Water Column x Gal/ft] Volume (gal)
11/17/21	12 :55	34.40	.	16.10	.	18.30	X 1	2.98
/ /	:	.	.	.	.		X 3	8.94

Gal/ft = (dia./2)² x 0.163	1" =	0.041	(2")	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	√
VOA Glass	11/17/21	14:15	F	3	(40 ml)	(HCl)	(YES)	(NO)		√
VOA Glass	11/17/21	14:15	F	3	(40 ml)	($Na_2S_2O_3$)	(YES)	(NO)		√
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L	HNO_3	YES	YES		
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — 6 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: 12 :56 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	F(1257)	0.00	6.89	119.2	1409	17.7	16.92	8.51	clear/colorless
1	F(1318)	3.00	5.81	22.3	1207	14.6	25.08	3.23	clear/colorless
2	F(1341)	6.00	5.78	23.8	1213	14.5	26.50	1.68	clear/colorless
3	F(1406)	9.00	5.80	23.5	1216	14.5	27.62	0.95	clear/colorless
4	F(1408)	9.30	5.80	22.5	1217	14.5	27.78	0.87	clear/colorless
5	F(1410)	9.60	5.80	22.1	1219	14.5	27.83	0.85	clear/colorless
6	F(1412)	9.90	5.80	21.9	1220	14.5	27.88	0.81	clear/colorless

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Standard purge (11/9/25psi) ~ 600ml/min

SAMPLER: I. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-12A
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		**TEMPERATURE:**	°F . °C	

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
11/19/21	09:11	27.60	.	6.16	.	21.44	X 1	3.49
/ /	:	.	.	.	.		X 3	10.47

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	[√ if used] √
VOA Glass	11/19/21	10:30	F	3	40 ml / HCl	YES	NO		✓
VOA Glass	11/19/21	10:30	F	3	40 ml / $Na_2S_2O_3$	YES	NO		✓
Amber Glass	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/19/21	10:30	F	2	250, 500, 1L / None	YES	NO	NA	✓
Yellow Glass	11/19/21	10:30	F	2	250, 500, 1L / H_2SO_4	YES	NO		✓
Red Total Poly	/ /	:			125, 250, 500 / HNO_3	YES	NO		
Red Diss. Poly	11/19/21	10:30	F	1	250, 500, 1L / HNO_3	YES	YES		
White Poly	/ /	:			250, 500, 1L / None	YES	YES		
Clear Poly	/ /	:			100, 250, 500 / $Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — 11 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH3) (NO_2/NO_3) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (C)	DTW	Diss O_2 (mg/l)	Water Quality
0	F(0914)	0.00	6.12	134.0	347	14.8	6.24	9.69	clear/colorless
1	F(0934)	3.50	6.52	138.1	341	11.00	7.56	9.55	clear/colorless
2	F(1003)	7.00	6.49	157.6	349	11.00	7.56	9.86	clear/colorless
3	F(1023)	10.50	6.47	166.9	343	11.00	7.58	10.37	clear/colorless
4	F(1025)	10.90	6.47	168.6	343	11.00	7.58	10.40	clear/colorless
5	F(1027)	11.30	6.48	167.9	343	11.00	7.58	10.43	clear/colorless
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Standard purge (10/4/25 psi) ~ 800 ml/min

SAMPLER: J. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-12B
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	(NW)	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY		(CLOUDY)		RAIN		?		**TEMPERATURE:** (°F) 45.0 °C		

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
11/19/21	10:41	46.20	.	12.25	.	—	X 1	-
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	(2") = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	√
VOA Glass	11/19/21	11:05	F	3	(40 ml)	(HCl)	YES (NO)		✓
VOA Glass	11/19/21	11:05	F	3	(40 ml)	$Na_2S_2O_3$	(YES) NO		✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/19/21	11:05	F	2	(250, 500, 1L)	(None)	(YES) NO	NA	✓
Yellow Glass	11/19/21	11:05	F	2	(250, 500, 1L)	(H_2SO_4)	(YES) NO		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	11/19/21	11:05	F	1	250, 500, 1L	(HNO_3)	(YES) (YES)		✓
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — 11 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: 10:44 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	F(1045)	0.00	6.84	142.0	691	11.6	12.41	9.26	clear/colorless
1	F(1050)	0.50	7.01	-3.2	467	11.3	12.52	2.15	cloudy/light tan
2	F(1055)	1.0	7.09	-26.7	489	11.4	12.54	1.73	Cloudy/light tan
3	F(1057)	1.20	7.11	-28.9	491	11.4	12.54	1.67	Cloudy/light tan
4	F(1059)	1.40	7.12	-30.4	493	11.4	12.54	1.67	cloudy/light tan
5	F(1101)	1.60	7.13	-31.3	494	11.4	12.54	1.68	Cloudy/light tan
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Low flow purge Method (11/9/25 psi) ~ 375ml/min.

SAMPLER: J. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-14A
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	(N)	NE	E	SE	S	SW	W	NW	LIGHT	(MEDIUM)	HEAVY
WEATHER:	(SUNNY)	CLOUDY	RAIN	?	**TEMPERATURE:**	(F) 52.0 °C				

(Circle appropriate units)

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
11/17/21	:	23.60	.	6.19	.	17.41	X 1	2.83
/ /	:	.	.	.	.		X 3	8.49

Gal/ft = (dia./2)^2 x 0.163	1" =	0.041	2" =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	√
VOA Glass	11/17/21	15:25	F	3	40 ml	(HCl)	(YES)	(NO)		✓
VOA Glass	11/17/21	15:25	F	3	40 ml	($Na_2S_2O_3$)	(YES)	(NO)		✓
Amber Glass	/ /	[illegible] :			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/17/21	15:25	F	2	(250) 500, (1L)	(None)	(YES)	(NO)	NA	✓
Yellow Glass	11/17/21	15:25	F	2	(250), 500, 1L	(H_2SO_4)	(YES)	(NO)		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	11/17/21	15:25	F	1	250, (500), 1L	(HNO_3)	(YES)	(YES)		✓
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 11 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: 14:29 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	F(1430)	0.00	7.15	26.0	493	12.0	6.48	8.77	clear/colorless
1	F(1447)	2.85	6.25	155.9	305	11.5	6.44	6.73	clear/colorless
2	F(1504)	5.70	6.17	184.2	304	11.5	6.45	6.71	clear/colorless
3	F(1521)	8.55	6.18	197.2	301	11.6	6.47	6.69	clear/colorless
4	F(1523)	8.85	6.17	197.8	300	11.6	6.47	6.70	clear/colorless
5		.	.			.	.	.	
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Standard purge method (11/9/20psi) ~ 600ml/min

SAMPLER: I. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-1413
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	(NW)	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY		(CLOUDY)		(RAIN)		?		**TEMPERATURE:**	(F) 44.0 °C	

(Circle appropriate units)

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		[Water Column x Gal/ft] Volume (gal)
11/18/21	08:08	44.60	.	8.54	.	—	X 1	—
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)² X 0.163: 1" = 0.041 (2") = 0.163 3" = 0.367 4" = 0.653 6" = 1.469 10" = 4.080 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	[√ if used] √
VOA Glass	11/18/21	08:35	F	3 (40 ml)	(HCl)	(YES)	(NO)		✓
VOA Glass	11/18/21	08:35	F	3 (40 ml)	($Na_2S_2O_3$)	YES	(NO)		✓
Amber Glass	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/18/21	08:35	F	2 (250, 500, 1L)	(None)	(YES)	(NO)	NA	✓
Yellow Glass	11/18/21	08:35	F	2 (250, 500, 1L)	(H_2SO_4)	(YES)	(NO)		✓
Red Total Poly	/ /	:		125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	11/18/21	08:35	F	1 (250, 500, 1L)	(HNO_3)	(YES)	(YES)		✓
White Poly	/ /	:		250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:		100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — 11 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: 08:11 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	F(0812)	0.00	7.03	199.6	461.7	10.8	8.94	6.85	clear/colorless
1	F(0819)	0.50	7.36	-36.1	544.1	10.9	9.13	1.01	clear/light tan
2	F(0826)	1.00	7.41	-41.2	535.6	10.9	9.13	2.27	clear/light tan
3	F(0828)	1.15	7.42	-45.5	535.1	10.9	9.13	2.21	clear/light tan
4	F(0830)	1.30	7.42	-42.7	533.6	10.9	9.13	2.20	clear/light tan
5		.	.			.	.	.	
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Low flow purge method (11/9/25 psi) ~300 ml/min

SAMPLER: I Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** DUP3
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	(NW)	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY		(CLOUDY)		(RAIN)		?		**TEMPERATURE:**	(°F) / 4.0 °C	

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
/ /	:	.	.	.	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)^2 x 0.163	1" =	0.041	2" =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	√
VOA Glass	11/19/21	08:40	F	3	(40 ml)	(HCl)	(YES)	(NO)		√
VOA Glass	11/18/21	08:40	F	3	(40 ml)	($Na_2S_2O_3$)	(YES)	(NO)		√
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/18/21	08:40	F	2	(250) 500 (1L)	(None)	(YES)	(NO)	NA	√
Yellow Glass	11/18/21	08:40	F	2	(250) 500, 1L	(H_2SO_4)	(YES)	(NO)		√
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	11/18/21	08:40	F	1	250, 500, 1L	(HNO_3)	(YES)	(YES)		√
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH$_3$) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0		0.00	.			.	.	.	
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Collected @ MW-14B

SAMPLER: T. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-15A

SITE ADDRESS: McMinnville , Oregon **BLIND ID:**

DUP ID: NA

WIND FROM:	(N)	NE	E	SE	S	SW	W	NW	LIGHT	(MEDIUM)	HEAVY
WEATHER:	SUNNY	(CLOUDY)	RAIN	?	**TEMPERATURE:**	(40 .0 °C)				

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
11/17/21	10 :40	24 .00	.	8 .42	.	15.58	X 1	2 .53
/ /	:	.	.	.	.		X 3	7 .59

Gal/ft = (dia./2)^2 x 0.163	1" =	0.041	(2")	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	√
VOA Glass	11/17/21	11 :25	F	3	(40 ml)	HCl	(YES)	(NO)		✓
VOA Glass	11/17/21	11 :25	F	3	(40 ml)	$Na_2S_2O_3$	(YES)	(NO)		✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/17/21	11 :25	F	2	(250), 500, (1L)	None	(YES)	(NO)	NA	✓
Yellow Glass	11/17/21	11 :25	F	2	(250), 500, 1L	(H_2SO_4)	(YES)	(NO)		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	11/17/21	11 :25	F	1	250, (500), 1L	(HNO_3)	(YES)	(YES)		✓
White Poly	/ /	:	~~F~~ FM	~~1~~ 1M	250, (500), 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — 11 — Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: 10 : 43 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	F(1043)	0.00	7.05	109.8	240	10.8	9.82	11.30	Clear/colorless
1	F(1054)	2 .60	6.34	163.6	207	15.1	15.22	10.31	Cloudy/light tan
2	F(1105)	5 .20	6.17	187.9	208	14.9	16.81	9.55	Cloudy/tan
3	F(1116)	7 .80	6.19	196.8	199	14.8	18.13	9.68	Cloudy/tan
4	F(1118)	8 .10	6.20	202.0	199	14.8	18.37	9.66	Cloudy/tan
5	F(1120)	8 .40	6.21	201.5	197	14.8	18.49	9.63	Cloudy/tan
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Standard purge (11/9/21) ~ 1050 ml/min

SAMPLER: T. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-15B
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	(N)	NE	E	SE	S	SW	W	NW	LIGHT	(MEDIUM)	HEAVY
WEATHER:	(SUNNY)	CLOUDY	RAIN	?	**TEMPERATURE:**	(°F) 48.0 °C				

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
11/17/21	11:43	45.95	.	14.90	.	-	X 1	-
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)² x 0.163	1" =	0.041	(2") =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	√
VOA Glass	11/17/21	12:05	F	3	(40 ml)	(HCl)	YES	(NO)		✓
VOA Glass	11/17/21	12:05	F	3	(40 ml)	($Na_2S_2O_3$)	(YES)	NO		✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/17/21	12:05	F	2	(250, 500, 1L)	(None)	(YES)	(NO)	NA	✓
Yellow Glass	11/17/21	12:05	F	2	(250, 500, 1L)	(H_2SO_4)	(YES)	NO		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	11/17/21	12:05	F	1	250, (500) 1L	(HNO_3)	(YES)	(YES)		✓
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — 11 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: 11:44 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	F(1146)	0.00	6.90	153.1	909	13.1	15.01	7.30	clear/colorless
1	F(1152)	0.50	6.78	64.4	894	13.5	15.02	1.21	clear/light tan
2	F(1200)	1.00	6.96	17.8	870	13.5	15.02	0.63	clear/colorless
3	F(1202)	1.20	6.97	15.6	868	13.5	15.02	0.60	clear/colorless
4	F(1204)	1.40	6.98	13.7	865	13.5	15.02	0.59	clear/colorless
5		.	.			.	.	.	
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Low flow purge Method (11/9/25psi) ~450 ml/min

SAMPLER: T. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** FB2
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	(N)	NE	E	SE	S	SW	W	NW	LIGHT	(MEDIUM)	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(°F) 48.0 °C	

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
/ /	:	.	.	.	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)^2 x 0.163 | 1" = 0.041 | 2" = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other = Transfer

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	√
VOA Glass	11/17/21	12:20	G	3	(40 ml)	HCl	(YES)	(NO)		√
VOA Glass	11/17/21	12:20	G	3	(40 ml)	$Na_2S_2O_3$	(YES)	(NO)		√
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/17/21	12:20	G	2	(250, 500, 1L)	None	(YES)	(NO)	NA	√
Yellow Glass	11/17/21	12:20	G	2	(250, 500, 1L)	H_2SO_4	(YES)	(NO)		√
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	11/17/21	12:20	G	1	250, 500, 1L	HNO_3	(YES)	(YES)		√
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 | 11 | Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [ ] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	G (1220)	0.00	—	—	—	—	—	—	—
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Collected near MW-15B

SAMPLER: I. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-16A
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	(N)	NE	E	SE	S	SW	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)	CLOUDY	RAIN		?	**TEMPERATURE:**	(F) 37.0	°C			

(Circle appropriate units)

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
11/17/21	08:15	25.00	.	17.54	.	7.46	X 1	1.21
/ /	:	.	.	.	.		X 3	3.6

Gal/ft = (dia./2)^2 x 0.163	1" =	0.041	(2") =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	√
VOA Glass	11/17/21	08:55	F	3	(40 ml)	(HCl)	(YES)	(NO)		✓
VOA Glass	11/17/21	08:55	F	3	(40 ml)	($Na_2S_2O_3$)	(YES)	(NO)		✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/17/21	08:55	F	2	(250, 500 1L)	(None)	(YES)	(NO)	NA	✓
Yellow Glass	11/17/21	08:55	F	2	(250) 500, 1L	(H_2SO_4)	(YES)	(NO)		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	11/17/21	08:55	F	1	250, (500) 1L	(HNO_3)	(YES)	(YES)		✓
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — 11 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: 08:16 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	F(0817)	0.00	7.00	214.8	647	7.8	17.77	11.03	clear/colorless
1	F(0828)	1.25	6.36	195.5	297	12.5	18.91	10.69	clear/light tan
2	F(0837)	2.50	6.47	192.9	370	12.5	19.76	10.26	clear/light tan
3	F(0846)	3.75	6.47	184.6	445	12.5	BTOP	9.64	clear/light tan
4	F(0848)	4.05	6.44	182.4	446	12.5	BTOP	9.58	clear/light tan
5	F(0850)	4 1/3 4.40	6.44	180.2	448	12.4	BTOP	9.54	clear/light tan
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

(Standard purge 20/10/20psi) ~600ml/min

SAMPLER: I. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-16B
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	(N)	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY	CLOUDY	RAIN	?	**TEMPERATURE:**	(F) 40 .0 °C				

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
11/17/21	09:13	46.00	.	16.22	.	—	X 1	—
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)^2 x 0.163	1" =	0.041	(2") =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	√
VOA Glass	11/17/21	09:40	F	3	40 ml	HCl	YES	NO		✓
VOA Glass	11/17/21	09:40	F	3	40 ml	$Na_2S_2O_3$	YES	NO		✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/17/21	09:40	F	2	250 500 1L	None	YES	NO	NA	✓
Yellow Glass	11/17/21	09:40	F	2	250, 500, 1L	H_2SO_4	YES	NO		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	11/17/21	0944:0940 IN	F	1	250, 500, 1L	HNO_3	YES	YES		✓
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — 11 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: 09:14 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	F(0917)	0.00	7.17	167.9	1243	9 .60	16.27	7 .11	clear/colorless
1	F(0925)	0 .50	6.96	20.1	1272	11 .80	16.27	1 .67	clear/colorless
2	F(0933)	1 .00	7.01	1.2	1276	11 .90	16.27	1 .55	clear/colorless
3	F(0935)	1 .20	7.01	0.3	1279	11 .90	16.27	1 .50	clear/colorless
4	F(0937)	1 .40	7.00	-1.3	1281	11 .90	16.27	1 .48	clear/colorless
5		.	.			.	.	.	
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Low flow purge method (11/9 @ 25psi) ~ 450ml/min

SAMPLER: I. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** DUP2
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	(N)	NE	E	SE	S	SW	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(°F) 40.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
/ /	:	.	.	.	.	.	X 1	.
/ /	:	.	.	.	.	.	X 3	.

Gal/ft = (dia./2)^2 x 0.163	1" =	0.041	2" =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	√
VOA Glass	11/17/21	09:45	F	3	(40 ml)	(HCl)	(YES)	(NO)		✓
VOA Glass	11/17/21	09:45	F	3	(40 ml)	($Na_2S_2O_3$)	(YES)	(NO)		✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/17/21	09:45	F	2	(250) 500, (1L)	(None)	(YES)	(NO)	NA	✓
Yellow Glass	11/17/21	09:45	F	2	(250) 500, 1L	(H_2SO_4)	(YES)	(NO)		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	11/17/21	09:45	F	1	250, (500), 1L	(HNO_3)	(YES)	(YES)		✓
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — 11 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	F	0.00	—	—	—	—	—	—	—
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Collected at MW-16B

SAMPLER: T. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-19A
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	(NW)	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)	CLOUDY	RAIN	?	**TEMPERATURE:**	(F) 50.2 °C					

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		[Water Column x Gal/ft] Volume (gal)
11/19/21	11:52	32.00	.	22.07	.	9.93	X 1	1.61
/ /	:	.	.	.	.		X 3	4.83

Gal/ft = (dia./2)^2 x 0.163 | 1" = 0.041 | (2") = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	[√ if used] √
VOA Glass	~~11/19/21~~ JH	12:45	F	3	(40 ml)	HCl	(YES)	(NO)		✓
VOA Glass	~~11/19/21~~	12:45	F	3	(40 ml)	($Na_2S_2O_3$)	(YES)	(NO)		✓
Amber Glass	/ / JH	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	~~11/19/21~~ JH	12:45	F	2	(250) 500 (1L)	(None)	(YES)	(NO)	NA	✓
Yellow Glass	~~11/19/21~~ JH	12:45	F	1	250, (500), 1L	(H_2SO_4)	(YES)	(NO)		✓
Red Total Poly	JH /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	~~11/19/21~~ JH	12:45	F	1	250, (500), 1L	(HNO_3)	(YES)	(YES)		✓
White Poly	JH /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

Collected on 11/19/2021

White no acid, Yellow H2SO4, Red HNO3 — 10 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: 11:53 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O_2 (mg/l)	Water Quality
0	F(1154)	0.00	6.97	95.2	309	14.5	22.27	5.43	clear/colorless
1	F(1209)	1.65	7.91	-93.6	299	12.5	22.63	0.46	clear/colorless
2	F(1224)	3.30	7.93	-101.0	299	12.5	22.68	0.43	clear/colorless
3	F(1239)	4.95	7.89	-101.3	298	12.4	22.78	0.60	clear/colorless
4	F(1241)	5.10	7.90	-102.9	297	12.4	22.79	0.59	clear/colorless
5	F(1243)	5.25	7.90	-104.3	298	12.4	22.79	0.59	clear/colorless
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Standard purge method (10/5/25 psi) ~ 300 ml/min

SAMPLER: J. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** FB4
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		**TEMPERATURE:**	°F 50.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
/ /	:	.	.	.	.	.	X 1	.
/ /	:	.	.	.	.	.	X 3	.

Gal/ft = (dia./2)^2 x 0.163	1" =	0.041	2" =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other = Transfer

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	√
VOA Glass	11/19/21	12:05	G	3	40 ml	HCl	YES NO		✓
VOA Glass	11/19/21	12:05	G	3	40 ml	$Na_2S_2O_3$	YES NO		✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/19/21	12:05	G	2	250, 500, 1L	None	YES NO	NA	✓
Yellow Glass	11/19/21	12:05	G	1	250, 500, 1L	H_2SO_4	YES NO		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	11/19/21	12:05	G	1	250, 500, 1L	HNO_3	YES	YES		✓
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8260) (8011) OR [X] WA [ ]
	AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
	YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
	RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
	RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
	WHITE - Poly	(Orthophosphate)
	Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0		0.00	.			.	.	.	
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Collected near MW-19A using Lab Supplied DI water

SAMPLER: J. Hollquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** DUP4
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	(NW)	LIGHT	MEDIUM	HEAVY
WEATHER:	(SUNNY)	CLOUDY	RAIN	?					**TEMPERATURE:**	(°F) 50.0 °C	

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
/ /	:	.	.	.	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	[√ if used] √
VOA Glass	11/19/21	12:50	F	3	(40 ml)	HCl	(YES)	(NO)	✓
VOA Glass	11/19/21	12:50	F	3	(40 ml)	$Na_2S_2O_3$	(YES)	(NO)	✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO	
White Poly	11/19/21	12:50	F	2	(250) 500 (1L)	None	(YES)	(NO)	NA ✓
Yellow Glass	11/19/21	12:50	F	1	250, (500), 1L	H_2SO_4	(YES)	(NO)	✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO	
Red Diss. Poly	11/19/21	12:50	F	1	250, (500), 1L	HNO_3	(YES)	(YES)	
White Poly	/ /	:			250, 500, 1L	None	YES	YES	
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO	

White no acid, Yellow H2SO4, Red HNO3 — Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA

Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	F(1250)	0.00	—	—	—	. —	. —	.	✓
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Collected at MW-19A

SAMPLER: J. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-20A
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	(SW)	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN			?	**TEMPERATURE:**	(°F) / 7.0 °C	

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
11/16/21	11 :00	23.60	.	5.36	.	18.24	X 1	2.97
/ /	:	.	.	.	.		X 3	8.91

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	(2") = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	√
VOA Glass	11/16/21	11 :55	F	3	40 ml	HCl	(YES)	(NO)		✓
VOA Glass	11/16/21	11 :55	F	3	40 ml	$Na_2S_2O_3$	(YES)	(NO)		✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/16/21	11 :55	F	2	250, 500, (1L)	None	(YES)	(NO)	NA	✓
Yellow Glass	11/16/21	11 :55	F	2 1	250, (500), 1L	H_2SO_4	(YES)	(NO)		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	11/16/21	11 :55	F	1	250, (500), 1L	HNO_3	(YES)	(YES)		✓
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — 10 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: 11 : 02 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	F(1102)	0.00	6.54	173	1469	12.9	6.23	8.69	clear/colorless
1	F(1116)	3.00	6.59	63.9	1537	13.3	10.28	0.27	clear/colorless
2	F(1132)	6.00	6.64	45.5	~~1533~~ 1353 DH	13.5	11.46	1.06	clear/colorless
3	F(1148)	9.00	6.66	36.1	1547	13.4	12.04	1.04	clear/colorless
4	F(1150)	9.40	6.66	35.4	1550	13.4	12.22	1.03	clear/colorless
5	F(1152)	9.80	6.65	34.4	1547	13.4	12.21	1.04	clear/colorless
6		.	.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Standard purge method (20/10/25psi) ~800 ml/min

SAMPLER: J. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-21A

SITE ADDRESS: McMinnville , Oregon **BLIND ID:**

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	(NW)	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		(CLOUDY)		RAIN		?		**TEMPERATURE:**	(F) 18.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
			[Product Thickness]			[Water Column]		[Water Column x Gal/ft]
11/18/21	09:20	15.42	.	3.82	.	11.60	X 1	1.89
/ /	:	.	.	.	.		X 3	5.67

Gal/ft = (dia./2)^2 x 0.163 | 1" = 0.041 | (2") = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	√
VOA Glass	11/18/21	10:15	F	3	(40 ml)	(HCl)	~~YES~~ (NO)		✓
VOA Glass	11/18/21	10:15	F	3	(40 ml)	($Na_2S_2O_3$)	(YES) (NO)		✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/18/21	10:15	F	2	(250) 500, 1L	(None)	~~YES~~ (NO)	NA	✓
Yellow Glass	11/18/21	10:15	F	2	(250), 500, 1L	~~K_2SO_4~~	(YES) (NO)		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	11/18/21	10:15	F	1	250 (500), 1L	~~HNO_3~~	~~YES~~ ~~YES~~		✓
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 | 11 | Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	F(0924)	0.00	7.32	47.8	295	10.8	4.46	9.12	clear/colorless
1	F(0940)	1.90	6.22	171.8	277	13.8	4.90	8.39	clear/colorless
2	F(0956)	3.80	6.21	190.8	284	13.9	4.91	8.12	clear/colorless
3	F(1009)	5.70	6.20	199.6	281	14.0	4.91	8.07	clear/colorless
4	F(1011)	5.85	6.20	201.3	279	14.0	4.91	8.07	clear/colorless
5		.	.			.	.	.	
6		.	.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Standard purge (10|5|25psi) ~ 600ml/min

SAMPLER: T. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224

Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** FB3

SITE ADDRESS: McMinnville , Oregon **BLIND ID:**

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?	**TEMPERATURE:**	°F 48 .0 °C		

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
/ /	:	.	.	.	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)^2 x 0.163	1" =	0.041	2" =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other = Transfer

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	√
VOA Glass	11/18/21	09:50	G	3	40 ml	HCl	YES	NO		✓
VOA Glass	11/18/21	09:50	G	3	40 ml	$Na_2S_2O_3$	YES	NO		✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/18/21	09:50	G	2	250, 500, 1L	None	YES	NO	NA	✓
Yellow Glass	11/18/21	09:50	G	2	250, 500, 1L	H_2SO_4	YES	NO		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	11/18/21	09:50	G	1	250, 500, 1L	HNO_3	YES	YES		✓
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	G(0950)	0.00	–	–	–	–	–	–	–
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Collected near MW-21A using Lab supplied DI water

SAMPLER: I. Hallgren-St (PRINTED NAME) [signature] (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-21B

SITE ADDRESS: McMinnville , Oregon **BLIND ID:**

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	(SW)	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)	CLOUDY	RAIN	?	**TEMPERATURE:**	(F) 50.0 °C					

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
11/16/21	12:19	30.40	.	1.76	.	—	X 1	—
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	(2") = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	[√ if used] √
VOA Glass	11/16/21	13:00	F	~~3~~	~~40 ml~~	(HCl)	(YES)	(NO)		✓
VOA Glass	11/16/21	13:00	F	3	40 ml	($Na_2S_2O_3$)	(YES)	(NO)		✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/16/21	13:00	F	2	~~250~~, 500, (1L)	(None)	~~YES~~	~~NO~~	NA	✓
Yellow Glass	11/16/21	13:00	F	2	~~250~~, 500, 1L	~~H_2SO_4~~	~~YES~~	~~NO~~		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	11/16/21	13:00	F	1	250, ~~500~~, 1L	~~HNO_3~~	~~YES~~	~~YES~~		✓
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	F(1225)	0.00	7.63	145.2	447	15.3	2.10	8.19	Clear/colorless
1	F(1232)	0.50	6.84	82.7	506	13.6	1.96	0.79	Clear/colorless
2	F(1238)	1.00	6.83	59.4	537	13.6	1.96	0.55	Clear/colorless
3	F(1250)	1.50	6.83	44.8	538	13.7	1.96	0.53	Clear/colorless
4	F(1252)	1.65	6.82	42.4	540	13.8	1.96	0.49	Clear/colorless
5	F(1254)	1.80	6.82	40.4	541	13.8	1.96	0.49	Clear/colorless
6	F(1256)	1.95	6.82	39.4	543	13.7	1.96	0.49	Clear/colorless

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Low flow (12/8/20 psi) ~ 300ml/min

SAMPLER: L Hellyer (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-22A
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	(SW)	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(°F) 42.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
11/16/21	08:23	22.18	.	5.04	.	17.14	X 1	2.74
/ /	:	.	.	.	.		X 3	8.22

Gal/ft = (dia./2)² x 0.163	1" = 0.041	(2") = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	√
VOA Glass	11/16/21	10:05	F	3	(40 ml)	(HCl)	(YES)	(NO)		√
VOA Glass	11/16/21	10:05	F	3	(40 ml)	($Na_2S_2O_3$)	(YES)	(NO)		√
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/16/21	10:05	F	2	(250), 500, (1L)	(None)	(YES)	(NO)	NA	√
Yellow Glass	11/16/21	10:05	F	2	250, (500), 1L	(H_2SO_4)	(YES)	(NO)		√
Red Total Poly	X/16/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	11/16/21	10:05	F	1	250, (500), 1L	(HNO_3)	(YES)	(YES)		√
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — 11 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX) Nit NOxt
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: 08:30 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	F(0831)	0.00	7.50	157.2	414	10.3	5.32	10.26	cloudy/light tan
1	F(0838)	2.75	6.52	154.1	502	11.8	6.12	8.39	Cloudy/light tan
2	F(0925)	5.50	6.43	170.3	450	11.8	6.19	8.34	cloudy/light tan
3	F(1000)	8.25	6.35	186.3	461	11.8	6.33	8.41	Cloudy/light tan
4	F(1002)	8.50	6.35	186.9	462	11.8	6.33	8.42	Cloudy/light tan
5	F(1004)	8.75	6.34	187.5	462	11.8	6.34	8.43	cloudy/light tan
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Standard purge (2/8/2gpm) ~ 450 ml/min

SAMPLER: I. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** DUP1
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY	CLOUDY	RAIN	?					**TEMPERATURE:**	°F 45.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW	[Water Column x Gal/ft] Volume (gal)
/ /	:	.	.	.	.	.	X 1
/ /	:	.	.	.	.	.	X 3 .

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	[√ if used] √
VOA Glass	11/6/21	10 : 10	F	3	40 ml	HCl	YES	NO		✓
VOA Glass	11/6/21	10 : 10	F	3	40 ml	$Na_2S_2O_3$	YES	NO		✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/6/21	10 : 10	F	2	250 500 1L	None	YES	NO	NA	✓
Yellow Glass	11/6/21	10 : 10	F	2	250, 500, 1L	H_2SO_4	YES	NO		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	11/6/21	10 : 10	F	1	250, 500, 1L	HNO_3	YES	YES		✓
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX) Nox-C
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA

Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0		0.00	.			.	.	.	
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Collected at MW-22A

SAMPLER: I. Hultgvist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** FB1
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	(SW)	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	°F 45.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
/ /	:			.	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other = Transfer

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	[√ if used] √
VOA Glass	11/16/21	09:30	G	3	(40 ml)	(HCl)	~~YES~~	(NO)		√
VOA Glass	11/16/21	09:30	G	3	(40 ml)	($Na_2S_2O_3$)	(YES)	(NO)		√
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/16/21	09:30	G	2	(250), 500, (1L)	(None)	~~YES~~	(NO)	NA	√
Yellow Glass	11/16/21	09:30	G	2	250, (500), 1L	(H_2SO_4)	~~YES~~	(NO)		√
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	11/16/21	09:30	G	1	250, (500), 1L	(HNO_3)	(YES)	~~YES~~		√
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — 11 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8260) (8011) OR [ ] WA [ ]
	AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
	YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX) NOX
	RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
	RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
	WHITE - Poly	(Orthophosphate)
	Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	G(0930)	0.00	-	-	-	- .	-	-	-
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Collected near MW-22A using Lab-Supplied DI water

SAMPLER: I. Hultquist (PRINTED NAME) (SIGNATURE)

Fall 2021

Leachate Pond and Leachate Pond LDS Liquids

Field Sampling Data Sheets

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** Leach-Pond

SITE ADDRESS: McMinnville , Oregon **BLIND ID:**

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		**TEMPERATURE:**	(F) 48.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
/ /	:	.	.	.	.		X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)^2 x 0.163	1" =	0.041	2" =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other = Grab

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	[√ if used] √
VOA Glass	11/18/21	11:30	G	3	(40 ml)	(HCl)	(YES)	(NO)		✓
VOA Glass	/ /	:			40 ml	$Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/18/21	11:30	G	2	250, 500, (1L)	(None)	(YES)	(NO)	NA	✓
Yellow Glass	11/18/21	11:30	G	2	250, (500), 1L	(H_2SO_4)	(YES)	(NO)		✓
Red Total Poly	11/18/21	11:30	G	1	125, 250, (500)	(HNO_3)	(YES)	(NO)		✓
Red Diss. Poly	11/18/21	11:30	G	1	250, (500), 1L	(HNO_3)	(YES)	(YES)		✓
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — 9 — Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [ ] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX) Text
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O_2 (mg/l)	Water Quality
0	G(1130)	0.00	9.00	188.1	9574	7.10	—	7.90	Clear / Dark Amber
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarify, Color]

Collected from Sample port on Truck loading pipe

SAMPLER: I. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** LPOND LDS

SITE ADDRESS: McMinnville , Oregon **BLIND ID:**

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	(NW)	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY		(CLOUDY)		RAIN		?		**TEMPERATURE:**	°F 48.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
/ /	:	.	.	.	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)^2 x 0.163	1" =	0.041	2" =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	[√ if used]
VOA Glass	11/18/21	11:00	IN/A	3	(40 ml)	(HCl)	(YES)	NO		√
VOA Glass	/ /	:			40 ml	$Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/18/21	11:00	IN/A	2	250, 500 (1L)	(None)	(YES)	(NO)	NA	√
Yellow Glass	11/18/21	11:00	A	2	250, 500, 1L	H_2SO_4	YES	NO		
Red Total Poly	11/18/21	11:00	A	1	125, ~~250~~, 500	(HNO_3)	(YES)	(NO)		√
Red Diss. Poly	11/18/21	11:00	A	1	250, 500, 1L	(HNO_3)	(YES)	(YES)		√
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — 9 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX) (NOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O_2 (mg/l)	Water Quality
0	A(1100)	0.00	7.23	2135	5118	8.53	-	7.49	Clear/Dark Amber
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

for Liquid Level 7.81'

SAMPLER: T. Hultquist (PRINTED NAME) (SIGNATURE)

Landfill Site Inspection Checklists

WASTE MANAGEMENT, INC.
GROUNDWATER SAMPLING INSPECTION CHECKLIST

Facility Name: Riverbend Landfill
Facility No/Location: _____
Inspection Date: 4-12-2021
Time of Day: Daylight hours
Weather Conditions: Sunny 50°F

Facility Type: ( ) MSW ( ) Industrial ( ) C & D ( ) Other _____
( ) Detection ( ) Assessment ( ) Other _____
( ) Quarterly ( ) Semiannual ( ) Other/Special _____
( ) Appendix I ( ) Appendix II ( ) Additional (y or n) _____

Number of Wells Sampled: _____ No. Alt. Pts Sampled (e.g. springs) _____
Wells Inspected: All wells and piezometers.

I. General Monitoring Well Condition

Well(s) Labeled? (X) Yes or ( ) No
COMMENTS:

Groundwater Monitoring Well(s) Condition:
COMMENTS: Wells in good condition, some overgrown vegetation near MW-17A, MW-19A,

II. Well Monitoring Procedures

Were water levels made prior to purging? (X) Yes or ( ) No
DESCRIBE BRIEFLY: Solinst water level meter, decomed between readings

Were purge volumes measured? (X) Yes or ( ) No
DESCRIBE HOW: Calibrated 5-gallon bucket

Purge Method: (X) Stabilization (X) 3 Volumes ( ) Other _____
DESCRIBE BRIEFLY:

What field parameters were used to determine representative samples?
DESCRIBE BRIEFLY: temp, pH, Cond, DO, ORP

Did Well sampling require more than one day? (X) Yes or ( ) No Provide Dates: 4-13-2021 – 4-16-2021

III. Well Sampling Procedures

Sampler had map w/ well locations: (X) Yes or ( ) No
COMMENTS:

Sampler had a copy of the sampling procedures during sampling: (X) Yes or ( ) No
COMMENTS:

Sampler followed sampling procedures: (X) Yes or ( ) No
COMMENTS:

Sampling procedures were as approved in the approved facility GWMP: (X) Yes or ( ) No
COMMENTS:

Decontamination procedures adequate (describe for meters and pumps): (X) Yes or ( ) No
COMMENTS: Standard decon with distilled water and Liquinox

Any observed inappropriate techniques or procedures: ( ) Yes or (X) No
COMMENTS:

Inspected By: _____	Signature: _____	Date: _____
Sampler: T. Hultquist	Signature: [signature]	Date: 4-16-2021
Sampler: _____	Signature: _____	Date: _____
Facility Rep: _____	Signature: _____	Date: _____

(Use Back side for additional Comments. Provide copies to sampler and facility)

Landfill Visual Inspection Program

	Yes	No
Are there any surface water impoundment's or erosion from heavy surface water runoff?		X
Are any monitoring wells or piezometers not clearly identified?		X
Are there any area's of distressed vegetation or unexplained animal remains?		X
Are there any areas of stained or tinted soils?		X
Is liquid seeping out of the slopes of the waste unit?		X
Are there any abnormal odors or observable vapors?		X
Are any of the monitoring wells damaged or unsecured?		X
Are there any abnormal conditions that are of concern to the Landfill operation?		X

Landfill Riverbend Landfill
Inspector I. Hultquist
Date 4/12/2021
Reason for inspection
1st, (2nd), 3rd, or 4th groundwater monitoring event
Other

Notes:

Landfill Visual Inspection Program

	Yes	No
Are there any surface water impoundment's or erosion from heavy surface water runoff?		X
Are any monitoring wells or piezometers not clearly identified?		X
Are there any area's of distressed vegetation or unexplained animal remains?		X
Are there any areas of stained or tinted soils?		X
Is liquid seeping out of the slopes of the waste unit?		X
Are there any abnormal odors or observable vapors?		X
Are any of the monitoring wells damaged or unsecured?		X
Are there any abnormal conditions that are of concern to the Landfill operation?		X

Landfill Riverbend LF
Inspector I. Hultquist
Date 11-15-2021
Reason for inspection
1st, 2nd, 3rd, or (4th) groundwater monitoring event
Other

Notes:

Overcast, light Rain. 45°F
Areas around MW and Piezometers, Gas probes flooded.

Field Report Forms

SCS ENGINEERS

Field Report Form

Client: Waste Management		Weather: Sunny 50°F
Project: 04208022.21 / Riverbend LF		
Event: 2Q2021 Semiannual event		Date: 4-12-2021
Prepared By: Tilthultquist	Address: McMinnville, OR	Arrival: 0745
		Departure: 1700

- Loaded up truck with equipment
- Stopped at Safeway in Newberg for ice and decon supplies.
- Arrived onsite, texted Riley (WM) to check in to site
- Began 2Q2021 water level survey with Kara K. (SCS)
- Calibrated GEM5000 to conduct 2Q2021 LFG survey.
- Completed water level survey, looked at access points for surface water sampling.
- Completed LFG survey for Gas probes, will survey buildings later in the week.
- Departed for SCS Portland.

Signed:

SCS ENGINEERS

Field Report Form

Client: Waste management	Weather: Sunny 60°F
Project: 04208022.21 / Riverbend Landfill	
Event: 2Q2021 Semiannual Event	Date: 4.13-2021
Prepared By: I Hultquist / Address: McMinnville, OR	Arrival: 0730
	Departure: 1630

- Arrived onsite, texted Riley to check in.
- Calibrated YSIs, began sampling GW monitoring wells.

Ian showed Kara Low flow purge sampling on MW-20B, FB1 (MW-20B), Standard purge on MW-20A, DUP1 (MW-20A). Ian dewatered P-06A, Sampled P-05A, and P-07A.

Kara Sampled MW-14A and MW-14B.

Ian and Kara Sampled MW-21B while Ian attempted to fix MW-21 A bladder pump. (Fixed fittings, need to replace bladder).

- Departed for SCS Portland. Kara Stopped at Safeway for ~~ice~~ to additional ice.

Signed:

SCS ENGINEERS

Field Report Form

Client: Waste Management		Weather: Sunny 65°F
Project: 04208022.21 / RLF		
Event: 2Q2021 Spring Monitoring		Date: 4/14/2021
Prepared By: IHultquist	Address: McMinnville OR	Arrival: 0730
		Departure: 1400

- Iced samples from 4/13. Loaded up trucks. Departed for Site.
- Calibrated YSIs
- Ian Sampled P-06A (Dewatered on 4/13), MW-16B, DUP2
- Kora Sampled MW-21A, MW-16A, FB2.

Ian and Kora Sampled 3 surface water sample points together SYR MW-12A, SYR SW-1, and SYR SW-2.

Departed from site

Kora took surface water bacteria samples to Alexin and returned rented peri. pump to FEI.

Ian iced/packed samples for shipping.

All Samples collected on 4/~~13~~13/21 and 4/14/21 shipped by 1630 on 4/14/21 to Eurofins - Denver via FedEx.

Signed: _____

SCS ENGINEERS

Field Report Form

Client: Waste Management	Weather: Sunny 65°F
Project: 04208022.21 / RLF	
Event: 2021 Spring monitoring	Date: 4-15-21
Prepared By: I. Hultquist	Address: McMinnville OR
	Arrival: 0730
	Departure: 1600

- Loaded up truck departed for Site
- Texted Riley upon arrival
Chris P stopped in route for ice.
Conducted Site tour with Chris P,
Calibrated YSIs
Chris P sampled MW-15A (DUP3), MW-15B, MW-5A, and MW-5B.
Ian Sampled Leach Pond, LPond LDS, FB3, 1/5P, 4/5S, 6/7P, 6/7S, 8S, 8P, 9S, 9P.
IH Calibrated Gem5000 and wrapped up LFG survey
- Departed from Site

Signed:

SCS ENGINEERS

Field Report Form

Client: Waste management	Weather: Sunny 65°F
Project: 04208022.21 / Riverbend LF	
Event: 2021 Semi annual monitoring event	Date: 4-16-21
Prepared By: I. Hultquist / Address: McMinnville OR	Arrival: 0730
	Departure:

- Loaded up truck, iced down samples from 4-15-21. Departed for site.
Stopped at safeway in Newberg for ice + Shipping Supplies.
- TPMS light came on on ~~Sh 515~~ F150. Stopped at gas station and put air in All 4 tires. Light turned off.
- Arrived onsite, texted Riley to check in.
- Calibrated YSI.
- Sampled MW-12A, FB4(MW-12A), MW-12B, Dup4(MW-12B) MW-19A. Discussed low pH on MW-12A with tiffany A. Recalibrated YSI, Calibrated back up YSI rechecked pH.
- Departed from site shipped all samples for Saturday Delivery via Fedex to Eurofins-Denver by 1630

Signed: [signature]

SCS ENGINEERS

Field Report Form

Client: Waste Management	Weather: Rain 48°F
Project: 04208022.21 / Riverbend LF	
Event: 4Q2021 Monitoring	Date: 11/15/21
Prepared By: I. Hultgvist	Address: McMinnville OR
	Arrival: 0815
	Departure: 1500

- Loaded up truck departed for site
- Stopped at Fred Meyer for decon Supplies.
- Arrived onsite, texted Site personnel to check in.
- Started GW elevation Survey.
- Called Dennis (WM) about keys to gates/ Site access.
- Completed GW elevation Survey
- Calibrated GEM5000, Sampled Flare.
- Departed from site
- Flare sample shipped via FedEx to AIS in Simi Valley on 11/15/21. Delivered 11/16/21.

Signed:

SCS ENGINEERS

Field Report Form

Client: WM		Weather: Sunny 50°F
Project: 04208022.21 / River bend LF		
Event: 4Q Monitoring		Date: 11/16/21
Prepared By: I. Hultquist	Address: McMinnville OR	Arrival: 0800
		Departure: 1630

- Loaded up truck, departed for Site.
- Stopped at Safeway for ice.
- Arrived onsite, texted to check in.
- Calibrated Aquarod, Began GW Sampling
- Sampled MW-22A, DUP1(MW-22A), FB1(MW-22A) .MW-20A, MW-21B.
- Calibrated GEM 5000, began LFG Survey
- LFG Survey Completed.
- Departed from Site
- Uploaded LFG Survey to LGMS on 11/16/21

Signed:

SCS ENGINEERS

Field Report Form

Client: Waste Management		Weather: Cloudy / 40°F
Project: 04208022.21 / Riverbend LF		
Event: 4Q Monitoring		Date: 11/17/21
Prepared By: I. Hultquist	Address: McMinnville OR	Arrival: 0730
		Departure: 1600

- Loaded up truck, departed for site
- Stopped at safeway for ice
- Arrived onsite, texted Dennis to check in.
- Calibrated Aquaread
- Began sampling groundwater.
- Sampled MW-16A, MW-16B, DUP2 (MW-16B), MW-15A, MW-15B, FB2 (MW-15B), MW-5A, MW-14A.
- Stored samples on ice.
- Departed from site

Signed: _____

SCS ENGINEERS

Field Report Form

Client: Waste Management		Weather: cloudy / 45°F
~~Project:~~ Event: 4Q2021 Monitoring		
~~Event:~~ Project: Riverbend LF / 04208022.21		Date: 11-18-21
Prepared By: I. Hultquist	Address: McMinnville OR	Arrival: 0730
		Departure: 1215

- Loaded up truck, departed for site
- Stopped at safeway for ice
- Arrived onsite, texted Riley to check in.
- Calibrated Aqua read.
- Sampled MW-14B, DUP3 (mw-14B), MW-21A, FB3 (mw-21A) LPOND LDS, Leach pond.
- Checked Stormwater ML006, no discharge but pond was full.
- Departed to ship samples, Stopped at safeway for fresh ice + shipping supplies.
- ~~Samples~~ All samples from (11-16-21, 11-17-21, and 11-18-21) shipped via FedEx to Eurofins-TA Denver.

Signed: _____

SCS ENGINEERS

Field Report Form

Client: Waste Management		Weather: Partly Cloudy / 45°F intermittent Showers
Project: 04208022.21 / Riverbend LF		
Event: 4Q2021 Monitoring		Date: 11-19-21
Prepared By: I. Hultquist	Address: McMinnville OR	Arrival: 0800
		Departure: 1400

- Loaded up truck, Calibrated Aquaread, departed from office. Stopped at safeway ~~at~~ for ice.
- Arrived at Newberg TS, checked outfall 003 for discharge. Collected Stw sample. Departed for Riverbend.
- Arrived onsite, checked in with Site personnel.
- Grabbed offsite gate keys.
- Began sampling GW, Sampled MW-12A, MW-12B, MW-19A, EB4(MW-19A), DUP4(MW-19A). Checked on discharge at Stw ML006. In between sampling GW. 006 discharging. Returned to sample after completing GW sampling.
- departed from site, Dropped 006 E.coli bottle at Alexin, Returned Aquaread to FET, Returned to office to ship samples
- All samples Shipped on 11-19-2021 via FedEx for Saturday delivery to Eurofins-TA Denver

Signed:

APPENDIX C

2021 Laboratory Analytical Reports (Including Chain-of-Custody Forms, Cation-Anion Balance Data, and Laboratory QA/QC Documentation), and TestAmerica Laboratories ORELAP Certification

Spring 2021

Compliance Groundwater

Laboratory Analytical Reports

eurofins | Environment Testing America



ANALYTICAL REPORT

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

Laboratory Job ID: 280-147466-1
Client Project/Site: 1003|Riverbend Landfill - Groundwater
Sampling Event: Semiannual Compliance Wells - Apr Oct

For:
Waste Management
13469 SW Highway 18
McMinnville, Oregon 97128

Attn: Mr. Jim Denson

Betsy Sara

Authorized for release by:
12/2/2021 8:55:11 AM

Betsy Sara, Project Manager II
(303)736-0189
Betsy.Sara@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

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Definitions/Glossary

Client: Waste Management
Job ID: 280-147466-1
Project/Site: 1003|Riverbend Landfill - Groundwater

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

Glossary

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

Job ID: 280-147466-1

Laboratory: Eurofins TestAmerica, Denver

Narrative

CASE NARRATIVE

Client: Waste Management

Project: 1003|Riverbend Landfill - Groundwater

Report Number: 280-147466-1

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

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

Sample Receiving

The samples were received on 04/15/2021; the samples arrived in good condition, properly preserved and on ice. The temperatures of the coolers at receipt were 0.9º C, 2.8º C, 3.2º C and 3.6º C.

Holding Times

All holding times were met.

Method Blanks

Dissolved Iron Method 6010B was detected in the Method Blank above the project established reporting limit, however, the requested reporting limit for Dissolved Iron is below TestAmerica Denver's standard reporting limit and, therefore, no corrective action has been taken for this anomaly. It must be noted that results reported below TestAmerica Denver's standard reporting limits may result in false positive/false negative results, less accurate quantitation and potential misidentification at the lower concentrations.

All other Method Blanks met method criteria.

Laboratory Control Samples (LCS)

All Laboratory Control Sample recoveries were within control limits.

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

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) for Method 8260B (batch 533411) and Method 8011, however, LCS/LCSD pairs were analyzed to demonstrate method precision and accuracy.

The Method 8260B MS/MSD performed on a sample from another client exhibited RPD results outside the RPD limits for multiple spike compounds. Because the corresponding Matrix Spike and Matrix Spike Duplicate recoveries, Laboratory Control Sample, and Method Blank sample were within control limits, this anomaly is considered to be due to matrix interference and no corrective action was taken.

The Matrix Spike and Matrix Spike Duplicate performed on a sample from another client exhibited recoveries outside control limits for Dissolved Potassium Method 6010B. 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.

Job ID: 280-147466-1 (Continued)

Laboratory: Eurofins TestAmerica, Denver (Continued)

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 Calcium, Dissolved Magnesium and Dissolved Sodium Method 6010B because the sample concentration was greater than four times the spike amount. In addition, the RPD result was outside the RPD limit for Dissolved Sodium. Because the corresponding Laboratory Control Sample and the Method Blank sample were within control limits, no corrective action was taken.

Sample MW-14A was selected to fulfill the laboratory batch quality control requirements for Method 353.2. Analysis of the laboratory generated MS/MSD for this sample exhibited recoveries of Nitrate/Nitrite 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 results were within established control limits.

General Comments

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.

The analysis for Chloride and Sulfate Method 300.0 was performed by TestAmerica Buffalo. Their address and phone number are:
TestAmerica Buffalo
10 Hazelwood Drive, Suite 106
Amherst, NY 14228
Phone: 716-691-2600

Detection Summary

Client: Waste Management
Job ID: 280-147466-1
Project/Site: 1003|Riverbend Landfill - Groundwater

Client Sample ID: TB1 — Lab Sample ID: 280-147466-1

No Detections.

Client Sample ID: MW-14A — Lab Sample ID: 280-147466-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	36000		500		ug/L	1		6010B	Dissolved
Magnesium	15000		200		ug/L	1		6010B	Dissolved
Manganese	34		3.0		ug/L	1		6010B	Dissolved
Sodium	11000		1000		ug/L	1		6010B	Dissolved
Chloride	11		0.50		mg/L	1		300.0	Total/NA
Sulfate	16		1.0		mg/L	1		300.0	Total/NA
Total Organic Carbon - Average	1.1		1.0		mg/L	1		9060	Total/NA
Total Anions	3.4				meq/L	1		SM 1030E	Total/NA
Total Cations	3.5				meq/L	1		SM 1030E	Total/NA
Percent Difference	0.98				%	1		SM 1030E	Total/NA
Calcium	36				mg/L	1		SM 1030E	Total/NA
Magnesium	15				mg/L	1		SM 1030E	Total/NA
Potassium	0.00				mg/L	1		SM 1030E	Total/NA
Sodium	11				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.00				mg/L	1		SM 1030E	Total/NA
Chloride	11				mg/L	1		SM 1030E	Total/NA
Sulfate	16				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	140				mg/L	1		SM 1030E	Total/NA
Alkalinity	140				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.00				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	0.98				%	1		SM 1030E	Total/NA
Calculated TDS	160				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.3				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	210				mg/L	1		SM 1030E	Total/NA
Iron	0.00				mg/L	1		SM 1030E	Total/NA
Calcium	1.8				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	1.2				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	0.48				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	0.31				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.33				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	140				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	2.8				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	140		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	210		10		mg/L	1		SM 2540C	Total/NA
Field pH	6.04				SU	1		Field Sampling	Total/NA
Field Conductivity	344.2				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	10.3				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	2.90				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	124.9				millivolts	1		Field Sampling	Total/NA

Client Sample ID: MW-14B — Lab Sample ID: 280-147466-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	40000		500		ug/L	1		6010B	Dissolved

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Denver

Client Sample ID: MW-14B (Continued)

Lab Sample ID: 280-147466-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	3800	B	30		ug/L	1		6010B	Dissolved
Magnesium	13000		200		ug/L	1		6010B	Dissolved
Manganese	1900		3.0		ug/L	1		6010B	Dissolved
Potassium	560		500		ug/L	1		6010B	Dissolved
Sodium	19000		1000		ug/L	1		6010B	Dissolved
Chloride	14		0.50		mg/L	1		300.0	Total/NA
Sulfate	3.2		1.0		mg/L	1		300.0	Total/NA
Ammonia as N	0.31		0.030		mg/L	1		350.1	Total/NA
Total Organic Carbon - Average	1.8		1.0		mg/L	1		9060	Total/NA
Total Anions	3.9				meq/L	1		SM 1030E	Total/NA
Total Cations	4.1				meq/L	1		SM 1030E	Total/NA
Percent Difference	3.4				%	1		SM 1030E	Total/NA
Calcium	40				mg/L	1		SM 1030E	Total/NA
Magnesium	13				mg/L	1		SM 1030E	Total/NA
Potassium	0.56				mg/L	1		SM 1030E	Total/NA
Sodium	19				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.31				mg/L	1		SM 1030E	Total/NA
Chloride	14				mg/L	1		SM 1030E	Total/NA
Sulfate	3.2				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	170				mg/L	1		SM 1030E	Total/NA
Alkalinity	170				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.00				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	3.4				%	1		SM 1030E	Total/NA
Calculated TDS	190				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.1				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	220				mg/L	1		SM 1030E	Total/NA
Iron	3.8				mg/L	1		SM 1030E	Total/NA
Calcium	2.0				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	1.1				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.014				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	0.83				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.022				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	0.39				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.067				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	170				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	3.4				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.20				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	170		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	220		10		mg/L	1		SM 2540C	Total/NA
Field pH	6.81				SU	1		Field Sampling	Total/NA
Field Conductivity	400.9				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	11.7				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	1.39				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	-66.5				millivolts	1		Field Sampling	Total/NA

Client Sample ID: MW-21A

Lab Sample ID: 280-147466-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	30000		500		ug/L	1		6010B	Dissolved
Magnesium	12000		200		ug/L	1		6010B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-21A (Continued)

Lab Sample ID: 280-147466-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	3.4		3.0		ug/L	1		6010B	Dissolved
Sodium	14000		1000		ug/L	1		6010B	Dissolved
Chloride	5.3		0.50		mg/L	1		300.0	Total/NA
Sulfate	10		1.0		mg/L	1		300.0	Total/NA
Nitrate/Nitrite	1.7		0.050		mg/L	1		353.2	Total/NA
Total Organic Carbon - Average	1.4		1.0		mg/L	1		9060	Total/NA
Total Anions	3.1				meq/L	1		SM 1030E	Total/NA
Total Cations	3.1				meq/L	1		SM 1030E	Total/NA
Percent Difference	0.27				%	1		SM 1030E	Total/NA
Calcium	30				mg/L	1		SM 1030E	Total/NA
Magnesium	12				mg/L	1		SM 1030E	Total/NA
Potassium	0.00				mg/L	1		SM 1030E	Total/NA
Sodium	14				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.00				mg/L	1		SM 1030E	Total/NA
Chloride	5.3				mg/L	1		SM 1030E	Total/NA
Sulfate	10				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	130				mg/L	1		SM 1030E	Total/NA
Alkalinity	130				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	1.7				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	0.27				%	1		SM 1030E	Total/NA
Calculated TDS	140				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.3				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	180				mg/L	1		SM 1030E	Total/NA
Iron	0.00				mg/L	1		SM 1030E	Total/NA
Calcium	1.5				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	0.99				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	0.61				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	0.15				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.21				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	130				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	2.6				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.12				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	130		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	180		10		mg/L	1		SM 2540C	Total/NA
Field pH	6.04				SU	1		Field Sampling	Total/NA
Field Conductivity	289.5				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	11.9				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	7.99				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	97.4				millivolts	1		Field Sampling	Total/NA

Client Sample ID: MW-21B

Lab Sample ID: 280-147466-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	46000		500		ug/L	1		6010B	Dissolved
Iron	240	B	30		ug/L	1		6010B	Dissolved
Magnesium	18000		200		ug/L	1		6010B	Dissolved
Manganese	1600		3.0		ug/L	1		6010B	Dissolved
Potassium	1100		500		ug/L	1		6010B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-21B (Continued)

Lab Sample ID: 280-147466-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	27000		1000		ug/L	1		6010B	Dissolved
Chloride	13		0.50		mg/L	1		300.0	Total/NA
Sulfate	1.9		1.0		mg/L	1		300.0	Total/NA
Ammonia as N	0.36		0.030		mg/L	1		350.1	Total/NA
Total Organic Carbon - Average	3.1		1.0		mg/L	1		9060	Total/NA
Total Anions	4.8				meq/L	1		SM 1030E	Total/NA
Total Cations	5.0				meq/L	1		SM 1030E	Total/NA
Percent Difference	2.2				%	1		SM 1030E	Total/NA
Calcium	46				mg/L	1		SM 1030E	Total/NA
Magnesium	18				mg/L	1		SM 1030E	Total/NA
Potassium	1.1				mg/L	1		SM 1030E	Total/NA
Sodium	27				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.36				mg/L	1		SM 1030E	Total/NA
Chloride	13				mg/L	1		SM 1030E	Total/NA
Sulfate	1.9				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	220				mg/L	1		SM 1030E	Total/NA
Alkalinity	220				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.00				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	2.2				%	1		SM 1030E	Total/NA
Calculated TDS	240				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.1				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	260				mg/L	1		SM 1030E	Total/NA
Iron	0.24				mg/L	1		SM 1030E	Total/NA
Calcium	2.3				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	1.5				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.028				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	1.2				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.026				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	0.37				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.040				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	220				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	4.4				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.013				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	220		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	260		10		mg/L	1		SM 2540C	Total/NA
Field pH	6.55				SU	1		Field Sampling	Total/NA
Field Conductivity	435.6				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	12.4				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	0.75				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	51.2				millivolts	1		Field Sampling	Total/NA

Client Sample ID: MW-16A

Lab Sample ID: 280-147466-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	30000		500		ug/L	1		6010B	Dissolved
Iron	40	B	30		ug/L	1		6010B	Dissolved
Magnesium	14000		200		ug/L	1		6010B	Dissolved
Manganese	1000		3.0		ug/L	1		6010B	Dissolved
Sodium	32000		1000		ug/L	1		6010B	Dissolved
Chloride	11		0.50		mg/L	1		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-16A (Continued)

Lab Sample ID: 280-147466-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	19		1.0		mg/L	1		300.0	Total/NA
Ammonia as N	0.051		0.030		mg/L	1		350.1	Total/NA
Total Organic Carbon - Average	1.6		1.0		mg/L	1		9060	Total/NA
Total Anions	3.7				meq/L	1		SM 1030E	Total/NA
Total Cations	4.0				meq/L	1		SM 1030E	Total/NA
Percent Difference	4.4				%	1		SM 1030E	Total/NA
Calcium	30				mg/L	1		SM 1030E	Total/NA
Magnesium	14				mg/L	1		SM 1030E	Total/NA
Potassium	0.00				mg/L	1		SM 1030E	Total/NA
Sodium	32				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.051				mg/L	1		SM 1030E	Total/NA
Chloride	11				mg/L	1		SM 1030E	Total/NA
Sulfate	19				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	150				mg/L	1		SM 1030E	Total/NA
Alkalinity	150				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.00				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	4.4				%	1		SM 1030E	Total/NA
Calculated TDS	180				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.2				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	220				mg/L	1		SM 1030E	Total/NA
Iron	0.040				mg/L	1		SM 1030E	Total/NA
Calcium	1.5				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	1.2				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	1.4				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.0036				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	0.31				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.40				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	150				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	3.0				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.0021				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	150		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	220		10		mg/L	1		SM 2540C	Total/NA
Field pH	6.18				SU	1		Field Sampling	Total/NA
Field Conductivity	349.1				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	12.0				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	2.66				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	127.0				millivolts	1		Field Sampling	Total/NA

Client Sample ID: FB2

Lab Sample ID: 280-147466-7

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Total Anions	0.00				meq/L	1		SM 1030E	Total/NA
Total Cations	0.00				meq/L	1		SM 1030E	Total/NA
Percent Difference	NC				%	1		SM 1030E	Total/NA
Calcium	0.00				mg/L	1		SM 1030E	Total/NA
Magnesium	0.00				mg/L	1		SM 1030E	Total/NA
Potassium	0.00				mg/L	1		SM 1030E	Total/NA
Sodium	0.00				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.00				mg/L	1		SM 1030E	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: FB2 (Continued)

Lab Sample ID: 280-147466-7

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Chloride	0.00				mg/L	1		SM 1030E	Total/NA
Sulfate	0.00				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	0.00				mg/L	1		SM 1030E	Total/NA
Alkalinity	0.00				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.00				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	NC				%	1		SM 1030E	Total/NA
Calculated TDS	0.00				mg/L	1		SM 1030E	Total/NA
TDS Ratio	NC				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	0.00				mg/L	1		SM 1030E	Total/NA
Iron	0.00				mg/L	1		SM 1030E	Total/NA
Calcium	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	0.00				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.00				meq/L	1		SM 1030E (meq)	Total/NA

Client Sample ID: MW-16B

Lab Sample ID: 280-147466-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	84000		500		ug/L	1		6010B	Dissolved
Iron	1500	B	30		ug/L	1		6010B	Dissolved
Magnesium	31000		200		ug/L	1		6010B	Dissolved
Manganese	2600		3.0		ug/L	1		6010B	Dissolved
Potassium	610		500		ug/L	1		6010B	Dissolved
Sodium	55000		1000		ug/L	1		6010B	Dissolved
Chloride	100		0.50		mg/L	1		300.0	Total/NA
Sulfate	3.9		1.0		mg/L	1		300.0	Total/NA
Ammonia as N	0.20		0.030		mg/L	1		350.1	Total/NA
Total Organic Carbon - Average	1.8		1.0		mg/L	1		9060	Total/NA
Total Anions	8.5				meq/L	1		SM 1030E	Total/NA
Total Cations	9.2				meq/L	1		SM 1030E	Total/NA
Percent Difference	4.2				%	1		SM 1030E	Total/NA
Calcium	84				mg/L	1		SM 1030E	Total/NA
Magnesium	31				mg/L	1		SM 1030E	Total/NA
Potassium	0.61				mg/L	1		SM 1030E	Total/NA
Sodium	55				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.20				mg/L	1		SM 1030E	Total/NA
Chloride	100				mg/L	1		SM 1030E	Total/NA
Sulfate	3.9				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	280				mg/L	1		SM 1030E	Total/NA
Alkalinity	280				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.00				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	4.2				%	1		SM 1030E	Total/NA
Calculated TDS	440				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.1				NONE	1		SM 1030E	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-16B (Continued)

Lab Sample ID: 280-147466-8

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	480				mg/L	1		SM 1030E	Total/NA
Iron	1.5				mg/L	1		SM 1030E	Total/NA
Calcium	4.2				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	2.6				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.016				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	2.4				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.014				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	2.8				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.081				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	280				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	5.6				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.081				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	280		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	480		10		mg/L	1		SM 2540C	Total/NA
Field pH	6.88				SU	1		Field Sampling	Total/NA
Field Conductivity	915				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	12.4				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	0.73				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	-48.1				millivolts	1		Field Sampling	Total/NA

Client Sample ID: DUP2

Lab Sample ID: 280-147466-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	81000		500		ug/L	1		6010B	Dissolved
Iron	1500	B	30		ug/L	1		6010B	Dissolved
Magnesium	30000		200		ug/L	1		6010B	Dissolved
Manganese	2500		3.0		ug/L	1		6010B	Dissolved
Potassium	620		500		ug/L	1		6010B	Dissolved
Sodium	53000		1000		ug/L	1		6010B	Dissolved
Chloride	100		0.50		mg/L	1		300.0	Total/NA
Sulfate	3.9		1.0		mg/L	1		300.0	Total/NA
Ammonia as N	0.21		0.030		mg/L	1		350.1	Total/NA
Total Organic Carbon - Average	1.8		1.0		mg/L	1		9060	Total/NA
Total Anions	8.7				meq/L	1		SM 1030E	Total/NA
Total Cations	8.9				meq/L	1		SM 1030E	Total/NA
Percent Difference	1.3				%	1		SM 1030E	Total/NA
Calcium	81				mg/L	1		SM 1030E	Total/NA
Magnesium	30				mg/L	1		SM 1030E	Total/NA
Potassium	0.62				mg/L	1		SM 1030E	Total/NA
Sodium	53				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.21				mg/L	1		SM 1030E	Total/NA
Chloride	100				mg/L	1		SM 1030E	Total/NA
Sulfate	3.9				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	290				mg/L	1		SM 1030E	Total/NA
Alkalinity	290				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.00				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	1.3				%	1		SM 1030E	Total/NA
Calculated TDS	440				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.1				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	480				mg/L	1		SM 1030E	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DUP2 (Continued)

Lab Sample ID: 280-147466-9

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Iron	1.5				mg/L	1		SM 1030E	Total/NA
Calcium	4.0				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	2.5				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.016				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	2.3				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.015				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	2.8				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.081				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	290				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	5.8				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.081				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	290		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	480		10		mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Waste Management
Job ID: 280-147466-1
Project/Site: 1003|Riverbend Landfill - Groundwater

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-147466-1	TB1	Water	04/13/21 07:00	04/15/21 10:00
280-147466-2	MW-14A	Water	04/13/21 13:30	04/15/21 10:00
280-147466-3	MW-14B	Water	04/13/21 14:40	04/15/21 10:00
280-147466-4	MW-21A	Water	04/13/21 15:55	04/15/21 10:00
280-147466-5	MW-21B	Water	04/14/21 08:55	04/15/21 10:00
280-147466-6	MW-16A	Water	04/14/21 10:50	04/15/21 10:00
280-147466-7	FB2	Water	04/14/21 10:10	04/15/21 10:00
280-147466-8	MW-16B	Water	04/14/21 10:10	04/15/21 10:00
280-147466-9	DUP2	Water	04/14/21 10:15	04/15/21 10:00

Method Summary

Client: Waste Management
Job ID: 280-147466-1
Project/Site: 1003|Riverbend Landfill - Groundwater

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL DEN
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	TAL DEN
6010B	Metals (ICP)	SW846	TAL DEN
300.0	Anions, Ion Chromatography	MCAWW	TAL BUF
350.1	Nitrogen, Ammonia	MCAWW	TAL DEN
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	TAL DEN
9060	Organic Carbon, Total (TOC)	SW846	TAL DEN
SM 1030E	Cation Anion Balance	SM	TAL DEN
SM 1030E (meq)	Cation Anion Balance	SM	TAL DEN
SM 2320B	Alkalinity	SM	TAL DEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL DEN
Field Sampling	Field Sampling	EPA	TAL DEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL DEN
5030B	Purge and Trap	SW846	TAL DEN
8011	Microextraction	SW846	TAL DEN

Protocol 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.

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL DEN = Eurofins TestAmerica, Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Groundwater

Job ID: 280-147466-1

Client Sample ID: TB1
Date Collected: 04/13/21 07:00
Date Received: 04/15/21 10:00

Lab Sample ID: 280-147466-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/22/21 05:39	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/22/21 05:39	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/22/21 05:39	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/22/21 05:39	1
1,1-Dichloroethane	ND		1.0		ug/L			04/22/21 05:39	1
1,1-Dichloroethene	ND		1.0		ug/L			04/22/21 05:39	1
1,1-Dichloropropene	ND		1.0		ug/L			04/22/21 05:39	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/22/21 05:39	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/22/21 05:39	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/22/21 05:39	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/22/21 05:39	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/22/21 05:39	1
1,2-Dichloroethane	ND		1.0		ug/L			04/22/21 05:39	1
1,2-Dichloropropane	ND		1.0		ug/L			04/22/21 05:39	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/22/21 05:39	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/22/21 05:39	1
1,3-Dichloropropane	ND		1.0		ug/L			04/22/21 05:39	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/22/21 05:39	1
2,2-Dichloropropane	ND		5.0		ug/L			04/22/21 05:39	1
2-Butanone (MEK)	ND		6.0		ug/L			04/22/21 05:39	1
2-Chlorotoluene	ND		1.0		ug/L			04/22/21 05:39	1
2-Hexanone	ND		5.0		ug/L			04/22/21 05:39	1
4-Chlorotoluene	ND		1.0		ug/L			04/22/21 05:39	1
4-Isopropyltoluene	ND		1.0		ug/L			04/22/21 05:39	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/22/21 05:39	1
Acetone	ND		10		ug/L			04/22/21 05:39	1
Benzene	ND		1.0		ug/L			04/22/21 05:39	1
Bromobenzene	ND		1.0		ug/L			04/22/21 05:39	1
Bromochloromethane	ND		1.0		ug/L			04/22/21 05:39	1
Bromodichloromethane	ND		1.0		ug/L			04/22/21 05:39	1
Bromoform	ND		1.0		ug/L			04/22/21 05:39	1
Bromomethane	ND		2.0		ug/L			04/22/21 05:39	1
Carbon disulfide	ND		2.0		ug/L			04/22/21 05:39	1
Carbon tetrachloride	ND		1.0		ug/L			04/22/21 05:39	1
Chlorobenzene	ND		1.0		ug/L			04/22/21 05:39	1
Chloroethane	ND		2.0		ug/L			04/22/21 05:39	1
Chloroform	ND		1.0		ug/L			04/22/21 05:39	1
Chloromethane	ND		2.0		ug/L			04/22/21 05:39	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/22/21 05:39	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/22/21 05:39	1
Dibromochloromethane	ND		1.0		ug/L			04/22/21 05:39	1
Dibromomethane	ND		1.0		ug/L			04/22/21 05:39	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/22/21 05:39	1
Ethylbenzene	ND		1.0		ug/L			04/22/21 05:39	1
Hexachlorobutadiene	ND		1.0		ug/L			04/22/21 05:39	1
Isopropylbenzene	ND		1.0		ug/L			04/22/21 05:39	1
Methylene Chloride	ND		5.0		ug/L			04/22/21 05:39	1
Naphthalene	ND		1.0		ug/L			04/22/21 05:39	1
n-Butylbenzene	ND		1.0		ug/L			04/22/21 05:39	1

Client Sample ID: TB1

Date Collected: 04/13/21 07:00
Date Received: 04/15/21 10:00

Lab Sample ID: 280-147466-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		1.0		ug/L			04/22/21 05:39	1
sec-Butylbenzene	ND		1.0		ug/L			04/22/21 05:39	1
Styrene	ND		1.0		ug/L			04/22/21 05:39	1
tert-Butylbenzene	ND		1.0		ug/L			04/22/21 05:39	1
Tetrachloroethene	ND		1.0		ug/L			04/22/21 05:39	1
Toluene	ND		1.0		ug/L			04/22/21 05:39	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/22/21 05:39	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/22/21 05:39	1
Trichloroethene	ND		1.0		ug/L			04/22/21 05:39	1
Trichlorofluoromethane	ND		2.0		ug/L			04/22/21 05:39	1
Vinyl chloride	ND		1.0		ug/L			04/22/21 05:39	1
Xylenes (total)	ND		2.0		ug/L			04/22/21 05:39	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/22/21 05:39*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 127*		*04/22/21 05:39*	*1*
4-Bromofluorobenzene (Surr)	*100*		*78 - 120*		*04/22/21 05:39*	*1*
Dibromofluoromethane (Surr)	*101*		*77 - 120*		*04/22/21 05:39*	*1*
Toluene-d8 (Surr)	*99*		*80 - 125*		*04/22/21 05:39*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		04/23/21 10:55	04/23/21 18:08	1
1,2-Dibromoethane	ND		0.050		ug/L		04/23/21 10:55	04/23/21 18:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*114*		*70 - 130*	*04/23/21 10:55*	*04/23/21 18:08*	*1*

Client Sample ID: MW-14A

Date Collected: 04/13/21 13:30
Date Received: 04/15/21 10:00

Lab Sample ID: 280-147466-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/25/21 00:54	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/25/21 00:54	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/25/21 00:54	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/25/21 00:54	1
1,1-Dichloroethane	ND		1.0		ug/L			04/25/21 00:54	1
1,1-Dichloroethene	ND		1.0		ug/L			04/25/21 00:54	1
1,1-Dichloropropene	ND		1.0		ug/L			04/25/21 00:54	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/25/21 00:54	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/25/21 00:54	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/25/21 00:54	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/25/21 00:54	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/25/21 00:54	1
1,2-Dichloroethane	ND		1.0		ug/L			04/25/21 00:54	1
1,2-Dichloropropane	ND		1.0		ug/L			04/25/21 00:54	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/25/21 00:54	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Groundwater

Job ID: 280-147466-1

Client Sample ID: MW-14A
Date Collected: 04/13/21 13:30
Date Received: 04/15/21 10:00

Lab Sample ID: 280-147466-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0		ug/L			04/25/21 00:54	1
1,3-Dichloropropane	ND		1.0		ug/L			04/25/21 00:54	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/25/21 00:54	1
2,2-Dichloropropane	ND		5.0		ug/L			04/25/21 00:54	1
2-Butanone (MEK)	ND		6.0		ug/L			04/25/21 00:54	1
2-Chlorotoluene	ND		1.0		ug/L			04/25/21 00:54	1
2-Hexanone	ND		5.0		ug/L			04/25/21 00:54	1
4-Chlorotoluene	ND		1.0		ug/L			04/25/21 00:54	1
4-Isopropyltoluene	ND		1.0		ug/L			04/25/21 00:54	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/25/21 00:54	1
Acetone	ND		10		ug/L			04/25/21 00:54	1
Benzene	ND		1.0		ug/L			04/25/21 00:54	1
Bromobenzene	ND		1.0		ug/L			04/25/21 00:54	1
Bromochloromethane	ND		1.0		ug/L			04/25/21 00:54	1
Bromodichloromethane	ND		1.0		ug/L			04/25/21 00:54	1
Bromoform	ND		1.0		ug/L			04/25/21 00:54	1
Bromomethane	ND		2.0		ug/L			04/25/21 00:54	1
Carbon disulfide	ND		2.0		ug/L			04/25/21 00:54	1
Carbon tetrachloride	ND		1.0		ug/L			04/25/21 00:54	1
Chlorobenzene	ND		1.0		ug/L			04/25/21 00:54	1
Chloroethane	ND		2.0		ug/L			04/25/21 00:54	1
Chloroform	ND		1.0		ug/L			04/25/21 00:54	1
Chloromethane	ND		2.0		ug/L			04/25/21 00:54	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/25/21 00:54	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/25/21 00:54	1
Dibromochloromethane	ND		1.0		ug/L			04/25/21 00:54	1
Dibromomethane	ND		1.0		ug/L			04/25/21 00:54	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/25/21 00:54	1
Ethylbenzene	ND		1.0		ug/L			04/25/21 00:54	1
Hexachlorobutadiene	ND		1.0		ug/L			04/25/21 00:54	1
Isopropylbenzene	ND		1.0		ug/L			04/25/21 00:54	1
Methylene Chloride	ND		5.0		ug/L			04/25/21 00:54	1
Naphthalene	ND		1.0		ug/L			04/25/21 00:54	1
n-Butylbenzene	ND		1.0		ug/L			04/25/21 00:54	1
N-Propylbenzene	ND		1.0		ug/L			04/25/21 00:54	1
sec-Butylbenzene	ND		1.0		ug/L			04/25/21 00:54	1
Styrene	ND		1.0		ug/L			04/25/21 00:54	1
tert-Butylbenzene	ND		1.0		ug/L			04/25/21 00:54	1
Tetrachloroethene	ND		1.0		ug/L			04/25/21 00:54	1
Toluene	ND		1.0		ug/L			04/25/21 00:54	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/25/21 00:54	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/25/21 00:54	1
Trichloroethene	ND		1.0		ug/L			04/25/21 00:54	1
Trichlorofluoromethane	ND		2.0		ug/L			04/25/21 00:54	1
Vinyl chloride	ND		1.0		ug/L			04/25/21 00:54	1
Xylenes (total)	ND		2.0		ug/L			04/25/21 00:54	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/25/21 00:54*	*1*

Client Sample ID: MW-14A

Date Collected: 04/13/21 13:30
Date Received: 04/15/21 10:00

Lab Sample ID: 280-147466-2

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 127*		*04/25/21 00:54*	*1*
4-Bromofluorobenzene (Surr)	*95*		*78 - 120*		*04/25/21 00:54*	*1*
Dibromofluoromethane (Surr)	*101*		*77 - 120*		*04/25/21 00:54*	*1*
Toluene-d8 (Surr)	*98*		*80 - 125*		*04/25/21 00:54*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		04/23/21 10:55	04/23/21 18:30	1
1,2-Dibromoethane	ND		0.050		ug/L		04/23/21 10:55	04/23/21 18:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*115*		*70 - 130*	*04/23/21 10:55*	*04/23/21 18:30*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**36000**		500		ug/L		04/23/21 09:06	04/23/21 19:31	1
Iron	ND		30		ug/L		04/23/21 09:06	04/23/21 19:31	1
Magnesium	**15000**		200		ug/L		04/23/21 09:06	04/23/21 19:31	1
Manganese	**34**		3.0		ug/L		04/23/21 09:06	04/23/21 19:31	1
Potassium	ND		500		ug/L		04/23/21 09:06	04/23/21 19:31	1
Sodium	**11000**		1000		ug/L		04/23/21 09:06	04/23/21 19:31	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	**3.4**				meq/L			05/03/21 09:05	1
Total Cations	**3.5**				meq/L			05/03/21 09:05	1
Percent Difference	**0.98**				%			05/03/21 09:05	1
Calcium	**36**				mg/L			05/03/21 09:05	1
Magnesium	**15**				mg/L			05/03/21 09:05	1
Potassium	**0.00**				mg/L			05/03/21 09:05	1
Sodium	**11**				mg/L			05/03/21 09:05	1
Ammonia as N	**0.00**				mg/L			05/03/21 09:05	1
Chloride	**11**				mg/L			05/03/21 09:05	1
Sulfate	**16**				mg/L			05/03/21 09:05	1
Bicarbonate Alkalinity	**140**				mg/L			05/03/21 09:05	1
Alkalinity	**140**				mg/L			05/03/21 09:05	1
Nitrate/Nitrite	**0.00**				mg/L			05/03/21 09:05	1
Anion/Cation Balance	**0.98**				%			05/03/21 09:05	1
Calculated TDS	**160**				mg/L			05/03/21 09:05	1
TDS Ratio	**1.3**				NONE			05/03/21 09:05	1
Total Dissolved Solids	**210**				mg/L			05/03/21 09:05	1
Iron	**0.00**				mg/L			05/03/21 09:05	1
Calcium	**1.8**				meq/L			05/03/21 09:05	1
Magnesium	**1.2**				meq/L			05/03/21 09:05	1
Potassium	**0.00**				meq/L			05/03/21 09:05	1
Sodium	**0.48**				meq/L			05/03/21 09:05	1
Ammonia as N	**0.00**				meq/L			05/03/21 09:05	1
Chloride	**0.31**				meq/L			05/03/21 09:05	1
Sulfate	**0.33**				meq/L			05/03/21 09:05	1
Alkalinity	**140**				mg/L			05/03/21 09:05	1
Bicarbonate Alkalinity	**2.8**				meq/L			05/03/21 09:05	1

Client Sample ID: MW-14A
Lab Sample ID: 280-147466-2
Date Collected: 04/13/21 13:30
Matrix: Water
Date Received: 04/15/21 10:00

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate/Nitrite	**0.00**				meq/L			05/03/21 09:05	1
Iron	**0.00**				meq/L			05/03/21 09:05	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**11**		0.50		mg/L			04/28/21 01:05	1
Sulfate	**16**		1.0		mg/L			04/28/21 01:05	1
Ammonia as N	ND		0.030		mg/L			04/26/21 18:12	1
Nitrate/Nitrite	ND	F1	0.050		mg/L			04/28/21 18:52	1
Total Organic Carbon - Average	**1.1**		1.0		mg/L			05/03/21 17:23	1
Bicarbonate Alkalinity	**140**		10		mg/L			04/16/21 22:47	1
Total Dissolved Solids	**210**		10		mg/L			04/19/21 13:23	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**6.04**				SU			04/13/21 14:30	1
Field Conductivity	**344.2**				umhos/cm			04/13/21 14:30	1
Field Temperature	**10.3**				Degrees C			04/13/21 14:30	1
Field Dissolved Oxygen	**2.90**				mg/L			04/13/21 14:30	1
Field EH/ORP	**124.9**				millivolts			04/13/21 14:30	1

Client Sample ID: MW-14B
Lab Sample ID: 280-147466-3
Date Collected: 04/13/21 14:40
Matrix: Water
Date Received: 04/15/21 10:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/25/21 01:16	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/25/21 01:16	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/25/21 01:16	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/25/21 01:16	1
1,1-Dichloroethane	ND		1.0		ug/L			04/25/21 01:16	1
1,1-Dichloroethene	ND		1.0		ug/L			04/25/21 01:16	1
1,1-Dichloropropene	ND		1.0		ug/L			04/25/21 01:16	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/25/21 01:16	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/25/21 01:16	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/25/21 01:16	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/25/21 01:16	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/25/21 01:16	1
1,2-Dichloroethane	ND		1.0		ug/L			04/25/21 01:16	1
1,2-Dichloropropane	ND		1.0		ug/L			04/25/21 01:16	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/25/21 01:16	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/25/21 01:16	1
1,3-Dichloropropane	ND		1.0		ug/L			04/25/21 01:16	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/25/21 01:16	1
2,2-Dichloropropane	ND		5.0		ug/L			04/25/21 01:16	1
2-Butanone (MEK)	ND		6.0		ug/L			04/25/21 01:16	1
2-Chlorotoluene	ND		1.0		ug/L			04/25/21 01:16	1
2-Hexanone	ND		5.0		ug/L			04/25/21 01:16	1
4-Chlorotoluene	ND		1.0		ug/L			04/25/21 01:16	1
4-Isopropyltoluene	ND		1.0		ug/L			04/25/21 01:16	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/25/21 01:16	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Groundwater

Job ID: 280-147466-1

Client Sample ID: MW-14B
Date Collected: 04/13/21 14:40
Date Received: 04/15/21 10:00

Lab Sample ID: 280-147466-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10		ug/L			04/25/21 01:16	1
Benzene	ND		1.0		ug/L			04/25/21 01:16	1
Bromobenzene	ND		1.0		ug/L			04/25/21 01:16	1
Bromochloromethane	ND		1.0		ug/L			04/25/21 01:16	1
Bromodichloromethane	ND		1.0		ug/L			04/25/21 01:16	1
Bromoform	ND		1.0		ug/L			04/25/21 01:16	1
Bromomethane	ND		2.0		ug/L			04/25/21 01:16	1
Carbon disulfide	ND		2.0		ug/L			04/25/21 01:16	1
Carbon tetrachloride	ND		1.0		ug/L			04/25/21 01:16	1
Chlorobenzene	ND		1.0		ug/L			04/25/21 01:16	1
Chloroethane	ND		2.0		ug/L			04/25/21 01:16	1
Chloroform	ND		1.0		ug/L			04/25/21 01:16	1
Chloromethane	ND		2.0		ug/L			04/25/21 01:16	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/25/21 01:16	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/25/21 01:16	1
Dibromochloromethane	ND		1.0		ug/L			04/25/21 01:16	1
Dibromomethane	ND		1.0		ug/L			04/25/21 01:16	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/25/21 01:16	1
Ethylbenzene	ND		1.0		ug/L			04/25/21 01:16	1
Hexachlorobutadiene	ND		1.0		ug/L			04/25/21 01:16	1
Isopropylbenzene	ND		1.0		ug/L			04/25/21 01:16	1
Methylene Chloride	ND		5.0		ug/L			04/25/21 01:16	1
Naphthalene	ND		1.0		ug/L			04/25/21 01:16	1
n-Butylbenzene	ND		1.0		ug/L			04/25/21 01:16	1
N-Propylbenzene	ND		1.0		ug/L			04/25/21 01:16	1
sec-Butylbenzene	ND		1.0		ug/L			04/25/21 01:16	1
Styrene	ND		1.0		ug/L			04/25/21 01:16	1
tert-Butylbenzene	ND		1.0		ug/L			04/25/21 01:16	1
Tetrachloroethene	ND		1.0		ug/L			04/25/21 01:16	1
Toluene	ND		1.0		ug/L			04/25/21 01:16	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/25/21 01:16	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/25/21 01:16	1
Trichloroethene	ND		1.0		ug/L			04/25/21 01:16	1
Trichlorofluoromethane	ND		2.0		ug/L			04/25/21 01:16	1
Vinyl chloride	ND		1.0		ug/L			04/25/21 01:16	1
Xylenes (total)	ND		2.0		ug/L			04/25/21 01:16	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/25/21 01:16*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 127*		*04/25/21 01:16*	*1*
4-Bromofluorobenzene (Surr)	*95*		*78 - 120*		*04/25/21 01:16*	*1*
Dibromofluoromethane (Surr)	*103*		*77 - 120*		*04/25/21 01:16*	*1*
Toluene-d8 (Surr)	*96*		*80 - 125*		*04/25/21 01:16*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		04/23/21 10:55	04/23/21 18:52	1
1,2-Dibromoethane	ND		0.050		ug/L		04/23/21 10:55	04/23/21 18:52	1

Client Sample ID: MW-14B

Date Collected: 04/13/21 14:40
Date Received: 04/15/21 10:00

Lab Sample ID: 280-147466-3

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*112*		*70 - 130*	*04/23/21 10:55*	*04/23/21 18:52*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	40000		500		ug/L		04/23/21 09:06	04/23/21 19:48	1
Iron	3800	B	30		ug/L		04/23/21 09:06	04/23/21 19:48	1
Magnesium	13000		200		ug/L		04/23/21 09:06	04/23/21 19:48	1
Manganese	1900		3.0		ug/L		04/23/21 09:06	04/23/21 19:48	1
Potassium	560		500		ug/L		04/23/21 09:06	04/23/21 19:48	1
Sodium	19000		1000		ug/L		04/23/21 09:06	04/23/21 19:48	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	3.9				meq/L			05/03/21 09:05	1
Total Cations	4.1				meq/L			05/03/21 09:05	1
Percent Difference	3.4				%			05/03/21 09:05	1
Calcium	40				mg/L			05/03/21 09:05	1
Magnesium	13				mg/L			05/03/21 09:05	1
Potassium	0.56				mg/L			05/03/21 09:05	1
Sodium	19				mg/L			05/03/21 09:05	1
Ammonia as N	0.31				mg/L			05/03/21 09:05	1
Chloride	14				mg/L			05/03/21 09:05	1
Sulfate	3.2				mg/L			05/03/21 09:05	1
Bicarbonate Alkalinity	170				mg/L			05/03/21 09:05	1
Alkalinity	170				mg/L			05/03/21 09:05	1
Nitrate/Nitrite	0.00				mg/L			05/03/21 09:05	1
Anion/Cation Balance	3.4				%			05/03/21 09:05	1
Calculated TDS	190				mg/L			05/03/21 09:05	1
TDS Ratio	1.1				NONE			05/03/21 09:05	1
Total Dissolved Solids	220				mg/L			05/03/21 09:05	1
Iron	3.8				mg/L			05/03/21 09:05	1
Calcium	2.0				meq/L			05/03/21 09:05	1
Magnesium	1.1				meq/L			05/03/21 09:05	1
Potassium	0.014				meq/L			05/03/21 09:05	1
Sodium	0.83				meq/L			05/03/21 09:05	1
Ammonia as N	0.022				meq/L			05/03/21 09:05	1
Chloride	0.39				meq/L			05/03/21 09:05	1
Sulfate	0.067				meq/L			05/03/21 09:05	1
Alkalinity	170				mg/L			05/03/21 09:05	1
Bicarbonate Alkalinity	3.4				meq/L			05/03/21 09:05	1
Nitrate/Nitrite	0.00				meq/L			05/03/21 09:05	1
Iron	0.20				meq/L			05/03/21 09:05	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14		0.50		mg/L			04/28/21 01:23	1
Sulfate	3.2		1.0		mg/L			04/28/21 01:23	1
Ammonia as N	0.31		0.030		mg/L			04/26/21 18:18	1
Nitrate/Nitrite	ND		0.050		mg/L			04/28/21 18:58	1
Total Organic Carbon - Average	1.8		1.0		mg/L			05/02/21 07:10	1
Bicarbonate Alkalinity	170		10		mg/L			04/16/21 22:53	1
Total Dissolved Solids	220		10		mg/L			04/19/21 13:23	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Groundwater

Job ID: 280-147466-1

Client Sample ID: MW-14B

Lab Sample ID: 280-147466-3

Date Collected: 04/13/21 14:40
Matrix: Water
Date Received: 04/15/21 10:00

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.81				SU			04/13/21 15:40	1
Field Conductivity	400.9				umhos/cm			04/13/21 15:40	1
Field Temperature	11.7				Degrees C			04/13/21 15:40	1
Field Dissolved Oxygen	1.39				mg/L			04/13/21 15:40	1
Field EH/ORP	-66.5				millivolts			04/13/21 15:40	1

Client Sample ID: MW-21A

Lab Sample ID: 280-147466-4

Date Collected: 04/13/21 15:55
Matrix: Water
Date Received: 04/15/21 10:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/25/21 01:39	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/25/21 01:39	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/25/21 01:39	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/25/21 01:39	1
1,1-Dichloroethane	ND		1.0		ug/L			04/25/21 01:39	1
1,1-Dichloroethene	ND		1.0		ug/L			04/25/21 01:39	1
1,1-Dichloropropene	ND		1.0		ug/L			04/25/21 01:39	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/25/21 01:39	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/25/21 01:39	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/25/21 01:39	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/25/21 01:39	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/25/21 01:39	1
1,2-Dichloroethane	ND		1.0		ug/L			04/25/21 01:39	1
1,2-Dichloropropane	ND		1.0		ug/L			04/25/21 01:39	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/25/21 01:39	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/25/21 01:39	1
1,3-Dichloropropane	ND		1.0		ug/L			04/25/21 01:39	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/25/21 01:39	1
2,2-Dichloropropane	ND		5.0		ug/L			04/25/21 01:39	1
2-Butanone (MEK)	ND		6.0		ug/L			04/25/21 01:39	1
2-Chlorotoluene	ND		1.0		ug/L			04/25/21 01:39	1
2-Hexanone	ND		5.0		ug/L			04/25/21 01:39	1
4-Chlorotoluene	ND		1.0		ug/L			04/25/21 01:39	1
4-Isopropyltoluene	ND		1.0		ug/L			04/25/21 01:39	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/25/21 01:39	1
Acetone	ND		10		ug/L			04/25/21 01:39	1
Benzene	ND		1.0		ug/L			04/25/21 01:39	1
Bromobenzene	ND		1.0		ug/L			04/25/21 01:39	1
Bromochloromethane	ND		1.0		ug/L			04/25/21 01:39	1
Bromodichloromethane	ND		1.0		ug/L			04/25/21 01:39	1
Bromoform	ND		1.0		ug/L			04/25/21 01:39	1
Bromomethane	ND		2.0		ug/L			04/25/21 01:39	1
Carbon disulfide	ND		2.0		ug/L			04/25/21 01:39	1
Carbon tetrachloride	ND		1.0		ug/L			04/25/21 01:39	1
Chlorobenzene	ND		1.0		ug/L			04/25/21 01:39	1
Chloroethane	ND		2.0		ug/L			04/25/21 01:39	1
Chloroform	ND		1.0		ug/L			04/25/21 01:39	1
Chloromethane	ND		2.0		ug/L			04/25/21 01:39	1

Client Sample ID: MW-21A

Date Collected: 04/13/21 15:55
Date Received: 04/15/21 10:00

Lab Sample ID: 280-147466-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/25/21 01:39	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/25/21 01:39	1
Dibromochloromethane	ND		1.0		ug/L			04/25/21 01:39	1
Dibromomethane	ND		1.0		ug/L			04/25/21 01:39	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/25/21 01:39	1
Ethylbenzene	ND		1.0		ug/L			04/25/21 01:39	1
Hexachlorobutadiene	ND		1.0		ug/L			04/25/21 01:39	1
Isopropylbenzene	ND		1.0		ug/L			04/25/21 01:39	1
Methylene Chloride	ND		5.0		ug/L			04/25/21 01:39	1
Naphthalene	ND		1.0		ug/L			04/25/21 01:39	1
n-Butylbenzene	ND		1.0		ug/L			04/25/21 01:39	1
N-Propylbenzene	ND		1.0		ug/L			04/25/21 01:39	1
sec-Butylbenzene	ND		1.0		ug/L			04/25/21 01:39	1
Styrene	ND		1.0		ug/L			04/25/21 01:39	1
tert-Butylbenzene	ND		1.0		ug/L			04/25/21 01:39	1
Tetrachloroethene	ND		1.0		ug/L			04/25/21 01:39	1
Toluene	ND		1.0		ug/L			04/25/21 01:39	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/25/21 01:39	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/25/21 01:39	1
Trichloroethene	ND		1.0		ug/L			04/25/21 01:39	1
Trichlorofluoromethane	ND		2.0		ug/L			04/25/21 01:39	1
Vinyl chloride	ND		1.0		ug/L			04/25/21 01:39	1
Xylenes (total)	ND		2.0		ug/L			04/25/21 01:39	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/25/21 01:39*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 127*		*04/25/21 01:39*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*04/25/21 01:39*	*1*
Dibromofluoromethane (Surr)	*103*		*77 - 120*		*04/25/21 01:39*	*1*
Toluene-d8 (Surr)	*95*		*80 - 125*		*04/25/21 01:39*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		04/23/21 10:55	04/23/21 19:13	1
1,2-Dibromoethane	ND		0.050		ug/L		04/23/21 10:55	04/23/21 19:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*109*		*70 - 130*	*04/23/21 10:55*	*04/23/21 19:13*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**30000**		500		ug/L		04/23/21 09:06	04/23/21 19:52	1
Iron	ND		30		ug/L		04/23/21 09:06	04/23/21 19:52	1
Magnesium	**12000**		200		ug/L		04/23/21 09:06	04/23/21 19:52	1
Manganese	**3.4**		3.0		ug/L		04/23/21 09:06	04/23/21 19:52	1
Potassium	ND		500		ug/L		04/23/21 09:06	04/23/21 19:52	1
Sodium	**14000**		1000		ug/L		04/23/21 09:06	04/23/21 19:52	1

Client Sample ID: MW-21A
Date Collected: 04/13/21 15:55
Date Received: 04/15/21 10:00

Lab Sample ID: 280-147466-4
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	3.1				meq/L			05/03/21 09:05	1
Total Cations	3.1				meq/L			05/03/21 09:05	1
Percent Difference	0.27				%			05/03/21 09:05	1
Calcium	30				mg/L			05/03/21 09:05	1
Magnesium	12				mg/L			05/03/21 09:05	1
Potassium	0.00				mg/L			05/03/21 09:05	1
Sodium	14				mg/L			05/03/21 09:05	1
Ammonia as N	0.00				mg/L			05/03/21 09:05	1
Chloride	5.3				mg/L			05/03/21 09:05	1
Sulfate	10				mg/L			05/03/21 09:05	1
Bicarbonate Alkalinity	130				mg/L			05/03/21 09:05	1
Alkalinity	130				mg/L			05/03/21 09:05	1
Nitrate/Nitrite	1.7				mg/L			05/03/21 09:05	1
Anion/Cation Balance	0.27				%			05/03/21 09:05	1
Calculated TDS	140				mg/L			05/03/21 09:05	1
TDS Ratio	1.3				NONE			05/03/21 09:05	1
Total Dissolved Solids	180				mg/L			05/03/21 09:05	1
Iron	0.00				mg/L			05/03/21 09:05	1
Calcium	1.5				meq/L			05/03/21 09:05	1
Magnesium	0.99				meq/L			05/03/21 09:05	1
Potassium	0.00				meq/L			05/03/21 09:05	1
Sodium	0.61				meq/L			05/03/21 09:05	1
Ammonia as N	0.00				meq/L			05/03/21 09:05	1
Chloride	0.15				meq/L			05/03/21 09:05	1
Sulfate	0.21				meq/L			05/03/21 09:05	1
Alkalinity	130				mg/L			05/03/21 09:05	1
Bicarbonate Alkalinity	2.6				meq/L			05/03/21 09:05	1
Nitrate/Nitrite	0.12				meq/L			05/03/21 09:05	1
Iron	0.00				meq/L			05/03/21 09:05	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.3		0.50		mg/L			04/28/21 02:53	1
Sulfate	10		1.0		mg/L			04/28/21 02:53	1
Ammonia as N	ND		0.030		mg/L			04/26/21 18:20	1
Nitrate/Nitrite	1.7		0.050		mg/L			04/28/21 19:00	1
Total Organic Carbon - Average	1.4		1.0		mg/L			05/02/21 07:27	1
Bicarbonate Alkalinity	130		10		mg/L			04/16/21 22:59	1
Total Dissolved Solids	180		10		mg/L			04/19/21 13:23	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.04				SU			04/13/21 16:55	1
Field Conductivity	289.5				umhos/cm			04/13/21 16:55	1
Field Temperature	11.9				Degrees C			04/13/21 16:55	1
Field Dissolved Oxygen	7.99				mg/L			04/13/21 16:55	1
Field EH/ORP	97.4				millivolts			04/13/21 16:55	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Groundwater

Job ID: 280-147466-1

Client Sample ID: MW-21B
Date Collected: 04/14/21 08:55
Date Received: 04/15/21 10:00

Lab Sample ID: 280-147466-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/25/21 02:01	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/25/21 02:01	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/25/21 02:01	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/25/21 02:01	1
1,1-Dichloroethane	ND		1.0		ug/L			04/25/21 02:01	1
1,1-Dichloroethene	ND		1.0		ug/L			04/25/21 02:01	1
1,1-Dichloropropene	ND		1.0		ug/L			04/25/21 02:01	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/25/21 02:01	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/25/21 02:01	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/25/21 02:01	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/25/21 02:01	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/25/21 02:01	1
1,2-Dichloroethane	ND		1.0		ug/L			04/25/21 02:01	1
1,2-Dichloropropane	ND		1.0		ug/L			04/25/21 02:01	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/25/21 02:01	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/25/21 02:01	1
1,3-Dichloropropane	ND		1.0		ug/L			04/25/21 02:01	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/25/21 02:01	1
2,2-Dichloropropane	ND		5.0		ug/L			04/25/21 02:01	1
2-Butanone (MEK)	ND		6.0		ug/L			04/25/21 02:01	1
2-Chlorotoluene	ND		1.0		ug/L			04/25/21 02:01	1
2-Hexanone	ND		5.0		ug/L			04/25/21 02:01	1
4-Chlorotoluene	ND		1.0		ug/L			04/25/21 02:01	1
4-Isopropyltoluene	ND		1.0		ug/L			04/25/21 02:01	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/25/21 02:01	1
Acetone	ND		10		ug/L			04/25/21 02:01	1
Benzene	ND		1.0		ug/L			04/25/21 02:01	1
Bromobenzene	ND		1.0		ug/L			04/25/21 02:01	1
Bromochloromethane	ND		1.0		ug/L			04/25/21 02:01	1
Bromodichloromethane	ND		1.0		ug/L			04/25/21 02:01	1
Bromoform	ND		1.0		ug/L			04/25/21 02:01	1
Bromomethane	ND		2.0		ug/L			04/25/21 02:01	1
Carbon disulfide	ND		2.0		ug/L			04/25/21 02:01	1
Carbon tetrachloride	ND		1.0		ug/L			04/25/21 02:01	1
Chlorobenzene	ND		1.0		ug/L			04/25/21 02:01	1
Chloroethane	ND		2.0		ug/L			04/25/21 02:01	1
Chloroform	ND		1.0		ug/L			04/25/21 02:01	1
Chloromethane	ND		2.0		ug/L			04/25/21 02:01	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/25/21 02:01	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/25/21 02:01	1
Dibromochloromethane	ND		1.0		ug/L			04/25/21 02:01	1
Dibromomethane	ND		1.0		ug/L			04/25/21 02:01	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/25/21 02:01	1
Ethylbenzene	ND		1.0		ug/L			04/25/21 02:01	1
Hexachlorobutadiene	ND		1.0		ug/L			04/25/21 02:01	1
Isopropylbenzene	ND		1.0		ug/L			04/25/21 02:01	1
Methylene Chloride	ND		5.0		ug/L			04/25/21 02:01	1
Naphthalene	ND		1.0		ug/L			04/25/21 02:01	1
n-Butylbenzene	ND		1.0		ug/L			04/25/21 02:01	1

Client Sample ID: MW-21B

Date Collected: 04/14/21 08:55
Date Received: 04/15/21 10:00

Lab Sample ID: 280-147466-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		1.0		ug/L			04/25/21 02:01	1
sec-Butylbenzene	ND		1.0		ug/L			04/25/21 02:01	1
Styrene	ND		1.0		ug/L			04/25/21 02:01	1
tert-Butylbenzene	ND		1.0		ug/L			04/25/21 02:01	1
Tetrachloroethene	ND		1.0		ug/L			04/25/21 02:01	1
Toluene	ND		1.0		ug/L			04/25/21 02:01	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/25/21 02:01	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/25/21 02:01	1
Trichloroethene	ND		1.0		ug/L			04/25/21 02:01	1
Trichlorofluoromethane	ND		2.0		ug/L			04/25/21 02:01	1
Vinyl chloride	ND		1.0		ug/L			04/25/21 02:01	1
Xylenes (total)	ND		2.0		ug/L			04/25/21 02:01	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/25/21 02:01*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 127*		*04/25/21 02:01*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*04/25/21 02:01*	*1*
Dibromofluoromethane (Surr)	*104*		*77 - 120*		*04/25/21 02:01*	*1*
Toluene-d8 (Surr)	*98*		*80 - 125*		*04/25/21 02:01*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		04/23/21 10:55	04/23/21 19:35	1
1,2-Dibromoethane	ND		0.050		ug/L		04/23/21 10:55	04/23/21 19:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*109*		*70 - 130*	*04/23/21 10:55*	*04/23/21 19:35*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**46000**		500		ug/L		04/23/21 09:06	04/23/21 19:55	1
Iron	**240**	**B**	30		ug/L		04/23/21 09:06	04/23/21 19:55	1
Magnesium	**18000**		200		ug/L		04/23/21 09:06	04/23/21 19:55	1
Manganese	**1600**		3.0		ug/L		04/23/21 09:06	04/23/21 19:55	1
Potassium	**1100**		500		ug/L		04/23/21 09:06	04/23/21 19:55	1
Sodium	**27000**		1000		ug/L		04/23/21 09:06	04/23/21 19:55	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	**4.8**				meq/L			05/03/21 09:05	1
Total Cations	**5.0**				meq/L			05/03/21 09:05	1
Percent Difference	**2.2**				%			05/03/21 09:05	1
Calcium	**46**				mg/L			05/03/21 09:05	1
Magnesium	**18**				mg/L			05/03/21 09:05	1
Potassium	**1.1**				mg/L			05/03/21 09:05	1
Sodium	**27**				mg/L			05/03/21 09:05	1
Ammonia as N	**0.36**				mg/L			05/03/21 09:05	1
Chloride	**13**				mg/L			05/03/21 09:05	1
Sulfate	**1.9**				mg/L			05/03/21 09:05	1

Client Sample ID: MW-21B

Date Collected: 04/14/21 08:55
Date Received: 04/15/21 10:00

Lab Sample ID: 280-147466-5

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity	220				mg/L			05/03/21 09:05	1
Alkalinity	220				mg/L			05/03/21 09:05	1
Nitrate/Nitrite	0.00				mg/L			05/03/21 09:05	1
Anion/Cation Balance	2.2				%			05/03/21 09:05	1
Calculated TDS	240				mg/L			05/03/21 09:05	1
TDS Ratio	1.1				NONE			05/03/21 09:05	1
Total Dissolved Solids	260				mg/L			05/03/21 09:05	1
Iron	0.24				mg/L			05/03/21 09:05	1
Calcium	2.3				meq/L			05/03/21 09:05	1
Magnesium	1.5				meq/L			05/03/21 09:05	1
Potassium	0.028				meq/L			05/03/21 09:05	1
Sodium	1.2				meq/L			05/03/21 09:05	1
Ammonia as N	0.026				meq/L			05/03/21 09:05	1
Chloride	0.37				meq/L			05/03/21 09:05	1
Sulfate	0.040				meq/L			05/03/21 09:05	1
Alkalinity	220				mg/L			05/03/21 09:05	1
Bicarbonate Alkalinity	4.4				meq/L			05/03/21 09:05	1
Nitrate/Nitrite	0.00				meq/L			05/03/21 09:05	1
Iron	0.013				meq/L			05/03/21 09:05	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13		0.50		mg/L			04/28/21 03:10	1
Sulfate	1.9		1.0		mg/L			04/28/21 03:10	1
Ammonia as N	0.36		0.030		mg/L			04/27/21 14:56	1
Nitrate/Nitrite	ND		0.050		mg/L			04/28/21 19:02	1
Total Organic Carbon - Average	3.1		1.0		mg/L			05/02/21 08:17	1
Bicarbonate Alkalinity	220		10		mg/L			04/16/21 23:06	1
Total Dissolved Solids	260		10		mg/L			04/20/21 16:39	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.55				SU			04/14/21 09:55	1
Field Conductivity	435.6				umhos/cm			04/14/21 09:55	1
Field Temperature	12.4				Degrees C			04/14/21 09:55	1
Field Dissolved Oxygen	0.75				mg/L			04/14/21 09:55	1
Field EH/ORP	51.2				millivolts			04/14/21 09:55	1

Client Sample ID: MW-16A

Date Collected: 04/14/21 10:50
Date Received: 04/15/21 10:00

Lab Sample ID: 280-147466-6

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/25/21 02:23	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/25/21 02:23	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/25/21 02:23	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/25/21 02:23	1
1,1-Dichloroethane	ND		1.0		ug/L			04/25/21 02:23	1
1,1-Dichloroethene	ND		1.0		ug/L			04/25/21 02:23	1
1,1-Dichloropropene	ND		1.0		ug/L			04/25/21 02:23	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/25/21 02:23	1

Client Sample ID: MW-16A
Date Collected: 04/14/21 10:50
Date Received: 04/15/21 10:00

Lab Sample ID: 280-147466-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		1.0		ug/L			04/25/21 02:23	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/25/21 02:23	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/25/21 02:23	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/25/21 02:23	1
1,2-Dichloroethane	ND		1.0		ug/L			04/25/21 02:23	1
1,2-Dichloropropane	ND		1.0		ug/L			04/25/21 02:23	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/25/21 02:23	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/25/21 02:23	1
1,3-Dichloropropane	ND		1.0		ug/L			04/25/21 02:23	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/25/21 02:23	1
2,2-Dichloropropane	ND		5.0		ug/L			04/25/21 02:23	1
2-Butanone (MEK)	ND		6.0		ug/L			04/25/21 02:23	1
2-Chlorotoluene	ND		1.0		ug/L			04/25/21 02:23	1
2-Hexanone	ND		5.0		ug/L			04/25/21 02:23	1
4-Chlorotoluene	ND		1.0		ug/L			04/25/21 02:23	1
4-Isopropyltoluene	ND		1.0		ug/L			04/25/21 02:23	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/25/21 02:23	1
Acetone	ND		10		ug/L			04/25/21 02:23	1
Benzene	ND		1.0		ug/L			04/25/21 02:23	1
Bromobenzene	ND		1.0		ug/L			04/25/21 02:23	1
Bromochloromethane	ND		1.0		ug/L			04/25/21 02:23	1
Bromodichloromethane	ND		1.0		ug/L			04/25/21 02:23	1
Bromoform	ND		1.0		ug/L			04/25/21 02:23	1
Bromomethane	ND		2.0		ug/L			04/25/21 02:23	1
Carbon disulfide	ND		2.0		ug/L			04/25/21 02:23	1
Carbon tetrachloride	ND		1.0		ug/L			04/25/21 02:23	1
Chlorobenzene	ND		1.0		ug/L			04/25/21 02:23	1
Chloroethane	ND		2.0		ug/L			04/25/21 02:23	1
Chloroform	ND		1.0		ug/L			04/25/21 02:23	1
Chloromethane	ND		2.0		ug/L			04/25/21 02:23	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/25/21 02:23	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/25/21 02:23	1
Dibromochloromethane	ND		1.0		ug/L			04/25/21 02:23	1
Dibromomethane	ND		1.0		ug/L			04/25/21 02:23	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/25/21 02:23	1
Ethylbenzene	ND		1.0		ug/L			04/25/21 02:23	1
Hexachlorobutadiene	ND		1.0		ug/L			04/25/21 02:23	1
Isopropylbenzene	ND		1.0		ug/L			04/25/21 02:23	1
Methylene Chloride	ND		5.0		ug/L			04/25/21 02:23	1
Naphthalene	ND		1.0		ug/L			04/25/21 02:23	1
n-Butylbenzene	ND		1.0		ug/L			04/25/21 02:23	1
N-Propylbenzene	ND		1.0		ug/L			04/25/21 02:23	1
sec-Butylbenzene	ND		1.0		ug/L			04/25/21 02:23	1
Styrene	ND		1.0		ug/L			04/25/21 02:23	1
tert-Butylbenzene	ND		1.0		ug/L			04/25/21 02:23	1
Tetrachloroethene	ND		1.0		ug/L			04/25/21 02:23	1
Toluene	ND		1.0		ug/L			04/25/21 02:23	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/25/21 02:23	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/25/21 02:23	1

Client Sample ID: MW-16A

Date Collected: 04/14/21 10:50
Date Received: 04/15/21 10:00

Lab Sample ID: 280-147466-6

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		1.0		ug/L			04/25/21 02:23	1
Trichlorofluoromethane	ND		2.0		ug/L			04/25/21 02:23	1
Vinyl chloride	ND		1.0		ug/L			04/25/21 02:23	1
Xylenes (total)	ND		2.0		ug/L			04/25/21 02:23	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/25/21 02:23*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 127*		*04/25/21 02:23*	*1*
4-Bromofluorobenzene (Surr)	*95*		*78 - 120*		*04/25/21 02:23*	*1*
Dibromofluoromethane (Surr)	*104*		*77 - 120*		*04/25/21 02:23*	*1*
Toluene-d8 (Surr)	*100*		*80 - 125*		*04/25/21 02:23*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		04/23/21 10:55	04/23/21 19:56	1
1,2-Dibromoethane	ND		0.050		ug/L		04/23/21 10:55	04/23/21 19:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*108*		*70 - 130*	*04/23/21 10:55*	*04/23/21 19:56*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**30000**		500		ug/L		04/23/21 09:06	04/23/21 19:59	1
Iron	**40**	**B**	30		ug/L		04/23/21 09:06	04/23/21 19:59	1
Magnesium	**14000**		200		ug/L		04/23/21 09:06	04/23/21 19:59	1
Manganese	**1000**		3.0		ug/L		04/23/21 09:06	04/23/21 19:59	1
Potassium	ND		500		ug/L		04/23/21 09:06	04/23/21 19:59	1
Sodium	**32000**		1000		ug/L		04/23/21 09:06	04/23/21 19:59	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	**3.7**				meq/L			05/03/21 09:05	1
Total Cations	**4.0**				meq/L			05/03/21 09:05	1
Percent Difference	**4.4**				%			05/03/21 09:05	1
Calcium	**30**				mg/L			05/03/21 09:05	1
Magnesium	**14**				mg/L			05/03/21 09:05	1
Potassium	**0.00**				mg/L			05/03/21 09:05	1
Sodium	**32**				mg/L			05/03/21 09:05	1
Ammonia as N	**0.051**				mg/L			05/03/21 09:05	1
Chloride	**11**				mg/L			05/03/21 09:05	1
Sulfate	**19**				mg/L			05/03/21 09:05	1
Bicarbonate Alkalinity	**150**				mg/L			05/03/21 09:05	1
Alkalinity	**150**				mg/L			05/03/21 09:05	1
Nitrate/Nitrite	**0.00**				mg/L			05/03/21 09:05	1
Anion/Cation Balance	**4.4**				%			05/03/21 09:05	1
Calculated TDS	**180**				mg/L			05/03/21 09:05	1
TDS Ratio	**1.2**				NONE			05/03/21 09:05	1
Total Dissolved Solids	**220**				mg/L			05/03/21 09:05	1
Iron	**0.040**				mg/L			05/03/21 09:05	1

Client Sample ID: MW-16A

Date Collected: 04/14/21 10:50
Date Received: 04/15/21 10:00

Lab Sample ID: 280-147466-6

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	1.5				meq/L			05/03/21 09:05	1
Magnesium	1.2				meq/L			05/03/21 09:05	1
Potassium	0.00				meq/L			05/03/21 09:05	1
Sodium	1.4				meq/L			05/03/21 09:05	1
Ammonia as N	0.0036				meq/L			05/03/21 09:05	1
Chloride	0.31				meq/L			05/03/21 09:05	1
Sulfate	0.40				meq/L			05/03/21 09:05	1
Alkalinity	150				mg/L			05/03/21 09:05	1
Bicarbonate Alkalinity	3.0				meq/L			05/03/21 09:05	1
Nitrate/Nitrite	0.00				meq/L			05/03/21 09:05	1
Iron	0.0021				meq/L			05/03/21 09:05	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11		0.50		mg/L			04/28/21 03:28	1
Sulfate	19		1.0		mg/L			04/28/21 03:28	1
Ammonia as N	0.051		0.030		mg/L			04/29/21 11:43	1
Nitrate/Nitrite	ND		0.050		mg/L			04/28/21 19:04	1
Total Organic Carbon - Average	1.6		1.0		mg/L			05/02/21 08:34	1
Bicarbonate Alkalinity	150		10		mg/L			04/16/21 23:12	1
Total Dissolved Solids	220		10		mg/L			04/19/21 13:23	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.18				SU			04/14/21 11:50	1
Field Conductivity	349.1				umhos/cm			04/14/21 11:50	1
Field Temperature	12.0				Degrees C			04/14/21 11:50	1
Field Dissolved Oxygen	2.66				mg/L			04/14/21 11:50	1
Field EH/ORP	127.0				millivolts			04/14/21 11:50	1

Client Sample ID: FB2

Date Collected: 04/14/21 10:10
Date Received: 04/15/21 10:00

Lab Sample ID: 280-147466-7

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/25/21 00:10	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/25/21 00:10	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/25/21 00:10	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/25/21 00:10	1
1,1-Dichloroethane	ND		1.0		ug/L			04/25/21 00:10	1
1,1-Dichloroethene	ND		1.0		ug/L			04/25/21 00:10	1
1,1-Dichloropropene	ND		1.0		ug/L			04/25/21 00:10	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/25/21 00:10	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/25/21 00:10	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/25/21 00:10	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/25/21 00:10	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/25/21 00:10	1
1,2-Dichloroethane	ND		1.0		ug/L			04/25/21 00:10	1
1,2-Dichloropropane	ND		1.0		ug/L			04/25/21 00:10	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/25/21 00:10	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/25/21 00:10	1

Client Sample ID: FB2
Date Collected: 04/14/21 10:10
Date Received: 04/15/21 10:00

Lab Sample ID: 280-147466-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichloropropane	ND		1.0		ug/L			04/25/21 00:10	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/25/21 00:10	1
2,2-Dichloropropane	ND		5.0		ug/L			04/25/21 00:10	1
2-Butanone (MEK)	ND		6.0		ug/L			04/25/21 00:10	1
2-Chlorotoluene	ND		1.0		ug/L			04/25/21 00:10	1
2-Hexanone	ND		5.0		ug/L			04/25/21 00:10	1
4-Chlorotoluene	ND		1.0		ug/L			04/25/21 00:10	1
4-Isopropyltoluene	ND		1.0		ug/L			04/25/21 00:10	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/25/21 00:10	1
Acetone	ND		10		ug/L			04/25/21 00:10	1
Benzene	ND		1.0		ug/L			04/25/21 00:10	1
Bromobenzene	ND		1.0		ug/L			04/25/21 00:10	1
Bromochloromethane	ND		1.0		ug/L			04/25/21 00:10	1
Bromodichloromethane	ND		1.0		ug/L			04/25/21 00:10	1
Bromoform	ND		1.0		ug/L			04/25/21 00:10	1
Bromomethane	ND		2.0		ug/L			04/25/21 00:10	1
Carbon disulfide	ND		2.0		ug/L			04/25/21 00:10	1
Carbon tetrachloride	ND		1.0		ug/L			04/25/21 00:10	1
Chlorobenzene	ND		1.0		ug/L			04/25/21 00:10	1
Chloroethane	ND		2.0		ug/L			04/25/21 00:10	1
Chloroform	ND		1.0		ug/L			04/25/21 00:10	1
Chloromethane	ND		2.0		ug/L			04/25/21 00:10	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/25/21 00:10	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/25/21 00:10	1
Dibromochloromethane	ND		1.0		ug/L			04/25/21 00:10	1
Dibromomethane	ND		1.0		ug/L			04/25/21 00:10	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/25/21 00:10	1
Ethylbenzene	ND		1.0		ug/L			04/25/21 00:10	1
Hexachlorobutadiene	ND		1.0		ug/L			04/25/21 00:10	1
Isopropylbenzene	ND		1.0		ug/L			04/25/21 00:10	1
Methylene Chloride	ND		5.0		ug/L			04/25/21 00:10	1
Naphthalene	ND		1.0		ug/L			04/25/21 00:10	1
n-Butylbenzene	ND		1.0		ug/L			04/25/21 00:10	1
N-Propylbenzene	ND		1.0		ug/L			04/25/21 00:10	1
sec-Butylbenzene	ND		1.0		ug/L			04/25/21 00:10	1
Styrene	ND		1.0		ug/L			04/25/21 00:10	1
tert-Butylbenzene	ND		1.0		ug/L			04/25/21 00:10	1
Tetrachloroethene	ND		1.0		ug/L			04/25/21 00:10	1
Toluene	ND		1.0		ug/L			04/25/21 00:10	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/25/21 00:10	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/25/21 00:10	1
Trichloroethene	ND		1.0		ug/L			04/25/21 00:10	1
Trichlorofluoromethane	ND		2.0		ug/L			04/25/21 00:10	1
Vinyl chloride	ND		1.0		ug/L			04/25/21 00:10	1
Xylenes (total)	ND		2.0		ug/L			04/25/21 00:10	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/25/21 00:10*	*1*

Client Sample ID: FB2

Date Collected: 04/14/21 10:10
Date Received: 04/15/21 10:00

Lab Sample ID: 280-147466-7

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 127*		*04/25/21 00:10*	*1*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*		*04/25/21 00:10*	*1*
Dibromofluoromethane (Surr)	*103*		*77 - 120*		*04/25/21 00:10*	*1*
Toluene-d8 (Surr)	*99*		*80 - 125*		*04/25/21 00:10*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		04/23/21 10:55	04/23/21 20:17	1
1,2-Dibromoethane	ND		0.050		ug/L		04/23/21 10:55	04/23/21 20:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*112*		*70 - 130*	*04/23/21 10:55*	*04/23/21 20:17*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		500		ug/L		04/23/21 09:06	04/23/21 20:02	1
Iron	ND		30		ug/L		04/23/21 09:06	04/23/21 20:02	1
Magnesium	ND		200		ug/L		04/23/21 09:06	04/23/21 20:02	1
Manganese	ND		3.0		ug/L		04/23/21 09:06	04/23/21 20:02	1
Potassium	ND		500		ug/L		04/23/21 09:06	04/23/21 20:02	1
Sodium	ND		1000		ug/L		04/23/21 09:06	04/23/21 20:02	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	**0.00**				meq/L			05/03/21 09:05	1
Total Cations	**0.00**				meq/L			05/03/21 09:05	1
Percent Difference	**NC**				%			05/03/21 09:05	1
Calcium	**0.00**				mg/L			05/03/21 09:05	1
Magnesium	**0.00**				mg/L			05/03/21 09:05	1
Potassium	**0.00**				mg/L			05/03/21 09:05	1
Sodium	**0.00**				mg/L			05/03/21 09:05	1
Ammonia as N	**0.00**				mg/L			05/03/21 09:05	1
Chloride	**0.00**				mg/L			05/03/21 09:05	1
Sulfate	**0.00**				mg/L			05/03/21 09:05	1
Bicarbonate Alkalinity	**0.00**				mg/L			05/03/21 09:05	1
Alkalinity	**0.00**				mg/L			05/03/21 09:05	1
Nitrate/Nitrite	**0.00**				mg/L			05/03/21 09:05	1
Anion/Cation Balance	**NC**				%			05/03/21 09:05	1
Calculated TDS	**0.00**				mg/L			05/03/21 09:05	1
TDS Ratio	**NC**				NONE			05/03/21 09:05	1
Total Dissolved Solids	**0.00**				mg/L			05/03/21 09:05	1
Iron	**0.00**				mg/L			05/03/21 09:05	1
Calcium	**0.00**				meq/L			05/03/21 09:05	1
Magnesium	**0.00**				meq/L			05/03/21 09:05	1
Potassium	**0.00**				meq/L			05/03/21 09:05	1
Sodium	**0.00**				meq/L			05/03/21 09:05	1
Ammonia as N	**0.00**				meq/L			05/03/21 09:05	1
Chloride	**0.00**				meq/L			05/03/21 09:05	1
Sulfate	**0.00**				meq/L			05/03/21 09:05	1
Alkalinity	**0.00**				mg/L			05/03/21 09:05	1
Bicarbonate Alkalinity	**0.00**				meq/L			05/03/21 09:05	1

Client Sample ID: FB2

Date Collected: 04/14/21 10:10
Date Received: 04/15/21 10:00

Lab Sample ID: 280-147466-7
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate/Nitrite	0.00				meq/L			05/03/21 09:05	1
Iron	0.00				meq/L			05/03/21 09:05	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			04/28/21 03:46	1
Sulfate	ND		1.0		mg/L			04/28/21 03:46	1
Ammonia as N	ND		0.030		mg/L			04/27/21 15:00	1
Nitrate/Nitrite	ND		0.050		mg/L			04/28/21 19:06	1
Total Organic Carbon - Average	ND		1.0		mg/L			05/02/21 08:56	1
Bicarbonate Alkalinity	ND		10		mg/L			04/16/21 23:18	1
Total Dissolved Solids	ND		10		mg/L			04/19/21 13:23	1

Client Sample ID: MW-16B

Date Collected: 04/14/21 10:10
Date Received: 04/15/21 10:00

Lab Sample ID: 280-147466-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/25/21 02:45	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/25/21 02:45	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/25/21 02:45	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/25/21 02:45	1
1,1-Dichloroethane	ND		1.0		ug/L			04/25/21 02:45	1
1,1-Dichloroethene	ND		1.0		ug/L			04/25/21 02:45	1
1,1-Dichloropropene	ND		1.0		ug/L			04/25/21 02:45	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/25/21 02:45	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/25/21 02:45	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/25/21 02:45	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/25/21 02:45	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/25/21 02:45	1
1,2-Dichloroethane	ND		1.0		ug/L			04/25/21 02:45	1
1,2-Dichloropropane	ND		1.0		ug/L			04/25/21 02:45	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/25/21 02:45	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/25/21 02:45	1
1,3-Dichloropropane	ND		1.0		ug/L			04/25/21 02:45	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/25/21 02:45	1
2,2-Dichloropropane	ND		5.0		ug/L			04/25/21 02:45	1
2-Butanone (MEK)	ND		6.0		ug/L			04/25/21 02:45	1
2-Chlorotoluene	ND		1.0		ug/L			04/25/21 02:45	1
2-Hexanone	ND		5.0		ug/L			04/25/21 02:45	1
4-Chlorotoluene	ND		1.0		ug/L			04/25/21 02:45	1
4-Isopropyltoluene	ND		1.0		ug/L			04/25/21 02:45	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/25/21 02:45	1
Acetone	ND		10		ug/L			04/25/21 02:45	1
Benzene	ND		1.0		ug/L			04/25/21 02:45	1
Bromobenzene	ND		1.0		ug/L			04/25/21 02:45	1
Bromochloromethane	ND		1.0		ug/L			04/25/21 02:45	1
Bromodichloromethane	ND		1.0		ug/L			04/25/21 02:45	1
Bromoform	ND		1.0		ug/L			04/25/21 02:45	1
Bromomethane	ND		2.0		ug/L			04/25/21 02:45	1
Carbon disulfide	ND		2.0		ug/L			04/25/21 02:45	1

Client Sample ID: MW-16B

Date Collected: 04/14/21 10:10
Date Received: 04/15/21 10:00

Lab Sample ID: 280-147466-8

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	ND		1.0		ug/L			04/25/21 02:45	1
Chlorobenzene	ND		1.0		ug/L			04/25/21 02:45	1
Chloroethane	ND		2.0		ug/L			04/25/21 02:45	1
Chloroform	ND		1.0		ug/L			04/25/21 02:45	1
Chloromethane	ND		2.0		ug/L			04/25/21 02:45	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/25/21 02:45	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/25/21 02:45	1
Dibromochloromethane	ND		1.0		ug/L			04/25/21 02:45	1
Dibromomethane	ND		1.0		ug/L			04/25/21 02:45	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/25/21 02:45	1
Ethylbenzene	ND		1.0		ug/L			04/25/21 02:45	1
Hexachlorobutadiene	ND		1.0		ug/L			04/25/21 02:45	1
Isopropylbenzene	ND		1.0		ug/L			04/25/21 02:45	1
Methylene Chloride	ND		5.0		ug/L			04/25/21 02:45	1
Naphthalene	ND		1.0		ug/L			04/25/21 02:45	1
n-Butylbenzene	ND		1.0		ug/L			04/25/21 02:45	1
N-Propylbenzene	ND		1.0		ug/L			04/25/21 02:45	1
sec-Butylbenzene	ND		1.0		ug/L			04/25/21 02:45	1
Styrene	ND		1.0		ug/L			04/25/21 02:45	1
tert-Butylbenzene	ND		1.0		ug/L			04/25/21 02:45	1
Tetrachloroethene	ND		1.0		ug/L			04/25/21 02:45	1
Toluene	ND		1.0		ug/L			04/25/21 02:45	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/25/21 02:45	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/25/21 02:45	1
Trichloroethene	ND		1.0		ug/L			04/25/21 02:45	1
Trichlorofluoromethane	ND		2.0		ug/L			04/25/21 02:45	1
Vinyl chloride	ND		1.0		ug/L			04/25/21 02:45	1
Xylenes (total)	ND		2.0		ug/L			04/25/21 02:45	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/25/21 02:45*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 127*		*04/25/21 02:45*	*1*
4-Bromofluorobenzene (Surr)	*95*		*78 - 120*		*04/25/21 02:45*	*1*
Dibromofluoromethane (Surr)	*106*		*77 - 120*		*04/25/21 02:45*	*1*
Toluene-d8 (Surr)	*96*		*80 - 125*		*04/25/21 02:45*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		04/23/21 10:55	04/23/21 20:39	1
1,2-Dibromoethane	ND		0.050		ug/L		04/23/21 10:55	04/23/21 20:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*112*		*70 - 130*	*04/23/21 10:55*	*04/23/21 20:39*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**84000**		500		ug/L		04/23/21 09:06	04/23/21 20:05	1
Iron	**1500**	**B**	30		ug/L		04/23/21 09:06	04/23/21 20:05	1
Magnesium	**31000**		200		ug/L		04/23/21 09:06	04/23/21 20:05	1

Client Sample ID: MW-16B

Date Collected: 04/14/21 10:10
Date Received: 04/15/21 10:00

Lab Sample ID: 280-147466-8

Matrix: Water

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	2600		3.0		ug/L		04/23/21 09:06	04/23/21 20:05	1
Potassium	610		500		ug/L		04/23/21 09:06	04/23/21 20:05	1
Sodium	55000		1000		ug/L		04/23/21 09:06	04/23/21 20:05	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	8.5				meq/L			05/03/21 09:05	1
Total Cations	9.2				meq/L			05/03/21 09:05	1
Percent Difference	4.2				%			05/03/21 09:05	1
Calcium	84				mg/L			05/03/21 09:05	1
Magnesium	31				mg/L			05/03/21 09:05	1
Potassium	0.61				mg/L			05/03/21 09:05	1
Sodium	55				mg/L			05/03/21 09:05	1
Ammonia as N	0.20				mg/L			05/03/21 09:05	1
Chloride	100				mg/L			05/03/21 09:05	1
Sulfate	3.9				mg/L			05/03/21 09:05	1
Bicarbonate Alkalinity	280				mg/L			05/03/21 09:05	1
Alkalinity	280				mg/L			05/03/21 09:05	1
Nitrate/Nitrite	0.00				mg/L			05/03/21 09:05	1
Anion/Cation Balance	4.2				%			05/03/21 09:05	1
Calculated TDS	440				mg/L			05/03/21 09:05	1
TDS Ratio	1.1				NONE			05/03/21 09:05	1
Total Dissolved Solids	480				mg/L			05/03/21 09:05	1
Iron	1.5				mg/L			05/03/21 09:05	1
Calcium	4.2				meq/L			05/03/21 09:05	1
Magnesium	2.6				meq/L			05/03/21 09:05	1
Potassium	0.016				meq/L			05/03/21 09:05	1
Sodium	2.4				meq/L			05/03/21 09:05	1
Ammonia as N	0.014				meq/L			05/03/21 09:05	1
Chloride	2.8				meq/L			05/03/21 09:05	1
Sulfate	0.081				meq/L			05/03/21 09:05	1
Alkalinity	280				mg/L			05/03/21 09:05	1
Bicarbonate Alkalinity	5.6				meq/L			05/03/21 09:05	1
Nitrate/Nitrite	0.00				meq/L			05/03/21 09:05	1
Iron	0.081				meq/L			05/03/21 09:05	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	100		0.50		mg/L			04/28/21 04:04	1
Sulfate	3.9		1.0		mg/L			04/28/21 04:04	1
Ammonia as N	0.20		0.030		mg/L			04/27/21 15:02	1
Nitrate/Nitrite	ND		0.050		mg/L			04/28/21 19:08	1
Total Organic Carbon - Average	1.8		1.0		mg/L			05/03/21 17:40	1
Bicarbonate Alkalinity	280		10		mg/L			04/16/21 23:25	1
Total Dissolved Solids	480		10		mg/L			04/19/21 13:23	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.88				SU			04/14/21 11:10	1
Field Conductivity	915				umhos/cm			04/14/21 11:10	1
Field Temperature	12.4				Degrees C			04/14/21 11:10	1
Field Dissolved Oxygen	0.73				mg/L			04/14/21 11:10	1

Client Sample ID: MW-16B

Lab Sample ID: 280-147466-8

Date Collected: 04/14/21 10:10

Matrix: Water

Date Received: 04/15/21 10:00

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field EH/ORP	-48.1				millivolts			04/14/21 11:10	1

Client Sample ID: DUP2

Lab Sample ID: 280-147466-9

Date Collected: 04/14/21 10:15

Matrix: Water

Date Received: 04/15/21 10:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/25/21 03:07	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/25/21 03:07	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/25/21 03:07	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/25/21 03:07	1
1,1-Dichloroethane	ND		1.0		ug/L			04/25/21 03:07	1
1,1-Dichloroethene	ND		1.0		ug/L			04/25/21 03:07	1
1,1-Dichloropropene	ND		1.0		ug/L			04/25/21 03:07	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/25/21 03:07	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/25/21 03:07	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/25/21 03:07	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/25/21 03:07	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/25/21 03:07	1
1,2-Dichloroethane	ND		1.0		ug/L			04/25/21 03:07	1
1,2-Dichloropropane	ND		1.0		ug/L			04/25/21 03:07	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/25/21 03:07	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/25/21 03:07	1
1,3-Dichloropropane	ND		1.0		ug/L			04/25/21 03:07	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/25/21 03:07	1
2,2-Dichloropropane	ND		5.0		ug/L			04/25/21 03:07	1
2-Butanone (MEK)	ND		6.0		ug/L			04/25/21 03:07	1
2-Chlorotoluene	ND		1.0		ug/L			04/25/21 03:07	1
2-Hexanone	ND		5.0		ug/L			04/25/21 03:07	1
4-Chlorotoluene	ND		1.0		ug/L			04/25/21 03:07	1
4-Isopropyltoluene	ND		1.0		ug/L			04/25/21 03:07	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/25/21 03:07	1
Acetone	ND		10		ug/L			04/25/21 03:07	1
Benzene	ND		1.0		ug/L			04/25/21 03:07	1
Bromobenzene	ND		1.0		ug/L			04/25/21 03:07	1
Bromochloromethane	ND		1.0		ug/L			04/25/21 03:07	1
Bromodichloromethane	ND		1.0		ug/L			04/25/21 03:07	1
Bromoform	ND		1.0		ug/L			04/25/21 03:07	1
Bromomethane	ND		2.0		ug/L			04/25/21 03:07	1
Carbon disulfide	ND		2.0		ug/L			04/25/21 03:07	1
Carbon tetrachloride	ND		1.0		ug/L			04/25/21 03:07	1
Chlorobenzene	ND		1.0		ug/L			04/25/21 03:07	1
Chloroethane	ND		2.0		ug/L			04/25/21 03:07	1
Chloroform	ND		1.0		ug/L			04/25/21 03:07	1
Chloromethane	ND		2.0		ug/L			04/25/21 03:07	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/25/21 03:07	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/25/21 03:07	1
Dibromochloromethane	ND		1.0		ug/L			04/25/21 03:07	1
Dibromomethane	ND		1.0		ug/L			04/25/21 03:07	1

Client Sample ID: DUP2

Date Collected: 04/14/21 10:15
Date Received: 04/15/21 10:00

Lab Sample ID: 280-147466-9

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		2.0		ug/L			04/25/21 03:07	1
Ethylbenzene	ND		1.0		ug/L			04/25/21 03:07	1
Hexachlorobutadiene	ND		1.0		ug/L			04/25/21 03:07	1
Isopropylbenzene	ND		1.0		ug/L			04/25/21 03:07	1
Methylene Chloride	ND		5.0		ug/L			04/25/21 03:07	1
Naphthalene	ND		1.0		ug/L			04/25/21 03:07	1
n-Butylbenzene	ND		1.0		ug/L			04/25/21 03:07	1
N-Propylbenzene	ND		1.0		ug/L			04/25/21 03:07	1
sec-Butylbenzene	ND		1.0		ug/L			04/25/21 03:07	1
Styrene	ND		1.0		ug/L			04/25/21 03:07	1
tert-Butylbenzene	ND		1.0		ug/L			04/25/21 03:07	1
Tetrachloroethene	ND		1.0		ug/L			04/25/21 03:07	1
Toluene	ND		1.0		ug/L			04/25/21 03:07	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/25/21 03:07	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/25/21 03:07	1
Trichloroethene	ND		1.0		ug/L			04/25/21 03:07	1
Trichlorofluoromethane	ND		2.0		ug/L			04/25/21 03:07	1
Vinyl chloride	ND		1.0		ug/L			04/25/21 03:07	1
Xylenes (total)	ND		2.0		ug/L			04/25/21 03:07	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/25/21 03:07*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 127*		*04/25/21 03:07*	*1*
4-Bromofluorobenzene (Surr)	*95*		*78 - 120*		*04/25/21 03:07*	*1*
Dibromofluoromethane (Surr)	*108*		*77 - 120*		*04/25/21 03:07*	*1*
Toluene-d8 (Surr)	*96*		*80 - 125*		*04/25/21 03:07*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		04/23/21 10:55	04/23/21 21:22	1
1,2-Dibromoethane	ND		0.050		ug/L		04/23/21 10:55	04/23/21 21:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*113*		*70 - 130*	*04/23/21 10:55*	*04/23/21 21:22*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**81000**		500		ug/L		04/23/21 09:06	04/23/21 20:09	1
Iron	**1500**	**B**	30		ug/L		04/23/21 09:06	04/23/21 20:09	1
Magnesium	**30000**		200		ug/L		04/23/21 09:06	04/23/21 20:09	1
Manganese	**2500**		3.0		ug/L		04/23/21 09:06	04/23/21 20:09	1
Potassium	**620**		500		ug/L		04/23/21 09:06	04/23/21 20:09	1
Sodium	**53000**		1000		ug/L		04/23/21 09:06	04/23/21 20:09	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	**8.7**				meq/L			05/03/21 09:05	1
Total Cations	**8.9**				meq/L			05/03/21 09:05	1
Percent Difference	**1.3**				%			05/03/21 09:05	1

Client Sample ID: DUP2
Date Collected: 04/14/21 10:15
Date Received: 04/15/21 10:00

Lab Sample ID: 280-147466-9
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	81				mg/L			05/03/21 09:05	1
Magnesium	30				mg/L			05/03/21 09:05	1
Potassium	0.62				mg/L			05/03/21 09:05	1
Sodium	53				mg/L			05/03/21 09:05	1
Ammonia as N	0.21				mg/L			05/03/21 09:05	1
Chloride	100				mg/L			05/03/21 09:05	1
Sulfate	3.9				mg/L			05/03/21 09:05	1
Bicarbonate Alkalinity	290				mg/L			05/03/21 09:05	1
Alkalinity	290				mg/L			05/03/21 09:05	1
Nitrate/Nitrite	0.00				mg/L			05/03/21 09:05	1
Anion/Cation Balance	1.3				%			05/03/21 09:05	1
Calculated TDS	440				mg/L			05/03/21 09:05	1
TDS Ratio	1.1				NONE			05/03/21 09:05	1
Total Dissolved Solids	480				mg/L			05/03/21 09:05	1
Iron	1.5				mg/L			05/03/21 09:05	1
Calcium	4.0				meq/L			05/03/21 09:05	1
Magnesium	2.5				meq/L			05/03/21 09:05	1
Potassium	0.016				meq/L			05/03/21 09:05	1
Sodium	2.3				meq/L			05/03/21 09:05	1
Ammonia as N	0.015				meq/L			05/03/21 09:05	1
Chloride	2.8				meq/L			05/03/21 09:05	1
Sulfate	0.081				meq/L			05/03/21 09:05	1
Alkalinity	290				mg/L			05/03/21 09:05	1
Bicarbonate Alkalinity	5.8				meq/L			05/03/21 09:05	1
Nitrate/Nitrite	0.00				meq/L			05/03/21 09:05	1
Iron	0.081				meq/L			05/03/21 09:05	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	100		0.50		mg/L			04/28/21 04:22	1
Sulfate	3.9		1.0		mg/L			04/28/21 04:22	1
Ammonia as N	0.21		0.030		mg/L			04/27/21 15:04	1
Nitrate/Nitrite	ND		0.050		mg/L			04/28/21 19:10	1
Total Organic Carbon - Average	1.8		1.0		mg/L			05/03/21 17:57	1
Bicarbonate Alkalinity	290		10		mg/L			04/17/21 00:09	1
Total Dissolved Solids	480		10		mg/L			04/20/21 16:39	1

Surrogate Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Groundwater

Job ID: 280-147466-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-127)	(78-120)	(77-120)	(80-125)
280-147461-B-10 MS	Matrix Spike	100	93	103	96
280-147461-C-10 MSD	Matrix Spike Duplicate	99	96	102	96
280-147466-1	TB1	102	100	101	99
280-147466-2	MW-14A	97	95	101	98
280-147466-3	MW-14B	100	95	103	96
280-147466-4	MW-21A	99	96	103	95
280-147466-5	MW-21B	99	96	104	98
280-147466-6	MW-16A	99	95	104	100
280-147466-7	FB2	103	97	103	99
280-147466-8	MW-16B	101	95	106	96
280-147466-9	DUP2	100	95	108	96
LCS 280-533411/4	Lab Control Sample	101	101	103	100
LCS 280-533813/4	Lab Control Sample	97	94	98	95
LCSD 280-533411/5	Lab Control Sample Dup	101	100	103	101
LCSD 280-533813/5	Lab Control Sample Dup	97	94	102	97
MB 280-533411/8	Method Blank	100	99	100	100
MB 280-533813/9	Method Blank	99	95	106	97

Surrogate Legend

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

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)
		12DBP1
Lab Sample ID	Client Sample ID	(70-130)
280-147466-1	TB1	114
280-147466-2	MW-14A	115
280-147466-3	MW-14B	112
280-147466-4	MW-21A	109
280-147466-5	MW-21B	109
280-147466-6	MW-16A	108
280-147466-7	FB2	112
280-147466-8	MW-16B	112
280-147466-9	DUP2	113
LCS 280-533634/2-A	Lab Control Sample	109
LCSD 280-533634/3-A	Lab Control Sample Dup	112
MB 280-533634/1-A	Method Blank	115

Surrogate Legend

12DBP = 1,2-Dibromopropane

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

Lab Sample ID: MB 280-533411/8
Matrix: Water
Analysis Batch: 533411

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/21/21 22:27	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/21/21 22:27	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/21/21 22:27	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/21/21 22:27	1
1,1-Dichloroethane	ND		1.0		ug/L			04/21/21 22:27	1
1,1-Dichloroethene	ND		1.0		ug/L			04/21/21 22:27	1
1,1-Dichloropropene	ND		1.0		ug/L			04/21/21 22:27	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/21/21 22:27	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/21/21 22:27	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/21/21 22:27	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/21/21 22:27	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/21/21 22:27	1
1,2-Dichloroethane	ND		1.0		ug/L			04/21/21 22:27	1
1,2-Dichloropropane	ND		1.0		ug/L			04/21/21 22:27	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/21/21 22:27	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/21/21 22:27	1
1,3-Dichloropropane	ND		1.0		ug/L			04/21/21 22:27	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/21/21 22:27	1
2,2-Dichloropropane	ND		5.0		ug/L			04/21/21 22:27	1
2-Butanone (MEK)	ND		6.0		ug/L			04/21/21 22:27	1
2-Chlorotoluene	ND		1.0		ug/L			04/21/21 22:27	1
2-Hexanone	ND		5.0		ug/L			04/21/21 22:27	1
4-Chlorotoluene	ND		1.0		ug/L			04/21/21 22:27	1
4-Isopropyltoluene	ND		1.0		ug/L			04/21/21 22:27	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/21/21 22:27	1
Acetone	ND		10		ug/L			04/21/21 22:27	1
Benzene	ND		1.0		ug/L			04/21/21 22:27	1
Bromobenzene	ND		1.0		ug/L			04/21/21 22:27	1
Bromochloromethane	ND		1.0		ug/L			04/21/21 22:27	1
Bromodichloromethane	ND		1.0		ug/L			04/21/21 22:27	1
Bromoform	ND		1.0		ug/L			04/21/21 22:27	1
Bromomethane	ND		2.0		ug/L			04/21/21 22:27	1
Carbon disulfide	ND		2.0		ug/L			04/21/21 22:27	1
Carbon tetrachloride	ND		1.0		ug/L			04/21/21 22:27	1
Chlorobenzene	ND		1.0		ug/L			04/21/21 22:27	1
Chloroethane	ND		2.0		ug/L			04/21/21 22:27	1
Chloroform	ND		1.0		ug/L			04/21/21 22:27	1
Chloromethane	ND		2.0		ug/L			04/21/21 22:27	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/21/21 22:27	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/21/21 22:27	1
Dibromochloromethane	ND		1.0		ug/L			04/21/21 22:27	1
Dibromomethane	ND		1.0		ug/L			04/21/21 22:27	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/21/21 22:27	1
Ethylbenzene	ND		1.0		ug/L			04/21/21 22:27	1
Hexachlorobutadiene	ND		1.0		ug/L			04/21/21 22:27	1
Isopropylbenzene	ND		1.0		ug/L			04/21/21 22:27	1
Methylene Chloride	ND		5.0		ug/L			04/21/21 22:27	1
Naphthalene	ND		1.0		ug/L			04/21/21 22:27	1

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

Lab Sample ID: MB 280-533411/8
Matrix: Water
Analysis Batch: 533411

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		1.0		ug/L			04/21/21 22:27	1
N-Propylbenzene	ND		1.0		ug/L			04/21/21 22:27	1
sec-Butylbenzene	ND		1.0		ug/L			04/21/21 22:27	1
Styrene	ND		1.0		ug/L			04/21/21 22:27	1
tert-Butylbenzene	ND		1.0		ug/L			04/21/21 22:27	1
Tetrachloroethene	ND		1.0		ug/L			04/21/21 22:27	1
Toluene	ND		1.0		ug/L			04/21/21 22:27	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/21/21 22:27	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/21/21 22:27	1
Trichloroethene	ND		1.0		ug/L			04/21/21 22:27	1
Trichlorofluoromethane	ND		2.0		ug/L			04/21/21 22:27	1
Vinyl chloride	ND		1.0		ug/L			04/21/21 22:27	1
Xylenes (total)	ND		2.0		ug/L			04/21/21 22:27	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/21/21 22:27*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 127*		*04/21/21 22:27*	*1*
4-Bromofluorobenzene (Surr)	*99*		*78 - 120*		*04/21/21 22:27*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 120*		*04/21/21 22:27*	*1*
Toluene-d8 (Surr)	*100*		*80 - 125*		*04/21/21 22:27*	*1*

Lab Sample ID: LCS 280-533411/4
Matrix: Water
Analysis Batch: 533411

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	24.7		ug/L		99	65 - 135
1,1,1-Trichloroethane	25.0	23.0		ug/L		92	65 - 135
1,1,2,2-Tetrachloroethane	25.0	24.3		ug/L		97	58 - 135
1,1,2-Trichloroethane	25.0	23.6		ug/L		94	64 - 135
1,1-Dichloroethane	25.0	23.6		ug/L		94	65 - 135
1,1-Dichloroethene	25.0	23.3		ug/L		93	65 - 136
1,1-Dichloropropene	25.0	22.8		ug/L		91	65 - 135
1,2,3-Trichlorobenzene	25.0	23.5		ug/L		94	60 - 135
1,2,3-Trichloropropane	25.0	24.9		ug/L		100	65 - 135
1,2,4-Trichlorobenzene	25.0	22.9		ug/L		92	58 - 135
1,2,4-Trimethylbenzene	25.0	23.3		ug/L		93	65 - 135
1,2-Dichlorobenzene	25.0	24.7		ug/L		99	65 - 135
1,2-Dichloroethane	25.0	25.2		ug/L		101	65 - 135
1,2-Dichloropropane	25.0	23.8		ug/L		95	64 - 135
1,3,5-Trimethylbenzene	25.0	23.1		ug/L		92	65 - 135
1,3-Dichlorobenzene	25.0	24.3		ug/L		97	65 - 135
1,3-Dichloropropane	25.0	23.5		ug/L		94	64 - 135
1,4-Dichlorobenzene	25.0	24.5		ug/L		98	65 - 135
2,2-Dichloropropane	25.0	24.1		ug/L		96	65 - 135
2-Butanone (MEK)	100	96.1		ug/L		96	44 - 177

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

Lab Sample ID: LCS 280-533411/4
Matrix: Water
Analysis Batch: 533411

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chlorotoluene	25.0	23.0		ug/L		92	65 - 135
2-Hexanone	100	102		ug/L		102	57 - 139
4-Chlorotoluene	25.0	22.7		ug/L		91	65 - 135
4-Isopropyltoluene	25.0	23.1		ug/L		92	65 - 135
4-Methyl-2-pentanone	100	103		ug/L		103	60 - 150
Acetone	100	99.0		ug/L		99	39 - 156
Benzene	25.0	23.4		ug/L		94	65 - 135
Bromobenzene	25.0	22.2		ug/L		89	65 - 135
Bromochloromethane	25.0	23.1		ug/L		93	65 - 135
Bromodichloromethane	25.0	24.4		ug/L		98	65 - 135
Bromoform	25.0	24.5		ug/L		98	62 - 135
Bromomethane	25.0	32.4		ug/L		129	45 - 135
Carbon disulfide	25.0	21.8		ug/L		87	55 - 143
Carbon tetrachloride	25.0	23.7		ug/L		95	65 - 135
Chlorobenzene	25.0	23.4		ug/L		94	65 - 135
Chloroethane	25.0	33.8		ug/L		135	46 - 136
Chloroform	25.0	23.5		ug/L		94	65 - 135
Chloromethane	25.0	29.1		ug/L		116	34 - 145
cis-1,2-Dichloroethene	25.0	23.5		ug/L		94	65 - 135
cis-1,3-Dichloropropene	25.0	24.1		ug/L		96	65 - 135
Dibromochloromethane	25.0	25.1		ug/L		100	65 - 135
Dibromomethane	25.0	23.0		ug/L		92	65 - 135
Dichlorodifluoromethane	25.0	27.9		ug/L		112	43 - 142
Ethylbenzene	25.0	22.9		ug/L		92	65 - 135
Hexachlorobutadiene	25.0	22.2		ug/L		89	65 - 135
Isopropylbenzene	25.0	22.7		ug/L		91	65 - 135
Methylene Chloride	25.0	25.2		ug/L		101	54 - 141
Naphthalene	25.0	22.3		ug/L		89	42 - 135
n-Butylbenzene	25.0	23.0		ug/L		92	64 - 135
N-Propylbenzene	25.0	23.1		ug/L		92	65 - 135
sec-Butylbenzene	25.0	22.6		ug/L		91	64 - 135
Styrene	25.0	23.6		ug/L		94	65 - 135
tert-Butylbenzene	25.0	22.6		ug/L		90	65 - 135
Tetrachloroethene	25.0	22.7		ug/L		91	65 - 135
Toluene	25.0	24.6		ug/L		98	65 - 135
trans-1,2-Dichloroethene	25.0	22.3		ug/L		89	65 - 135
trans-1,3-Dichloropropene	25.0	23.9		ug/L		96	65 - 135
Trichloroethene	25.0	22.7		ug/L		91	65 - 135
Trichlorofluoromethane	25.0	25.6		ug/L		102	53 - 137
Vinyl chloride	25.0	28.6		ug/L		114	40 - 137

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 127*
4-Bromofluorobenzene (Surr)	*101*		*78 - 120*
Dibromofluoromethane (Surr)	*103*		*77 - 120*
Toluene-d8 (Surr)	*100*		*80 - 125*

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

Lab Sample ID: LCSD 280-533411/5
Matrix: Water
Analysis Batch: 533411

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane			25.0	25.1		ug/L		100	65 - 135	2	20
1,1,1-Trichloroethane			25.0	23.2		ug/L		93	65 - 135	1	20
1,1,2,2-Tetrachloroethane			25.0	24.1		ug/L		96	58 - 135	1	20
1,1,2-Trichloroethane			25.0	23.9		ug/L		95	64 - 135	1	27
1,1-Dichloroethane			25.0	23.6		ug/L		94	65 - 135	0	21
1,1-Dichloroethene			25.0	23.3		ug/L		93	65 - 136	0	20
1,1-Dichloropropene			25.0	22.9		ug/L		92	65 - 135	0	21
1,2,3-Trichlorobenzene			25.0	24.6		ug/L		99	60 - 135	5	36
1,2,3-Trichloropropane			25.0	24.9		ug/L		100	65 - 135	0	23
1,2,4-Trichlorobenzene			25.0	23.6		ug/L		95	58 - 135	3	25
1,2,4-Trimethylbenzene			25.0	23.3		ug/L		93	65 - 135	0	20
1,2-Dichlorobenzene			25.0	24.7		ug/L		99	65 - 135	0	20
1,2-Dichloroethane			25.0	25.1		ug/L		100	65 - 135	0	20
1,2-Dichloropropane			25.0	23.7		ug/L		95	64 - 135	0	20
1,3,5-Trimethylbenzene			25.0	23.0		ug/L		92	65 - 135	0	20
1,3-Dichlorobenzene			25.0	24.4		ug/L		97	65 - 135	0	20
1,3-Dichloropropane			25.0	23.9		ug/L		95	64 - 135	1	20
1,4-Dichlorobenzene			25.0	24.3		ug/L		97	65 - 135	0	23
2,2-Dichloropropane			25.0	23.5		ug/L		94	65 - 135	2	20
2-Butanone (MEK)			100	94.2		ug/L		94	44 - 177	2	32
2-Chlorotoluene			25.0	22.9		ug/L		92	65 - 135	0	20
2-Hexanone			100	101		ug/L		101	57 - 139	1	25
4-Chlorotoluene			25.0	22.9		ug/L		91	65 - 135	1	20
4-Isopropyltoluene			25.0	23.1		ug/L		92	65 - 135	0	20
4-Methyl-2-pentanone			100	102		ug/L		102	60 - 150	2	22
Acetone			100	96.2		ug/L		96	39 - 156	3	23
Benzene			25.0	23.8		ug/L		95	65 - 135	1	20
Bromobenzene			25.0	22.6		ug/L		90	65 - 135	1	26
Bromochloromethane			25.0	23.7		ug/L		95	65 - 135	3	29
Bromodichloromethane			25.0	24.5		ug/L		98	65 - 135	0	20
Bromoform			25.0	24.9		ug/L		100	62 - 135	2	27
Bromomethane			25.0	29.8		ug/L		119	45 - 135	8	33
Carbon disulfide			25.0	21.8		ug/L		87	55 - 143	0	20
Carbon tetrachloride			25.0	23.5		ug/L		94	65 - 135	1	21
Chlorobenzene			25.0	23.7		ug/L		95	65 - 135	1	20
Chloroethane			25.0	29.8		ug/L		119	46 - 136	13	25
Chloroform			25.0	23.8		ug/L		95	65 - 135	1	20
Chloromethane			25.0	28.9		ug/L		115	34 - 145	1	24
cis-1,2-Dichloroethene			25.0	23.4		ug/L		93	65 - 135	1	20
cis-1,3-Dichloropropene			25.0	24.3		ug/L		97	65 - 135	1	26
Dibromochloromethane			25.0	25.2		ug/L		101	65 - 135	0	20
Dibromomethane			25.0	23.3		ug/L		93	65 - 135	1	26
Dichlorodifluoromethane			25.0	27.2		ug/L		109	43 - 142	2	30
Ethylbenzene			25.0	23.3		ug/L		93	65 - 135	2	20
Hexachlorobutadiene			25.0	22.7		ug/L		91	65 - 135	2	25
Isopropylbenzene			25.0	22.7		ug/L		91	65 - 135	0	20
Methylene Chloride			25.0	25.4		ug/L		102	54 - 141	1	26
Naphthalene			25.0	23.7		ug/L		95	42 - 135	6	23

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

Lab Sample ID: LCSD 280-533411/5
Matrix: Water
Analysis Batch: 533411

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
n-Butylbenzene			25.0	23.0		ug/L		92	64 - 135	0	21
N-Propylbenzene			25.0	23.0		ug/L		92	65 - 135	0	20
sec-Butylbenzene			25.0	22.9		ug/L		92	64 - 135	1	21
Styrene			25.0	23.7		ug/L		95	65 - 135	0	26
tert-Butylbenzene			25.0	22.8		ug/L		91	65 - 135	1	21
Tetrachloroethene			25.0	22.9		ug/L		92	65 - 135	1	20
Toluene			25.0	24.8		ug/L		99	65 - 135	1	20
trans-1,2-Dichloroethene			25.0	22.6		ug/L		91	65 - 135	2	24
trans-1,3-Dichloropropene			25.0	24.0		ug/L		96	65 - 135	1	26
Trichloroethene			25.0	23.2		ug/L		93	65 - 135	2	20
Trichlorofluoromethane			25.0	25.1		ug/L		100	53 - 137	2	27
Vinyl chloride			25.0	28.7		ug/L		115	40 - 137	1	24

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 127*
4-Bromofluorobenzene (Surr)	*100*		*78 - 120*
Dibromofluoromethane (Surr)	*103*		*77 - 120*
Toluene-d8 (Surr)	*101*		*80 - 125*

Lab Sample ID: MB 280-533813/9
Matrix: Water
Analysis Batch: 533813

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/24/21 22:42	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/24/21 22:42	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/24/21 22:42	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/24/21 22:42	1
1,1-Dichloroethane	ND		1.0		ug/L			04/24/21 22:42	1
1,1-Dichloroethene	ND		1.0		ug/L			04/24/21 22:42	1
1,1-Dichloropropene	ND		1.0		ug/L			04/24/21 22:42	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/24/21 22:42	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/24/21 22:42	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/24/21 22:42	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/24/21 22:42	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/24/21 22:42	1
1,2-Dichloroethane	ND		1.0		ug/L			04/24/21 22:42	1
1,2-Dichloropropane	ND		1.0		ug/L			04/24/21 22:42	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/24/21 22:42	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/24/21 22:42	1
1,3-Dichloropropane	ND		1.0		ug/L			04/24/21 22:42	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/24/21 22:42	1
2,2-Dichloropropane	ND		5.0		ug/L			04/24/21 22:42	1
2-Butanone (MEK)	ND		6.0		ug/L			04/24/21 22:42	1
2-Chlorotoluene	ND		1.0		ug/L			04/24/21 22:42	1
2-Hexanone	ND		5.0		ug/L			04/24/21 22:42	1
4-Chlorotoluene	ND		1.0		ug/L			04/24/21 22:42	1
4-Isopropyltoluene	ND		1.0		ug/L			04/24/21 22:42	1

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

Lab Sample ID: MB 280-533813/9
Matrix: Water
Analysis Batch: 533813

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone	ND		5.0		ug/L			04/24/21 22:42	1
Acetone	ND		10		ug/L			04/24/21 22:42	1
Benzene	ND		1.0		ug/L			04/24/21 22:42	1
Bromobenzene	ND		1.0		ug/L			04/24/21 22:42	1
Bromochloromethane	ND		1.0		ug/L			04/24/21 22:42	1
Bromodichloromethane	ND		1.0		ug/L			04/24/21 22:42	1
Bromoform	ND		1.0		ug/L			04/24/21 22:42	1
Bromomethane	ND		2.0		ug/L			04/24/21 22:42	1
Carbon disulfide	ND		2.0		ug/L			04/24/21 22:42	1
Carbon tetrachloride	ND		1.0		ug/L			04/24/21 22:42	1
Chlorobenzene	ND		1.0		ug/L			04/24/21 22:42	1
Chloroethane	ND		2.0		ug/L			04/24/21 22:42	1
Chloroform	ND		1.0		ug/L			04/24/21 22:42	1
Chloromethane	ND		2.0		ug/L			04/24/21 22:42	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/24/21 22:42	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/24/21 22:42	1
Dibromochloromethane	ND		1.0		ug/L			04/24/21 22:42	1
Dibromomethane	ND		1.0		ug/L			04/24/21 22:42	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/24/21 22:42	1
Ethylbenzene	ND		1.0		ug/L			04/24/21 22:42	1
Hexachlorobutadiene	ND		1.0		ug/L			04/24/21 22:42	1
Isopropylbenzene	ND		1.0		ug/L			04/24/21 22:42	1
Methylene Chloride	ND		5.0		ug/L			04/24/21 22:42	1
Naphthalene	ND		1.0		ug/L			04/24/21 22:42	1
n-Butylbenzene	ND		1.0		ug/L			04/24/21 22:42	1
N-Propylbenzene	ND		1.0		ug/L			04/24/21 22:42	1
sec-Butylbenzene	ND		1.0		ug/L			04/24/21 22:42	1
Styrene	ND		1.0		ug/L			04/24/21 22:42	1
tert-Butylbenzene	ND		1.0		ug/L			04/24/21 22:42	1
Tetrachloroethene	ND		1.0		ug/L			04/24/21 22:42	1
Toluene	ND		1.0		ug/L			04/24/21 22:42	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/24/21 22:42	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/24/21 22:42	1
Trichloroethene	ND		1.0		ug/L			04/24/21 22:42	1
Trichlorofluoromethane	ND		2.0		ug/L			04/24/21 22:42	1
Vinyl chloride	ND		1.0		ug/L			04/24/21 22:42	1
Xylenes (total)	ND		2.0		ug/L			04/24/21 22:42	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/24/21 22:42*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 127*		*04/24/21 22:42*	*1*
4-Bromofluorobenzene (Surr)	*95*		*78 - 120*		*04/24/21 22:42*	*1*
Dibromofluoromethane (Surr)	*106*		*77 - 120*		*04/24/21 22:42*	*1*
Toluene-d8 (Surr)	*97*		*80 - 125*		*04/24/21 22:42*	*1*

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

Lab Sample ID: LCS 280-533813/4
Matrix: Water
Analysis Batch: 533813

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	22.1		ug/L		88	65 - 135
1,1,1-Trichloroethane	25.0	25.2		ug/L		101	65 - 135
1,1,2,2-Tetrachloroethane	25.0	22.5		ug/L		90	58 - 135
1,1,2-Trichloroethane	25.0	24.4		ug/L		97	64 - 135
1,1-Dichloroethane	25.0	24.0		ug/L		96	65 - 135
1,1-Dichloroethene	25.0	25.1		ug/L		100	65 - 136
1,1-Dichloropropene	25.0	25.5		ug/L		102	65 - 135
1,2,3-Trichlorobenzene	25.0	24.7		ug/L		99	60 - 135
1,2,3-Trichloropropane	25.0	22.5		ug/L		90	65 - 135
1,2,4-Trichlorobenzene	25.0	24.7		ug/L		99	58 - 135
1,2,4-Trimethylbenzene	25.0	23.9		ug/L		96	65 - 135
1,2-Dichlorobenzene	25.0	24.8		ug/L		99	65 - 135
1,2-Dichloroethane	25.0	23.3		ug/L		93	65 - 135
1,2-Dichloropropane	25.0	23.4		ug/L		93	64 - 135
1,3,5-Trimethylbenzene	25.0	24.1		ug/L		96	65 - 135
1,3-Dichlorobenzene	25.0	25.2		ug/L		101	65 - 135
1,3-Dichloropropane	25.0	23.5		ug/L		94	64 - 135
1,4-Dichlorobenzene	25.0	25.3		ug/L		101	65 - 135
2,2-Dichloropropane	25.0	24.8		ug/L		99	65 - 135
2-Butanone (MEK)	100	85.6		ug/L		86	44 - 177
2-Chlorotoluene	25.0	25.4		ug/L		102	65 - 135
2-Hexanone	100	86.5		ug/L		87	57 - 139
4-Chlorotoluene	25.0	26.3		ug/L		105	65 - 135
4-Isopropyltoluene	25.0	24.7		ug/L		99	65 - 135
4-Methyl-2-pentanone	100	86.1		ug/L		86	60 - 150
Acetone	100	80.8		ug/L		81	39 - 156
Benzene	25.0	24.8		ug/L		99	65 - 135
Bromobenzene	25.0	25.0		ug/L		100	65 - 135
Bromochloromethane	25.0	27.0		ug/L		108	65 - 135
Bromodichloromethane	25.0	22.2		ug/L		89	65 - 135
Bromoform	25.0	18.1		ug/L		72	62 - 135
Bromomethane	25.0	24.7		ug/L		99	45 - 135
Carbon disulfide	25.0	23.9		ug/L		96	55 - 143
Carbon tetrachloride	25.0	24.3		ug/L		97	65 - 135
Chlorobenzene	25.0	25.3		ug/L		101	65 - 135
Chloroethane	25.0	22.0		ug/L		88	46 - 136
Chloroform	25.0	24.1		ug/L		96	65 - 135
Chloromethane	25.0	21.5		ug/L		86	34 - 145
cis-1,2-Dichloroethene	25.0	25.4		ug/L		102	65 - 135
cis-1,3-Dichloropropene	25.0	22.1		ug/L		88	65 - 135
Dibromochloromethane	25.0	21.1		ug/L		84	65 - 135
Dibromomethane	25.0	24.6		ug/L		98	65 - 135
Dichlorodifluoromethane	25.0	24.5		ug/L		98	43 - 142
Ethylbenzene	25.0	24.9		ug/L		99	65 - 135
Hexachlorobutadiene	25.0	26.5		ug/L		106	65 - 135
Isopropylbenzene	25.0	24.5		ug/L		98	65 - 135
Methylene Chloride	25.0	25.4		ug/L		102	54 - 141
Naphthalene	25.0	21.9		ug/L		88	42 - 135

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

Lab Sample ID: LCS 280-533813/4
Matrix: Water
Analysis Batch: 533813

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
n-Butylbenzene			25.0	23.6		ug/L		94	64 - 135		
N-Propylbenzene			25.0	25.0		ug/L		100	65 - 135		
sec-Butylbenzene			25.0	26.5		ug/L		106	64 - 135		
Styrene			25.0	24.5		ug/L		98	65 - 135		
tert-Butylbenzene			25.0	25.4		ug/L		102	65 - 135		
Tetrachloroethene			25.0	26.8		ug/L		107	65 - 135		
Toluene			25.0	25.5		ug/L		102	65 - 135		
trans-1,2-Dichloroethene			25.0	26.1		ug/L		104	65 - 135		
trans-1,3-Dichloropropene			25.0	22.2		ug/L		89	65 - 135		
Trichloroethene			25.0	24.4		ug/L		98	65 - 135		
Trichlorofluoromethane			25.0	23.0		ug/L		92	53 - 137		
Vinyl chloride			25.0	22.1		ug/L		88	40 - 137		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 127*
4-Bromofluorobenzene (Surr)	*94*		*78 - 120*
Dibromofluoromethane (Surr)	*98*		*77 - 120*
Toluene-d8 (Surr)	*95*		*80 - 125*

Lab Sample ID: LCSD 280-533813/5
Matrix: Water
Analysis Batch: 533813

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane			25.0	22.8		ug/L		91	65 - 135	4	20
1,1,1-Trichloroethane			25.0	24.0		ug/L		96	65 - 135	5	20
1,1,2,2-Tetrachloroethane			25.0	22.7		ug/L		91	58 - 135	1	20
1,1,2-Trichloroethane			25.0	24.3		ug/L		97	64 - 135	0	27
1,1-Dichloroethane			25.0	23.8		ug/L		95	65 - 135	1	21
1,1-Dichloroethene			25.0	25.1		ug/L		100	65 - 136	0	20
1,1-Dichloropropene			25.0	25.3		ug/L		101	65 - 135	1	21
1,2,3-Trichlorobenzene			25.0	24.5		ug/L		98	60 - 135	1	36
1,2,3-Trichloropropane			25.0	23.9		ug/L		95	65 - 135	6	23
1,2,4-Trichlorobenzene			25.0	25.3		ug/L		101	58 - 135	2	25
1,2,4-Trimethylbenzene			25.0	23.8		ug/L		95	65 - 135	1	20
1,2-Dichlorobenzene			25.0	25.3		ug/L		101	65 - 135	2	20
1,2-Dichloroethane			25.0	23.3		ug/L		93	65 - 135	0	20
1,2-Dichloropropane			25.0	23.4		ug/L		94	64 - 135	0	20
1,3,5-Trimethylbenzene			25.0	23.8		ug/L		95	65 - 135	1	20
1,3-Dichlorobenzene			25.0	25.1		ug/L		100	65 - 135	1	20
1,3-Dichloropropane			25.0	22.8		ug/L		91	64 - 135	3	20
1,4-Dichlorobenzene			25.0	24.7		ug/L		99	65 - 135	3	23
2,2-Dichloropropane			25.0	24.7		ug/L		99	65 - 135	0	20
2-Butanone (MEK)			100	81.8		ug/L		82	44 - 177	5	32
2-Chlorotoluene			25.0	25.3		ug/L		101	65 - 135	0	20
2-Hexanone			100	82.5		ug/L		82	57 - 139	5	25
4-Chlorotoluene			25.0	25.9		ug/L		104	65 - 135	1	20
4-Isopropyltoluene			25.0	25.3		ug/L		101	65 - 135	2	20

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

Lab Sample ID: LCSD 280-533813/5
Matrix: Water
Analysis Batch: 533813

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Methyl-2-pentanone			100	87.8		ug/L		88	60 - 150	2	22
Acetone			100	78.8		ug/L		79	39 - 156	3	23
Benzene			25.0	24.9		ug/L		100	65 - 135	0	20
Bromobenzene			25.0	26.5		ug/L		106	65 - 135	6	26
Bromochloromethane			25.0	25.2		ug/L		101	65 - 135	7	29
Bromodichloromethane			25.0	21.7		ug/L		87	65 - 135	2	20
Bromoform			25.0	18.0		ug/L		72	62 - 135	1	27
Bromomethane			25.0	26.2		ug/L		105	45 - 135	6	33
Carbon disulfide			25.0	24.1		ug/L		96	55 - 143	1	20
Carbon tetrachloride			25.0	23.5		ug/L		94	65 - 135	3	21
Chlorobenzene			25.0	24.8		ug/L		99	65 - 135	2	20
Chloroethane			25.0	22.5		ug/L		90	46 - 136	2	25
Chloroform			25.0	24.8		ug/L		99	65 - 135	3	20
Chloromethane			25.0	21.0		ug/L		84	34 - 145	2	24
cis-1,2-Dichloroethene			25.0	25.0		ug/L		100	65 - 135	2	20
cis-1,3-Dichloropropene			25.0	21.6		ug/L		86	65 - 135	3	26
Dibromochloromethane			25.0	20.7		ug/L		83	65 - 135	2	20
Dibromomethane			25.0	25.0		ug/L		100	65 - 135	2	26
Dichlorodifluoromethane			25.0	23.8		ug/L		95	43 - 142	3	30
Ethylbenzene			25.0	24.2		ug/L		97	65 - 135	3	20
Hexachlorobutadiene			25.0	27.1		ug/L		108	65 - 135	2	25
Isopropylbenzene			25.0	24.4		ug/L		98	65 - 135	0	20
Methylene Chloride			25.0	25.5		ug/L		102	54 - 141	0	26
Naphthalene			25.0	21.6		ug/L		86	42 - 135	1	23
n-Butylbenzene			25.0	23.4		ug/L		94	64 - 135	1	21
N-Propylbenzene			25.0	25.5		ug/L		102	65 - 135	2	20
sec-Butylbenzene			25.0	25.2		ug/L		101	64 - 135	5	21
Styrene			25.0	23.8		ug/L		95	65 - 135	3	26
tert-Butylbenzene			25.0	25.5		ug/L		102	65 - 135	0	21
Tetrachloroethene			25.0	27.7		ug/L		111	65 - 135	3	20
Toluene			25.0	25.9		ug/L		104	65 - 135	2	20
trans-1,2-Dichloroethene			25.0	26.2		ug/L		105	65 - 135	1	24
trans-1,3-Dichloropropene			25.0	21.9		ug/L		88	65 - 135	1	26
Trichloroethene			25.0	23.3		ug/L		93	65 - 135	5	20
Trichlorofluoromethane			25.0	23.5		ug/L		94	53 - 137	2	27
Vinyl chloride			25.0	23.0		ug/L		92	40 - 137	4	24

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 127*
4-Bromofluorobenzene (Surr)	*94*		*78 - 120*
Dibromofluoromethane (Surr)	*102*		*77 - 120*
Toluene-d8 (Surr)	*97*		*80 - 125*

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

Lab Sample ID: 280-147461-B-10 MS
Matrix: Water
Analysis Batch: 533813

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	ND		25.0	24.8		ug/L		99	65 - 135
1,1,1-Trichloroethane	ND	F2	25.0	28.4		ug/L		114	65 - 135
1,1,2,2-Tetrachloroethane	ND		25.0	26.0		ug/L		104	58 - 135
1,1,2-Trichloroethane	ND		25.0	27.5		ug/L		110	64 - 135
1,1-Dichloroethane	ND		25.0	28.7		ug/L		115	65 - 135
1,1-Dichloroethene	ND		25.0	28.4		ug/L		114	65 - 136
1,1-Dichloropropene	ND		25.0	28.8		ug/L		115	65 - 135
1,2,3-Trichlorobenzene	ND		25.0	27.7		ug/L		111	60 - 135
1,2,3-Trichloropropane	ND		25.0	27.0		ug/L		108	65 - 135
1,2,4-Trichlorobenzene	ND		25.0	27.3		ug/L		109	58 - 135
1,2,4-Trimethylbenzene	ND		25.0	26.5		ug/L		106	65 - 135
1,2-Dichlorobenzene	ND		25.0	28.5		ug/L		114	65 - 135
1,2-Dichloroethane	ND		25.0	26.9		ug/L		108	65 - 135
1,2-Dichloropropane	ND	F2	25.0	27.2		ug/L		109	64 - 135
1,3,5-Trimethylbenzene	ND		25.0	26.0		ug/L		104	65 - 135
1,3-Dichlorobenzene	ND		25.0	27.4		ug/L		109	65 - 135
1,3-Dichloropropane	ND		25.0	26.9		ug/L		107	64 - 135
1,4-Dichlorobenzene	ND		25.0	28.1		ug/L		112	65 - 135
2,2-Dichloropropane	ND		25.0	23.9		ug/L		96	65 - 135
2-Butanone (MEK)	ND		100	99.3		ug/L		99	44 - 177
2-Chlorotoluene	ND		25.0	27.4		ug/L		109	65 - 135
2-Hexanone	ND		100	97.6		ug/L		98	57 - 139
4-Chlorotoluene	ND		25.0	29.6		ug/L		118	65 - 135
4-Isopropyltoluene	ND		25.0	27.3		ug/L		109	65 - 135
4-Methyl-2-pentanone	ND	F2	100	102		ug/L		102	60 - 150
Acetone	ND		100	102		ug/L		102	39 - 156
Benzene	ND		25.0	28.7		ug/L		115	65 - 135
Bromobenzene	ND		25.0	28.5		ug/L		114	65 - 135
Bromochloromethane	ND		25.0	30.0		ug/L		120	65 - 135
Bromodichloromethane	ND		25.0	25.6		ug/L		103	65 - 135
Bromoform	ND		25.0	20.2		ug/L		81	62 - 135
Bromomethane	ND		25.0	29.4		ug/L		118	45 - 135
Carbon disulfide	ND		25.0	26.7		ug/L		107	55 - 143
Carbon tetrachloride	ND		25.0	25.8		ug/L		103	65 - 135
Chlorobenzene	ND	F2	25.0	28.8		ug/L		115	65 - 135
Chloroethane	ND		25.0	27.0		ug/L		108	46 - 136
Chloroform	ND		25.0	28.8		ug/L		115	65 - 135
Chloromethane	ND		25.0	25.3		ug/L		101	34 - 145
cis-1,2-Dichloroethene	ND		25.0	28.4		ug/L		113	65 - 135
cis-1,3-Dichloropropene	ND		25.0	23.7		ug/L		95	65 - 135
Dibromochloromethane	ND	F2	25.0	23.5		ug/L		94	65 - 135
Dibromomethane	ND		25.0	28.9		ug/L		115	65 - 135
Dichlorodifluoromethane	ND		25.0	29.3		ug/L		117	43 - 142
Ethylbenzene	ND	F2	25.0	29.0		ug/L		116	65 - 135
Hexachlorobutadiene	ND		25.0	27.1		ug/L		108	65 - 135
Isopropylbenzene	ND		25.0	27.0		ug/L		107	65 - 135
Methylene Chloride	ND		25.0	30.3		ug/L		121	54 - 141
Naphthalene	ND		25.0	25.7		ug/L		103	42 - 135

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

Lab Sample ID: 280-147461-B-10 MS
Matrix: Water
Analysis Batch: 533813

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
n-Butylbenzene	ND		25.0	25.1		ug/L		100	64 - 135
N-Propylbenzene	ND	F2	25.0	28.0		ug/L		112	65 - 135
sec-Butylbenzene	ND		25.0	27.3		ug/L		109	64 - 135
Styrene	ND		25.0	27.8		ug/L		111	65 - 135
tert-Butylbenzene	ND		25.0	28.1		ug/L		113	65 - 135
Tetrachloroethene	ND		25.0	29.8		ug/L		119	65 - 135
Toluene	ND		25.0	28.8		ug/L		115	65 - 135
trans-1,2-Dichloroethene	ND		25.0	29.8		ug/L		119	65 - 135
trans-1,3-Dichloropropene	ND		25.0	23.6		ug/L		95	65 - 135
Trichloroethene	ND	F2	25.0	27.8		ug/L		111	65 - 135
Trichlorofluoromethane	ND		25.0	27.6		ug/L		111	53 - 137
Vinyl chloride	ND	F2	25.0	27.3		ug/L		109	40 - 137

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 127*
4-Bromofluorobenzene (Surr)	*93*		*78 - 120*
Dibromofluoromethane (Surr)	*103*		*77 - 120*
Toluene-d8 (Surr)	*96*		*80 - 125*

Lab Sample ID: 280-147461-C-10 MSD
Matrix: Water
Analysis Batch: 533813

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		25.0	20.2		ug/L		81	65 - 135	20	20
1,1,1-Trichloroethane	ND	F2	25.0	23.1	F2	ug/L		92	65 - 135	21	20
1,1,2,2-Tetrachloroethane	ND		25.0	21.6		ug/L		87	58 - 135	18	20
1,1,2-Trichloroethane	ND		25.0	22.6		ug/L		90	64 - 135	20	27
1,1-Dichloroethane	ND		25.0	23.2		ug/L		93	65 - 135	21	21
1,1-Dichloroethene	ND		25.0	23.6		ug/L		94	65 - 136	18	20
1,1-Dichloropropene	ND		25.0	23.3		ug/L		93	65 - 135	21	21
1,2,3-Trichlorobenzene	ND		25.0	23.3		ug/L		93	60 - 135	17	36
1,2,3-Trichloropropane	ND		25.0	21.4		ug/L		86	65 - 135	23	23
1,2,4-Trichlorobenzene	ND		25.0	22.6		ug/L		91	58 - 135	19	25
1,2,4-Trimethylbenzene	ND		25.0	22.7		ug/L		91	65 - 135	15	20
1,2-Dichlorobenzene	ND		25.0	23.9		ug/L		96	65 - 135	17	20
1,2-Dichloroethane	ND		25.0	22.1		ug/L		89	65 - 135	20	20
1,2-Dichloropropane	ND	F2	25.0	21.8	F2	ug/L		87	64 - 135	22	20
1,3,5-Trimethylbenzene	ND		25.0	22.2		ug/L		89	65 - 135	16	20
1,3-Dichlorobenzene	ND		25.0	23.6		ug/L		94	65 - 135	15	20
1,3-Dichloropropane	ND		25.0	21.9		ug/L		88	64 - 135	20	20
1,4-Dichlorobenzene	ND		25.0	23.7		ug/L		95	65 - 135	17	23
2,2-Dichloropropane	ND		25.0	19.8		ug/L		79	65 - 135	19	20
2-Butanone (MEK)	ND		100	74.5		ug/L		75	44 - 177	29	32
2-Chlorotoluene	ND		25.0	23.4		ug/L		94	65 - 135	15	20
2-Hexanone	ND		100	77.3		ug/L		77	57 - 139	23	25
4-Chlorotoluene	ND		25.0	24.4		ug/L		98	65 - 135	19	20
4-Isopropyltoluene	ND		25.0	22.5		ug/L		90	65 - 135	19	20

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

Lab Sample ID: 280-147461-C-10 MSD
Matrix: Water
Analysis Batch: 533813

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Methyl-2-pentanone	ND	F2	100	80.9	F2	ug/L		81	60 - 150	23	22
Acetone	ND		100	80.7		ug/L		81	39 - 156	23	23
Benzene	ND		25.0	23.7		ug/L		95	65 - 135	19	20
Bromobenzene	ND		25.0	24.3		ug/L		97	65 - 135	16	26
Bromochloromethane	ND		25.0	24.5		ug/L		98	65 - 135	20	29
Bromodichloromethane	ND		25.0	21.2		ug/L		85	65 - 135	19	20
Bromoform	ND		25.0	17.1		ug/L		69	62 - 135	17	27
Bromomethane	ND		25.0	23.3		ug/L		93	45 - 135	23	33
Carbon disulfide	ND		25.0	22.5		ug/L		90	55 - 143	17	20
Carbon tetrachloride	ND		25.0	21.5		ug/L		86	65 - 135	18	21
Chlorobenzene	ND	F2	25.0	23.2	F2	ug/L		93	65 - 135	22	20
Chloroethane	ND		25.0	21.5		ug/L		86	46 - 136	23	25
Chloroform	ND		25.0	23.7		ug/L		95	65 - 135	19	20
Chloromethane	ND		25.0	20.1		ug/L		80	34 - 145	23	24
cis-1,2-Dichloroethene	ND		25.0	23.7		ug/L		95	65 - 135	18	20
cis-1,3-Dichloropropene	ND		25.0	19.6		ug/L		78	65 - 135	19	26
Dibromochloromethane	ND	F2	25.0	18.5	F2	ug/L		74	65 - 135	24	20
Dibromomethane	ND		25.0	23.2		ug/L		93	65 - 135	22	26
Dichlorodifluoromethane	ND		25.0	23.2		ug/L		93	43 - 142	23	30
Ethylbenzene	ND	F2	25.0	23.0	F2	ug/L		92	65 - 135	23	20
Hexachlorobutadiene	ND		25.0	22.9		ug/L		92	65 - 135	17	25
Isopropylbenzene	ND		25.0	22.7		ug/L		90	65 - 135	17	20
Methylene Chloride	ND		25.0	25.0		ug/L		100	54 - 141	19	26
Naphthalene	ND		25.0	21.5		ug/L		86	42 - 135	18	23
n-Butylbenzene	ND		25.0	20.8		ug/L		83	64 - 135	19	21
N-Propylbenzene	ND	F2	25.0	22.8	F2	ug/L		91	65 - 135	21	20
sec-Butylbenzene	ND		25.0	23.6		ug/L		95	64 - 135	14	21
Styrene	ND		25.0	23.1		ug/L		92	65 - 135	19	26
tert-Butylbenzene	ND		25.0	23.0		ug/L		92	65 - 135	20	21
Tetrachloroethene	ND		25.0	25.8		ug/L		103	65 - 135	14	20
Toluene	ND		25.0	24.0		ug/L		96	65 - 135	18	20
trans-1,2-Dichloroethene	ND		25.0	24.5		ug/L		98	65 - 135	19	24
trans-1,3-Dichloropropene	ND		25.0	19.3		ug/L		77	65 - 135	20	26
Trichloroethene	ND	F2	25.0	22.2	F2	ug/L		89	65 - 135	22	20
Trichlorofluoromethane	ND		25.0	22.9		ug/L		91	53 - 137	19	27
Vinyl chloride	ND	F2	25.0	20.8	F2	ug/L		83	40 - 137	27	24

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 127*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*
Dibromofluoromethane (Surr)	*102*		*77 - 120*
Toluene-d8 (Surr)	*96*		*80 - 125*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Lab Sample ID: MB 280-533634/1-A
Matrix: Water
Analysis Batch: 533660

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 533634

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		04/23/21 10:55	04/23/21 16:21	1
1,2-Dibromoethane	ND		0.050		ug/L		04/23/21 10:55	04/23/21 16:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*115*		*70 - 130*	*04/23/21 10:55*	*04/23/21 16:21*	*1*

Lab Sample ID: LCS 280-533634/2-A
Matrix: Water
Analysis Batch: 533660

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 533634

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2-Dibromo-3-Chloropropane			0.250	0.248		ug/L		99	60 - 140		
1,2-Dibromoethane			0.250	0.268		ug/L		107	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dibromopropane	*109*		*70 - 130*

Lab Sample ID: LCSD 280-533634/3-A
Matrix: Water
Analysis Batch: 533660

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 533634

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.250	0.248		ug/L		99	60 - 140	0	10
1,2-Dibromoethane			0.250	0.291		ug/L		116	60 - 140	8	10

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dibromopropane	*112*		*70 - 130*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 280-533181/1-A
Matrix: Water
Analysis Batch: 533820

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 533181

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		500		ug/L		04/23/21 09:06	04/23/21 18:28	1
Iron	35.8		30		ug/L		04/23/21 09:06	04/23/21 18:28	1
Magnesium	ND		200		ug/L		04/23/21 09:06	04/23/21 18:28	1
Manganese	ND		3.0		ug/L		04/23/21 09:06	04/23/21 18:28	1
Potassium	ND		500		ug/L		04/23/21 09:06	04/23/21 18:28	1
Sodium	ND		1000		ug/L		04/23/21 09:06	04/23/21 18:28	1

Lab Sample ID: LCS 280-533181/2-A
Matrix: Water
Analysis Batch: 533820

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 533181

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Calcium			50000	49700		ug/L		99	90 - 111		

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 280-533181/2-A
Matrix: Water
Analysis Batch: 533820

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 533181

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	10000	10100		ug/L		101	89 - 115
Magnesium	50000	51300		ug/L		103	90 - 113
Manganese	1000	1020		ug/L		102	90 - 110
Potassium	50000	51100		ug/L		102	89 - 114
Sodium	50000	48400		ug/L		97	90 - 115

Lab Sample ID: 280-147388-A-4-E MS
Matrix: Water
Analysis Batch: 533820

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 533181

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	660000	F1	50000	659000	4	ug/L		7	48 - 153
Iron	ND		10000	10400		ug/L		104	52 - 155
Magnesium	210000	F1	50000	240000	4	ug/L		56	62 - 146
Manganese	11		1000	1050		ug/L		104	79 - 121
Potassium	40000	F1	50000	78400		ug/L		77	76 - 132
Sodium	260000	F1 F2	50000	238000	4	ug/L		-52	70 - 203

Lab Sample ID: 280-147388-A-4-F MSD
Matrix: Water
Analysis Batch: 533820

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 533181

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium	660000	F1	50000	635000	4	ug/L		-41	48 - 153	4	20
Iron	ND		10000	10800		ug/L		108	52 - 155	4	20
Magnesium	210000	F1	50000	217000	4	ug/L		12	62 - 146	10	20
Manganese	11		1000	1020		ug/L		101	79 - 121	3	20
Potassium	40000	F1	50000	67100	F1	ug/L		55	76 - 132	16	20
Sodium	260000	F1 F2	50000	150000	4 F2	ug/L		-228	70 - 203	45	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 480-578094/28
Matrix: Water
Analysis Batch: 578094

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			04/27/21 23:36	1
Sulfate	ND		1.0		mg/L			04/27/21 23:36	1

Lab Sample ID: LCS 480-578094/27
Matrix: Water
Analysis Batch: 578094

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	48.4		mg/L		97	90 - 110
Sulfate	50.0	48.6		mg/L		97	90 - 110

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 280-147466-3 MS
Matrix: Water
Analysis Batch: 578094

Client Sample ID: MW-14B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	14		50.0	62.1		mg/L		96	81 - 120		
Sulfate	3.2		50.0	51.7		mg/L		97	80 - 120		

Lab Sample ID: 280-147466-3 MSD
Matrix: Water
Analysis Batch: 578094

Client Sample ID: MW-14B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	14		50.0	62.4		mg/L		96	81 - 120	1	15
Sulfate	3.2		50.0	52.0		mg/L		98	80 - 120	1	15

Lab Sample ID: 280-147467-I-4 MS
Matrix: Water
Analysis Batch: 578094

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	5.3		50.0	54.5		mg/L		98	81 - 120		
Sulfate	5.0		50.0	54.3		mg/L		99	80 - 120		

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-533955/128
Matrix: Water
Analysis Batch: 533955

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.030		mg/L			04/26/21 16:19	1

Lab Sample ID: MB 280-533955/164
Matrix: Water
Analysis Batch: 533955

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.030		mg/L			04/26/21 17:31	1

Lab Sample ID: LCS 280-533955/126
Matrix: Water
Analysis Batch: 533955

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia as N			2.50	2.58		mg/L		103	90 - 110		

Lab Sample ID: LCS 280-533955/162
Matrix: Water
Analysis Batch: 533955

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia as N			2.50	2.58		mg/L		103	90 - 110		

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: LCSD 280-533955/127
Matrix: Water
Analysis Batch: 533955

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N			2.50	2.66		mg/L		106	90 - 110	3	10

Lab Sample ID: LCSD 280-533955/163
Matrix: Water
Analysis Batch: 533955

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N			2.50	2.58		mg/L		103	90 - 110	0	10

Lab Sample ID: 280-147432-G-6 MS
Matrix: Water
Analysis Batch: 533955

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia as N	ND		1.00	1.06		mg/L		106	90 - 110		

Lab Sample ID: 280-147432-G-6 MSD
Matrix: Water
Analysis Batch: 533955

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N	ND		1.00	1.08		mg/L		108	90 - 110	2	10

Lab Sample ID: MB 280-534091/20
Matrix: Water
Analysis Batch: 534091

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.030		mg/L			04/27/21 14:12	1

Lab Sample ID: LCS 280-534091/18
Matrix: Water
Analysis Batch: 534091

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia as N			2.50	2.42		mg/L		97	90 - 110		

Lab Sample ID: LCSD 280-534091/19
Matrix: Water
Analysis Batch: 534091

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N			2.50	2.42		mg/L		97	90 - 110	0	10

Lab Sample ID: 280-147447-C-6 MS
Matrix: Water
Analysis Batch: 534091

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia as N	ND		1.00	0.950		mg/L		95	90 - 110		

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: 280-147447-C-6 MSD
Matrix: Water
Analysis Batch: 534091

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N	ND		1.00	1.00		mg/L		100	90 - 110	5	10

Lab Sample ID: MB 280-534359/20
Matrix: Water
Analysis Batch: 534359

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.030		mg/L			04/29/21 11:41	1

Lab Sample ID: LCS 280-534359/18
Matrix: Water
Analysis Batch: 534359

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N	2.50	2.53		mg/L		101	90 - 110

Lab Sample ID: LCSD 280-534359/19
Matrix: Water
Analysis Batch: 534359

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N	2.50	2.52		mg/L		101	90 - 110	1	10

Lab Sample ID: 280-147466-6 MS
Matrix: Water
Analysis Batch: 534359

Client Sample ID: MW-16A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N	0.051		1.00	1.05		mg/L		100	90 - 110

Lab Sample ID: 280-147466-6 MSD
Matrix: Water
Analysis Batch: 534359

Client Sample ID: MW-16A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N	0.051		1.00	1.05		mg/L		100	90 - 110	1	10

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-534257/22
Matrix: Water
Analysis Batch: 534257

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate/Nitrite	ND		0.050		mg/L			04/28/21 18:50	1

Method: 353.2 - Nitrogen, Nitrate-Nitrite (Continued)

Lab Sample ID: LCS 280-534257/21
Matrix: Water
Analysis Batch: 534257

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate/Nitrite			5.00	5.07		mg/L		101	90 - 110		

Lab Sample ID: 280-147466-2 MS
Matrix: Water
Analysis Batch: 534257

Client Sample ID: MW-14A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate/Nitrite	ND	F1	4.00	4.48	F1	mg/L		112	90 - 110		

Lab Sample ID: 280-147466-2 MSD
Matrix: Water
Analysis Batch: 534257

Client Sample ID: MW-14A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate/Nitrite	ND	F1	4.00	4.37		mg/L		109	90 - 110	3	10

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 280-534659/4
Matrix: Water
Analysis Batch: 534659

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Average	ND		1.0		mg/L			05/02/21 01:26	1

Lab Sample ID: LCS 280-534659/3
Matrix: Water
Analysis Batch: 534659

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon - Average			25.0	24.7		mg/L		99	88 - 112		

Lab Sample ID: 280-147467-H-4 MS
Matrix: Water
Analysis Batch: 534659

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon - Average	1.2		25.0	26.3		mg/L		100	88 - 112		

Lab Sample ID: 280-147467-H-4 MSD
Matrix: Water
Analysis Batch: 534659

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Average	1.2		25.0	26.1		mg/L		100	88 - 112	1	15

Method: 9060 - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: MB 280-534804/4
Matrix: Water
Analysis Batch: 534804

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Average	ND		1.0		mg/L			05/03/21 16:02	1

Lab Sample ID: LCS 280-534804/3
Matrix: Water
Analysis Batch: 534804

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Average	25.0	25.0		mg/L		100	88 - 112

Lab Sample ID: 280-147469-B-3 MS
Matrix: Water
Analysis Batch: 534804

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Average	1.4		25.0	26.9		mg/L		102	88 - 112

Lab Sample ID: 280-147469-B-3 MSD
Matrix: Water
Analysis Batch: 534804

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Average	1.4		25.0	26.9		mg/L		102	88 - 112	0	15

Method: SM 1030E (meq) - Cation Anion Balance

Lab Sample ID: MB 280-534660/1
Matrix: Water
Analysis Batch: 534660

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

Analyte	MB Result	MB Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	0.000				meq/L			05/03/21 09:05	1
Magnesium	0.000				meq/L			05/03/21 09:05	1
Potassium	0.000				meq/L			05/03/21 09:05	1
Sodium	0.000				meq/L			05/03/21 09:05	1
Ammonia as N	0.000				meq/L			05/03/21 09:05	1
Chloride	0.000				meq/L			05/03/21 09:05	1
Sulfate	0.000				meq/L			05/03/21 09:05	1
Alkalinity	0.000				mg/L			05/03/21 09:05	1
Bicarbonate Alkalinity	0.000				meq/L			05/03/21 09:05	1
Nitrate/Nitrite	0.000				meq/L			05/03/21 09:05	1
Iron	0.000				meq/L			05/03/21 09:05	1

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-533008/33
Matrix: Water
Analysis Batch: 533008

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity	ND		10		mg/L			04/16/21 20:41	1

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: MB 280-533008/60
Matrix: Water
Analysis Batch: 533008

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity	ND		10		mg/L			04/17/21 00:02	1

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

Lab Sample ID: MB 280-533049/1
Matrix: Water
Analysis Batch: 533049

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10		mg/L			04/19/21 13:23	1

Lab Sample ID: LCS 280-533049/2
Matrix: Water
Analysis Batch: 533049

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	501	489		mg/L		98	88 - 114

Lab Sample ID: 280-147466-8 DU
Matrix: Water
Analysis Batch: 533049

Client Sample ID: MW-16B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	480		489		mg/L		2	10

Lab Sample ID: MB 280-533243/1
Matrix: Water
Analysis Batch: 533243

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10		mg/L			04/20/21 16:39	1

Lab Sample ID: LCS 280-533243/2
Matrix: Water
Analysis Batch: 533243

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	501	489		mg/L		98	88 - 114

Lab Sample ID: 280-147466-5 DU
Matrix: Water
Analysis Batch: 533243

Client Sample ID: MW-21B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	260		268		mg/L		4	10

QC Association Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Groundwater

Job ID: 280-147466-1

GC/MS VOA

Analysis Batch: 533411

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147466-1	TB1	Total/NA	Water	8260B	
MB 280-533411/8	Method Blank	Total/NA	Water	8260B	
LCS 280-533411/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-533411/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 533813

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147466-2	MW-14A	Total/NA	Water	8260B	
280-147466-3	MW-14B	Total/NA	Water	8260B	
280-147466-4	MW-21A	Total/NA	Water	8260B	
280-147466-5	MW-21B	Total/NA	Water	8260B	
280-147466-6	MW-16A	Total/NA	Water	8260B	
280-147466-7	FB2	Total/NA	Water	8260B	
280-147466-8	MW-16B	Total/NA	Water	8260B	
280-147466-9	DUP2	Total/NA	Water	8260B	
MB 280-533813/9	Method Blank	Total/NA	Water	8260B	
LCS 280-533813/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-533813/5	Lab Control Sample Dup	Total/NA	Water	8260B	
280-147461-B-10 MS	Matrix Spike	Total/NA	Water	8260B	
280-147461-C-10 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

GC Semi VOA

Prep Batch: 533634

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147466-1	TB1	Total/NA	Water	8011	
280-147466-2	MW-14A	Total/NA	Water	8011	
280-147466-3	MW-14B	Total/NA	Water	8011	
280-147466-4	MW-21A	Total/NA	Water	8011	
280-147466-5	MW-21B	Total/NA	Water	8011	
280-147466-6	MW-16A	Total/NA	Water	8011	
280-147466-7	FB2	Total/NA	Water	8011	
280-147466-8	MW-16B	Total/NA	Water	8011	
280-147466-9	DUP2	Total/NA	Water	8011	
MB 280-533634/1-A	Method Blank	Total/NA	Water	8011	
LCS 280-533634/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 280-533634/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 533660

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147466-1	TB1	Total/NA	Water	8011	533634
280-147466-2	MW-14A	Total/NA	Water	8011	533634
280-147466-3	MW-14B	Total/NA	Water	8011	533634
280-147466-4	MW-21A	Total/NA	Water	8011	533634
280-147466-5	MW-21B	Total/NA	Water	8011	533634
280-147466-6	MW-16A	Total/NA	Water	8011	533634
280-147466-7	FB2	Total/NA	Water	8011	533634
280-147466-8	MW-16B	Total/NA	Water	8011	533634
280-147466-9	DUP2	Total/NA	Water	8011	533634
MB 280-533634/1-A	Method Blank	Total/NA	Water	8011	533634
LCS 280-533634/2-A	Lab Control Sample	Total/NA	Water	8011	533634

GC Semi VOA (Continued)

Analysis Batch: 533660 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 280-533634/3-A	Lab Control Sample Dup	Total/NA	Water	8011	533634

Metals

Prep Batch: 533181

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147466-2	MW-14A	Dissolved	Water	3005A	
280-147466-3	MW-14B	Dissolved	Water	3005A	
280-147466-4	MW-21A	Dissolved	Water	3005A	
280-147466-5	MW-21B	Dissolved	Water	3005A	
280-147466-6	MW-16A	Dissolved	Water	3005A	
280-147466-7	FB2	Dissolved	Water	3005A	
280-147466-8	MW-16B	Dissolved	Water	3005A	
280-147466-9	DUP2	Dissolved	Water	3005A	
MB 280-533181/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-533181/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-147388-A-4-E MS	Matrix Spike	Dissolved	Water	3005A	
280-147388-A-4-F MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	

Analysis Batch: 533820

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147466-2	MW-14A	Dissolved	Water	6010B	533181
280-147466-3	MW-14B	Dissolved	Water	6010B	533181
280-147466-4	MW-21A	Dissolved	Water	6010B	533181
280-147466-5	MW-21B	Dissolved	Water	6010B	533181
280-147466-6	MW-16A	Dissolved	Water	6010B	533181
280-147466-7	FB2	Dissolved	Water	6010B	533181
280-147466-8	MW-16B	Dissolved	Water	6010B	533181
280-147466-9	DUP2	Dissolved	Water	6010B	533181
MB 280-533181/1-A	Method Blank	Total Recoverable	Water	6010B	533181
LCS 280-533181/2-A	Lab Control Sample	Total Recoverable	Water	6010B	533181
280-147388-A-4-E MS	Matrix Spike	Dissolved	Water	6010B	533181
280-147388-A-4-F MSD	Matrix Spike Duplicate	Dissolved	Water	6010B	533181

General Chemistry

Analysis Batch: 533008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147466-2	MW-14A	Total/NA	Water	SM 2320B	
280-147466-3	MW-14B	Total/NA	Water	SM 2320B	
280-147466-4	MW-21A	Total/NA	Water	SM 2320B	
280-147466-5	MW-21B	Total/NA	Water	SM 2320B	
280-147466-6	MW-16A	Total/NA	Water	SM 2320B	
280-147466-7	FB2	Total/NA	Water	SM 2320B	
280-147466-8	MW-16B	Total/NA	Water	SM 2320B	
280-147466-9	DUP2	Total/NA	Water	SM 2320B	
MB 280-533008/33	Method Blank	Total/NA	Water	SM 2320B	
MB 280-533008/60	Method Blank	Total/NA	Water	SM 2320B	

Analysis Batch: 533049

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147466-2	MW-14A	Total/NA	Water	SM 2540C	

General Chemistry (Continued)

Analysis Batch: 533049 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147466-3	MW-14B	Total/NA	Water	SM 2540C	
280-147466-4	MW-21A	Total/NA	Water	SM 2540C	
280-147466-6	MW-16A	Total/NA	Water	SM 2540C	
280-147466-7	FB2	Total/NA	Water	SM 2540C	
280-147466-8	MW-16B	Total/NA	Water	SM 2540C	
MB 280-533049/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-533049/2	Lab Control Sample	Total/NA	Water	SM 2540C	
280-147466-8 DU	MW-16B	Total/NA	Water	SM 2540C	

Analysis Batch: 533243

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147466-5	MW-21B	Total/NA	Water	SM 2540C	
280-147466-9	DUP2	Total/NA	Water	SM 2540C	
MB 280-533243/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-533243/2	Lab Control Sample	Total/NA	Water	SM 2540C	
280-147466-5 DU	MW-21B	Total/NA	Water	SM 2540C	

Analysis Batch: 533955

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147466-2	MW-14A	Total/NA	Water	350.1	
280-147466-3	MW-14B	Total/NA	Water	350.1	
280-147466-4	MW-21A	Total/NA	Water	350.1	
MB 280-533955/128	Method Blank	Total/NA	Water	350.1	
MB 280-533955/164	Method Blank	Total/NA	Water	350.1	
LCS 280-533955/126	Lab Control Sample	Total/NA	Water	350.1	
LCS 280-533955/162	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-533955/127	Lab Control Sample Dup	Total/NA	Water	350.1	
LCSD 280-533955/163	Lab Control Sample Dup	Total/NA	Water	350.1	
280-147432-G-6 MS	Matrix Spike	Total/NA	Water	350.1	
280-147432-G-6 MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	

Analysis Batch: 534091

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147466-5	MW-21B	Total/NA	Water	350.1	
280-147466-7	FB2	Total/NA	Water	350.1	
280-147466-8	MW-16B	Total/NA	Water	350.1	
280-147466-9	DUP2	Total/NA	Water	350.1	
MB 280-534091/20	Method Blank	Total/NA	Water	350.1	
LCS 280-534091/18	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-534091/19	Lab Control Sample Dup	Total/NA	Water	350.1	
280-147447-C-6 MS	Matrix Spike	Total/NA	Water	350.1	
280-147447-C-6 MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	

Analysis Batch: 534257

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147466-2	MW-14A	Total/NA	Water	353.2	
280-147466-3	MW-14B	Total/NA	Water	353.2	
280-147466-4	MW-21A	Total/NA	Water	353.2	
280-147466-5	MW-21B	Total/NA	Water	353.2	
280-147466-6	MW-16A	Total/NA	Water	353.2	
280-147466-7	FB2	Total/NA	Water	353.2	

General Chemistry (Continued)

Analysis Batch: 534257 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147466-8	MW-16B	Total/NA	Water	353.2	
280-147466-9	DUP2	Total/NA	Water	353.2	
MB 280-534257/22	Method Blank	Total/NA	Water	353.2	
LCS 280-534257/21	Lab Control Sample	Total/NA	Water	353.2	
280-147466-2 MS	MW-14A	Total/NA	Water	353.2	
280-147466-2 MSD	MW-14A	Total/NA	Water	353.2	

Analysis Batch: 534359

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147466-6	MW-16A	Total/NA	Water	350.1	
MB 280-534359/20	Method Blank	Total/NA	Water	350.1	
LCS 280-534359/18	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-534359/19	Lab Control Sample Dup	Total/NA	Water	350.1	
280-147466-6 MS	MW-16A	Total/NA	Water	350.1	
280-147466-6 MSD	MW-16A	Total/NA	Water	350.1	

Analysis Batch: 534659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147466-3	MW-14B	Total/NA	Water	9060	
280-147466-4	MW-21A	Total/NA	Water	9060	
280-147466-5	MW-21B	Total/NA	Water	9060	
280-147466-6	MW-16A	Total/NA	Water	9060	
280-147466-7	FB2	Total/NA	Water	9060	
MB 280-534659/4	Method Blank	Total/NA	Water	9060	
LCS 280-534659/3	Lab Control Sample	Total/NA	Water	9060	
280-147467-H-4 MS	Matrix Spike	Total/NA	Water	9060	
280-147467-H-4 MSD	Matrix Spike Duplicate	Total/NA	Water	9060	

Analysis Batch: 534660

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147466-2	MW-14A	Total/NA	Water	SM 1030E	
280-147466-2	MW-14A	Total/NA	Water	SM 1030E (meq)	
280-147466-3	MW-14B	Total/NA	Water	SM 1030E	
280-147466-3	MW-14B	Total/NA	Water	SM 1030E (meq)	
280-147466-4	MW-21A	Total/NA	Water	SM 1030E	
280-147466-4	MW-21A	Total/NA	Water	SM 1030E (meq)	
280-147466-5	MW-21B	Total/NA	Water	SM 1030E	
280-147466-5	MW-21B	Total/NA	Water	SM 1030E (meq)	
280-147466-6	MW-16A	Total/NA	Water	SM 1030E	
280-147466-6	MW-16A	Total/NA	Water	SM 1030E (meq)	
280-147466-7	FB2	Total/NA	Water	SM 1030E	
280-147466-7	FB2	Total/NA	Water	SM 1030E (meq)	
280-147466-8	MW-16B	Total/NA	Water	SM 1030E	
280-147466-8	MW-16B	Total/NA	Water	SM 1030E (meq)	
280-147466-9	DUP2	Total/NA	Water	SM 1030E	
280-147466-9	DUP2	Total/NA	Water	SM 1030E (meq)	
MB 280-534660/1	Method Blank	Total/NA	Water	SM 1030E (meq)	

Analysis Batch: 534804

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147466-2	MW-14A	Total/NA	Water	9060	

General Chemistry (Continued)

Analysis Batch: 534804 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147466-8	MW-16B	Total/NA	Water	9060	
280-147466-9	DUP2	Total/NA	Water	9060	
MB 280-534804/4	Method Blank	Total/NA	Water	9060	
LCS 280-534804/3	Lab Control Sample	Total/NA	Water	9060	
280-147469-B-3 MS	Matrix Spike	Total/NA	Water	9060	
280-147469-B-3 MSD	Matrix Spike Duplicate	Total/NA	Water	9060	

Analysis Batch: 578094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147466-2	MW-14A	Total/NA	Water	300.0	
280-147466-3	MW-14B	Total/NA	Water	300.0	
280-147466-4	MW-21A	Total/NA	Water	300.0	
280-147466-5	MW-21B	Total/NA	Water	300.0	
280-147466-6	MW-16A	Total/NA	Water	300.0	
280-147466-7	FB2	Total/NA	Water	300.0	
280-147466-8	MW-16B	Total/NA	Water	300.0	
280-147466-9	DUP2	Total/NA	Water	300.0	
MB 480-578094/28	Method Blank	Total/NA	Water	300.0	
LCS 480-578094/27	Lab Control Sample	Total/NA	Water	300.0	
280-147466-3 MS	MW-14B	Total/NA	Water	300.0	
280-147466-3 MSD	MW-14B	Total/NA	Water	300.0	
280-147467-I-4 MS	Matrix Spike	Total/NA	Water	300.0	

Field Service / Mobile Lab

Analysis Batch: 533839

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147466-2	MW-14A	Total/NA	Water	Field Sampling	
280-147466-3	MW-14B	Total/NA	Water	Field Sampling	
280-147466-4	MW-21A	Total/NA	Water	Field Sampling	
280-147466-5	MW-21B	Total/NA	Water	Field Sampling	
280-147466-6	MW-16A	Total/NA	Water	Field Sampling	
280-147466-8	MW-16B	Total/NA	Water	Field Sampling	

Lab Chronicle

Client: Waste Management
Job ID: 280-147466-1
Project/Site: 1003|Riverbend Landfill - Groundwater

Client Sample ID: TB1
Lab Sample ID: 280-147466-1
Date Collected: 04/13/21 07:00
Matrix: Water
Date Received: 04/15/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	533411	04/22/21 05:39	RJS	TAL DEN
Total/NA	Prep	8011			35.3 mL	35 mL	533634	04/23/21 10:55	JSM	TAL DEN
Total/NA	Analysis	8011		1			533660	04/23/21 18:08	JSM	TAL DEN

Client Sample ID: MW-14A
Lab Sample ID: 280-147466-2
Date Collected: 04/13/21 13:30
Matrix: Water
Date Received: 04/15/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	533813	04/25/21 00:54	GO	TAL DEN
Total/NA	Prep	8011			35.5 mL	35 mL	533634	04/23/21 10:55	JSM	TAL DEN
Total/NA	Analysis	8011		1			533660	04/23/21 18:30	JSM	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	533181	04/23/21 09:06	MAB	TAL DEN
Dissolved	Analysis	6010B		1			533820	04/23/21 19:31	LMT	TAL DEN
Total/NA	Analysis	300.0		1			578094	04/28/21 01:05	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	533955	04/26/21 18:12	QJB	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	534257	04/28/21 18:52	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	534804	05/03/21 17:23	RAF	TAL DEN
Total/NA	Analysis	SM 1030E		1			534660	05/03/21 09:05	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			534660	05/03/21 09:05	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			533008	04/16/21 22:47	QJB	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	533049	04/19/21 13:23	JMH	TAL DEN
Total/NA	Analysis	Field Sampling		1			533839	04/13/21 14:30	C1A	TAL DEN

Client Sample ID: MW-14B
Lab Sample ID: 280-147466-3
Date Collected: 04/13/21 14:40
Matrix: Water
Date Received: 04/15/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	533813	04/25/21 01:16	GO	TAL DEN
Total/NA	Prep	8011			34.9 mL	35 mL	533634	04/23/21 10:55	JSM	TAL DEN
Total/NA	Analysis	8011		1			533660	04/23/21 18:52	JSM	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	533181	04/23/21 09:06	MAB	TAL DEN
Dissolved	Analysis	6010B		1			533820	04/23/21 19:48	LMT	TAL DEN
Total/NA	Analysis	300.0		1			578094	04/28/21 01:23	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	533955	04/26/21 18:18	QJB	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	534257	04/28/21 18:58	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	534659	05/02/21 07:10	RAF	TAL DEN
Total/NA	Analysis	SM 1030E		1			534660	05/03/21 09:05	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			534660	05/03/21 09:05	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			533008	04/16/21 22:53	QJB	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	533049	04/19/21 13:23	JMH	TAL DEN
Total/NA	Analysis	Field Sampling		1			533839	04/13/21 15:40	C1A	TAL DEN

Client Sample ID: MW-21A

Lab Sample ID: 280-147466-4

Date Collected: 04/13/21 15:55

Matrix: Water

Date Received: 04/15/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	533813	04/25/21 01:39	GO	TAL DEN
Total/NA	Prep	8011			35.5 mL	35 mL	533634	04/23/21 10:55	JSM	TAL DEN
Total/NA	Analysis	8011		1			533660	04/23/21 19:13	JSM	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	533181	04/23/21 09:06	MAB	TAL DEN
Dissolved	Analysis	6010B		1			533820	04/23/21 19:52	LMT	TAL DEN
Total/NA	Analysis	300.0		1			578094	04/28/21 02:53	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	533955	04/26/21 18:20	QJB	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	534257	04/28/21 19:00	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	534659	05/02/21 07:27	RAF	TAL DEN
Total/NA	Analysis	SM 1030E		1			534660	05/03/21 09:05	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			534660	05/03/21 09:05	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			533008	04/16/21 22:59	QJB	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	533049	04/19/21 13:23	JMH	TAL DEN
Total/NA	Analysis	Field Sampling		1			533839	04/13/21 16:55	C1A	TAL DEN

Client Sample ID: MW-21B

Lab Sample ID: 280-147466-5

Date Collected: 04/14/21 08:55

Matrix: Water

Date Received: 04/15/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	533813	04/25/21 02:01	GO	TAL DEN
Total/NA	Prep	8011			35.1 mL	35 mL	533634	04/23/21 10:55	JSM	TAL DEN
Total/NA	Analysis	8011		1			533660	04/23/21 19:35	JSM	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	533181	04/23/21 09:06	MAB	TAL DEN
Dissolved	Analysis	6010B		1			533820	04/23/21 19:55	LMT	TAL DEN
Total/NA	Analysis	300.0		1			578094	04/28/21 03:10	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	534091	04/27/21 14:56	QJB	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	534257	04/28/21 19:02	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	534659	05/02/21 08:17	RAF	TAL DEN
Total/NA	Analysis	SM 1030E		1			534660	05/03/21 09:05	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			534660	05/03/21 09:05	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			533008	04/16/21 23:06	QJB	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	533243	04/20/21 16:39	JMH	TAL DEN
Total/NA	Analysis	Field Sampling		1			533839	04/14/21 09:55	C1A	TAL DEN

Client Sample ID: MW-16A

Lab Sample ID: 280-147466-6

Date Collected: 04/14/21 10:50

Matrix: Water

Date Received: 04/15/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	533813	04/25/21 02:23	GO	TAL DEN
Total/NA	Prep	8011			35.1 mL	35 mL	533634	04/23/21 10:55	JSM	TAL DEN
Total/NA	Analysis	8011		1			533660	04/23/21 19:56	JSM	TAL DEN

Client Sample ID: MW-16A

Date Collected: 04/14/21 10:50
Date Received: 04/15/21 10:00

Lab Sample ID: 280-147466-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			50 mL	50 mL	533181	04/23/21 09:06	MAB	TAL DEN
Dissolved	Analysis	6010B		1			533820	04/23/21 19:59	LMT	TAL DEN
Total/NA	Analysis	300.0		1			578094	04/28/21 03:28	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	534359	04/29/21 11:43	QJB	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	534257	04/28/21 19:04	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	534659	05/02/21 08:34	RAF	TAL DEN
Total/NA	Analysis	SM 1030E		1			534660	05/03/21 09:05	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			534660	05/03/21 09:05	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			533008	04/16/21 23:12	QJB	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	533049	04/19/21 13:23	JMH	TAL DEN
Total/NA	Analysis	Field Sampling		1			533839	04/14/21 11:50	C1A	TAL DEN

Client Sample ID: FB2

Date Collected: 04/14/21 10:10
Date Received: 04/15/21 10:00

Lab Sample ID: 280-147466-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	533813	04/25/21 00:10	GO	TAL DEN
Total/NA	Prep	8011			35 mL	35 mL	533634	04/23/21 10:55	JSM	TAL DEN
Total/NA	Analysis	8011		1			533660	04/23/21 20:17	JSM	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	533181	04/23/21 09:06	MAB	TAL DEN
Dissolved	Analysis	6010B		1			533820	04/23/21 20:02	LMT	TAL DEN
Total/NA	Analysis	300.0		1			578094	04/28/21 03:46	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	534091	04/27/21 15:00	QJB	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	534257	04/28/21 19:06	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	534659	05/02/21 08:56	RAF	TAL DEN
Total/NA	Analysis	SM 1030E		1			534660	05/03/21 09:05	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			534660	05/03/21 09:05	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			533008	04/16/21 23:18	QJB	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	533049	04/19/21 13:23	JMH	TAL DEN

Client Sample ID: MW-16B

Date Collected: 04/14/21 10:10
Date Received: 04/15/21 10:00

Lab Sample ID: 280-147466-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	533813	04/25/21 02:45	GO	TAL DEN
Total/NA	Prep	8011			35.4 mL	35 mL	533634	04/23/21 10:55	JSM	TAL DEN
Total/NA	Analysis	8011		1			533660	04/23/21 20:39	JSM	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	533181	04/23/21 09:06	MAB	TAL DEN
Dissolved	Analysis	6010B		1			533820	04/23/21 20:05	LMT	TAL DEN
Total/NA	Analysis	300.0		1			578094	04/28/21 04:04	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	534091	04/27/21 15:02	QJB	TAL DEN

Lab Chronicle

Client: Waste Management
Job ID: 280-147466-1
Project/Site: 1003|Riverbend Landfill - Groundwater

Client Sample ID: MW-16B
Lab Sample ID: 280-147466-8
Date Collected: 04/14/21 10:10
Matrix: Water
Date Received: 04/15/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	353.2		1	100 mL	100 mL	534257	04/28/21 19:08	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	534804	05/03/21 17:40	RAF	TAL DEN
Total/NA	Analysis	SM 1030E		1			534660	05/03/21 09:05	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			534660	05/03/21 09:05	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			533008	04/16/21 23:25	QJB	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	533049	04/19/21 13:23	JMH	TAL DEN
Total/NA	Analysis	Field Sampling		1			533839	04/14/21 11:10	C1A	TAL DEN

Client Sample ID: DUP2
Lab Sample ID: 280-147466-9
Date Collected: 04/14/21 10:15
Matrix: Water
Date Received: 04/15/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	533813	04/25/21 03:07	GO	TAL DEN
Total/NA	Prep	8011			34.9 mL	35 mL	533634	04/23/21 10:55	JSM	TAL DEN
Total/NA	Analysis	8011		1			533660	04/23/21 21:22	JSM	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	533181	04/23/21 09:06	MAB	TAL DEN
Dissolved	Analysis	6010B		1			533820	04/23/21 20:09	LMT	TAL DEN
Total/NA	Analysis	300.0		1			578094	04/28/21 04:22	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	534091	04/27/21 15:04	QJB	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	534257	04/28/21 19:10	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	534804	05/03/21 17:57	RAF	TAL DEN
Total/NA	Analysis	SM 1030E		1			534660	05/03/21 09:05	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			534660	05/03/21 09:05	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			533008	04/17/21 00:09	QJB	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	533243	04/20/21 16:39	JMH	TAL DEN

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL DEN = Eurofins TestAmerica, Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

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

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: I. Hultquist	Lab PM: Sara, Betsy A	Carrier Tracking No(s):	COC No: 280-16511-866.1
Client Contact:	Phone: 503-716-6320	E-Mail: Betsy.Sara@Eurofinset.com		Page:
Company: Waste Management				Job #:
Address: 13469 SW Highway 18	Due Date Requested:			
City: McMinnville	TAT Requested (days):			
State, Zip: OR, 97128				
Phone:	PO #:			
Email:	WO #:			
Project Name: 1003|Riverbend Landfill SCS Engineers Event Desc: Semiannual Compliance Wells - Apr Oct	Project #: 28002786			
Site: Oregon	SSOW#:			

Analysis Requested

280-147466 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, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	TDS/Alk	Dissolved Metals	Ammonia/TOC/NO3+NO2	8260B	8011	Cation/Anion Balance	Chloride/Sulfate (TA Buffalo)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	S	A	R		N		
TB1	4/13/2021	0700	G	W						X	X			4	
MW-14A	4/13/2021	1330	G	W	X		X	X	X	X	X	X	X	11	
MW-14B	4/13/2021	1440	G	W	X		X	X	X	X	X	X	X	11	
MW-21A	4/13/2021	1555	G	W	X		X	X	X	X	X	X	X	11	
MW-21B	4/14/2021	0855	G	W	X		X	X	X	X	X	X	X	11	
MW-16A	4/14/2021	1050	G	W	X		X	X	X	X	X	X	X	11	
FB2	4/14/2021	1010	G	W	X		X	X	X	X	X	X	X	11	
MW-16B	4/14/2021	1010	G	W	X		X	X	X	X	X	X	X	11	
DUP2	4/14/2021	1015	G	W	X		X	X	X	X	X	X	X	11	

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

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

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

Special Instructions/QC Requirements:

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		4/14/21 @ 1630	SCS		04/15/2021 10:00	TA DEN
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: △ Yes △ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 0.5 / 2.8 / 3.2 / 2.1, CF: +0.4, TB: 9

12/2/2021

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-14A
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	(NE)	E	SE	S	SW	W	NW	LIGHT	(MEDIUM)	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(°F) 54.	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
4/13/21	~~12:40~~	23.600	.	17.85	.	5.75	X 1	0.94
/ /	12:40	.	.	.	.		X 3	2.81

Gal/ft = (dia./2)^2 x 0.163	1" =	0.041	(2" =)	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	√
VOA Glass	4/13/21	13:30	F	3	(40 ml)	HCl	(YES)	NO		
VOA Glass	4/13/21	13:30	F	3	(40 ml)	$Na_2S_2O_3$	(YES)	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/13/21	13:30	F	2	(250, 500, 1L)	None	(YES)	NO	NA	
Yellow Glass	4/13/21	13:30	F	2	(250, 500, 1L)	H_2SO_4	(YES)	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/13/21	13:30	F	1	250, (500) 1L	HNO_3	(YES)	(YES)		
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 | 11 | Total Bottles (include duplicate count)

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR[~~X~~] WA[ ]
AMBER - Glass	(8080) (8150) (TOX) OR[ ] WA[ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3,CO_3) (Cl) (SO_4) (Silica, T) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: 12:40 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	F(1240)	0.00	5.84	67.9	~~8~~ 413.4	11.0	17.85	2.77	clear/colorless
1	F(1251)	1.0	6.01	89.0	322.7	10.2	17.~~5~~8	1.08	clear/colorless
2	F(1304)	2.0	6.05	104.0	336.3	10.4	17.61	1.18	clear/colorless
3	F(1317)	3.0	6.05	120.8	346.0	10.5	17.74	2.98	clear/colorless
4	F(1330)	3.3	6.05	123.3	345.0	10.4	17.73	2.93	clear/colorless
5	F(1322)	3.5	6.04	121.9	344.2	10.3	17.76	2.90	clear/colorless
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

standard purge method (20/10/20psi) ~ 400mL/min

SAMPLER: Hana Nguyen
(PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-14B
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	(NE)	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	°F 54 .	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
4/13/21	14:00	44.00	18.07	.	.	26.53	X 1	4.33
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia /2)^2 x 0.163 | 1" = 0.041 | (2") = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	√
VOA Glass	4/13/21	14:10	F	3 40 ml	HCl	YES	NO		√
VOA Glass	4/13/21	14:10	F	3 40 ml	$Na_2S_2O_3$	YES	NO		√
Amber Glass	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/13/21	14:10	F	2 (250, 500, 1L)	None	YES	NO	NA	√
Yellow Glass	4/13/21	14:10	F	2 (250, 500, 1L)	H_2SO_4	YES	NO		√
Red Total Poly	/ /	:		125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/13/21	14:10	F	1 250, 500, 1L	HNO_3	YES	YES		√
White Poly	/ /	:		250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:		100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — 11 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [ ] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: 14:05 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (C)	DTW	Diss O_2 (mg/l)	Water Quality
0	F (1006)	0.00	6.50	97.1	461.5	13.4	18.22	3.88	clear/colorless
1	F (1431)	0.75	6.85	-57.8	407.1	11.6	18.26	1.66	clear/colorless
2	F (1432)	0.80	6.86	-58.5	405.5	11.7	18.26	1.60	clear/colorless
3	F (1435)	0.85	6.87	-59.9	402.5	11.9	18.26	1.41	clear/colorless
4	F (1437)	0.90	6.87	-60.5	400.9	11.7	18.26	1.39	clear/colorless
5		.	.	.	.	.	.	.	
6		.	.	.	.	.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Low flow purge method (2 volumes) ~100 ml/min

SAMPLER: K. Kingen (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-21A
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	(NE)	E	SE	S	SW	W	NW	LIGHT	(MEDIUM)	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(F) 63 .	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
4/13/21	15:26	15.42	.	10.31	.	5.11	X 1	0.83
/ /	:	.	.	.	.		X 3	2.50

Gal/ft = (dia /2)² x 0.163	1" =	0.041	(2") =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) ~~Dedicated~~ Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	√
VOA Glass	4/13/21	15:55	F	3	(40 ml)	(HCl)	(YES)	NO		
VOA Glass	4/13/21	15:55	F	3	(40 ml)	($Na_2S_2O_3$)	(YES)	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/13/21	15:55	F	2	(250, 500, 1L)	(None)	(YES)	NO	NA	
Yellow Glass	4/13/21	15:55	F	2	(250, 500, 1L	(H_2SO_4)	(YES)	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/13/21	15:55	F	1	250, (500, 1L	(HNO_3)	(YES)	(YES)		
White Poly	/ /	:		KK	250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 | 11 | Total Bottles (include duplicate count)

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: 15:28 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	F(1529)	0.00	6.00	31.0	289.3	12.4	10.31	5.03	clear/colorless
1	F(1539)	1.0	6.04	70.4	282.6	11.8	11.22	3.31	clear/colorless
2	F(1546)	2.0	6.04	83.8	284.7	11.8	11.41	1.39	clear/colorless
3	F(1549)	2.35	6.03	90.4	286.5	11.8	11.49	1.23	clear/colorless
4	F(1549)	3.05	6.02	92.0	286.4	11.7	11.57	1.95	clear/colorless
5	F(1551)	3.35	6.04	97.4	289.5	11.9	11.62	1.99	clear/colorless
6		.	.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

standard purge method (10/5/25psi) ~ 600 mL/min

SAMPLER: (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-213
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	E	(SE)	S	SW	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)	CLOUDY	RAIN	?	**TEMPERATURE:**	(°F) 52 .	°C				

(Circle appropriate units)

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
4/14/21	08:30	30.40	.	9.91	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia /2)^2 x 0.163	1" =	0.041	(2") =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	√
VOA Glass	4/14/21	08:55	F	3	40 ml	HCl	YES	NO		
VOA Glass	4/14/21	08:55	F	3	40 ml	$Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/14/21	08:55	F	2	250, 500, 1L	None	YES	NO	NA	
Yellow Glass	4/14/21	08:55	F	2	250, 500, 1L	H_2SO_4	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/14/21	08:55	F	1	250, 500, 1L	HNO_3	YES	YES		
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 | 11 | Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8021) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: 08:30 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	F(0831)	0.00	6.24	128.0	322.2	12.3	9.91	5.19	cloudy/tan
1	F(0843)	1.0	6.44	76.0	398 3	12.4	10.24	0.98	cloudy/tan
2	F(0846)	1.2	6.49	67.8	410.1	12.4	10.25	0.94	cloudy/tan
3	F(0847)	1.4	6.51	59.9	422.4	12.4	10.24	0.85	cloudy/pale tan
4	F(0849)	1.7	6.53	55.3	430.5	12.4	10.24	0.79	cloudy/pale tan
5	F(0851)	2.0	6.55	51.2	435 6	12.4	10.24	0.75	cloudy/pale tan
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

low flow purge method (7/3/20psi) ~ 60mL/purge ~ 360mL/min

SAMPLER: Ysara Vinyard (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET pg. 1/2

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-16A

SITE ADDRESS: McMinnville , Oregon **BLIND ID:**

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		TEMPERATURE: (°F) 39 . °C		

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
4/14/21	09:49	25.00	.	15.83	.	9.17	X 1	1.49
/ /	:	.	.	.	.		X 3	4.47

Gal/ft = (dia /2)^2 x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [N if used]

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	√
VOA Glass	4/14/21	10:50	F	3 40 ml	HCl	YES	NO		
VOA Glass	4/14/21	10:50	F	3 40 ml	$Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/14/21	10:50	F	2 250, 500, 1L	None	YES	NO	NA	
Yellow Glass	4/14/21	10:50	F	2 250, 500, 1L	H_2SO_4	YES	NO		
Red Total Poly	/ /	:			125, 250, 500 HNO_3	YES	NO		
Red Diss. Poly	4/14/21	10:50	F	1 250, 500, 1L	HNO_3	YES	YES		
White Poly	/ /	:			250, 500, 1L None	YES	YES		
Clear Poly	/ /	:			100, 250, 500 $Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 11 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3,CO_3) (Cl) (SO_4) (Silica, T) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: 09:50 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	0950	0.00	5.93	113.0	334.8	12.0	15.83	7.10	clear/colorless
1	1000	1.5	6.08	130.6	315.2	11.8	19.69	6.13	clear/colorless
2	1015	3.0	6.09	134.4	319.7	11.8	18.59	4.01	clear/colorless
3	1030	4.5	6.15	135.0	329.4	11.9	19.60	3.04	clear/colorless
4	1042	4.9	6.15	134.4	329.9	11.9	19.73	3.23	clear/colorless
5	1034	4.9	6.17	133.3	335.7	12.0	19.89	2.93	clear/colorless
6	1036	5.1	6.17	130.9	338.0	12.1	19.92	2.57	clear/colorless

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

standard purge: (20/10/20 psi) ~ 400 mL/min

SAMPLER: Kara Kingen (PRINTED NAME) (SIGNATURE)

pg. 1

FIELD SAMPLING DATA SHEET

pg 2/2

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-16A

SITE ADDRESS: McMinnville , Oregon **BLIND ID:**

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(°F) 59.	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
4/14/21	09:49	25.00	.	15.83	.	9.17	X 1	1.49
/ /	:	.	.	.	.		X 3	4.48

Gal/ft = (dia /2)² x 0.163	1" =	0.041	(2") =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	√
VOA Glass	4/14/21	10:50	F	3	(40 ml)	(HCl)	YES	NO		
VOA Glass	4/14/21	10:50	F	3	(40 ml)	($Na_2S_2O_3$)	YES	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/14/21	10 50	F	2	(250) 500, (1L)	(None)	YES	NO	NA	
Yellow Glass	4/14/21	10:50	F	2	(250) 500, 1L	(H_2SO_4)	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/14/21	10:50	F	1	250, (500) 1L	(HNO_3)	YES	YES		
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 | 11 | Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3,CO_3) (Cl) (SO_4) (Silica, T) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH3) (NO_3,NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: 09:50 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	1040	~~0.00~~ 6.1	6.16	132.0	342.2	12.0	20.31	2.85	clear/colorless
1	1042	6.3	6.17	128.6	346.7	12.0	20.40	2.85	clear/colorless
2	1044	10.5	6.18	127.0	349.1	12.0	20.41	2.66	clear/colorless
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: Kara Kingery (PRINTED NAME) (SIGNATURE)

pg. 2

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** ERL

SITE ADDRESS: McMinnville , Oregon **BLIND ID:**

DUP ID: NA

WIND FROM:	N	(NE)	E	SE	S	SW	W	NW	~~LIGHT~~	MEDIUM	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(°F) 58.0 °C	

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
/ /	:						X 1	
/ /	:						X 3	

Gal/ft = (dia./2)^2 x 0.163	1" =	0.041	2" =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other = Transfer

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [N if used]

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	√
VOA Glass	4/14/21	10 : 10	G	3 (40 ml)	(HCl)	(YES)	NO		
VOA Glass	4/14/21	10 : 10	G	3 (40 ml)	($Na_2S_2O_3$)	(YES)	NO		
Amber Glass	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/14/21	10 : 10	G	2 ~~250, 500~~ 1L	(None)	(YES)	~~NO~~	NA	
Yellow Glass	4/14/21	10 : 10	G	(2X) 2X ~~250, 500~~ 1L	(H_2SO_4)	(YES)	(NO)		
Red Total Poly	/ /	:		125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/14/21	10 : 10	G	1 ~~250, 500~~ 1L	(HNO_3)	~~YES~~	~~YES~~		
White Poly	/ /	:		250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:		100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 11 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(~~8260~~) (801) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (~~TDS~~) (TSS) (Alkalinity) (~~HCO_3/CO_3~~) (~~Cl~~) (~~SO_4~~) (Silica, T) (NO3) (BOD)
YELLOW - Glass	(COD) (~~TOC~~) (~~NH3~~) (~~NO2/NO3~~) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	G (1010)	0.00	:	—	—	:	:	— .	—
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Collected near MW-16A using lab supplied DI water

SAMPLER: Kara Kingeter (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-16R
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	~~NE~~	E	SE	S	SW	W	NW	~~LIGHT~~	MEDIUM	HEAVY
WEATHER:	~~SUNNY~~		CLOUDY		RAIN		?		**TEMPERATURE:**	(F) 55.0 °C	

(Circle appropriate units)

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
4/14/21	09:45	46.00	.	16.17	.	29.83	X 1	4.86
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia /2)^2 x 0.163	1" = 0.041	(2") = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	√
VOA Glass	4/14/21	10:10	F	3	40 ml	HCl	YES	NO	
VOA Glass	4/14/21	10:10	F	3	40 ml	$Na_2S_2O_3$	YES	NO	
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO	
White Poly	4/14/21	10:10	F	2	250, 500, 1L	None	YES	NO	NA
Yellow Glass	4/14/21	10:10	F	2	250, 500, 1L	~~H_2SO_4~~	YES	NO	
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO	
Red Diss. Poly	4/14/21	10:10	F	1	250, 500, 1L	HNO_3	~~YES~~	~~YES~~	
White Poly	/ /	:			250, 500, 1L	None	YES	YES	
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO	

White no acid, Yellow H2SO4, Red HNO3 — 11 — Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO/CO3) (Cl) (SO4) (Silica, T) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH3) (NO2/NO3) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: 09:48 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	F(0949)	0.00	7.54	40.4	911	12.1	16.18	5.92	clear/colorless
1	F(1001)	0.75	6.80	-42.8	909	12.4	16.19	0.89	cloudy/colorless
2	F(1003)	0.95	6.86	-45.8	912	12.4	16.19	0.76	clear/colorless
3	F(1005)	1.15	6.87	-46.5	913	12.4	16.19	0.74	clear/colorless
4	F(1007)	1.35	6.88	-48.1	915	12.4	16.19	0.73	clear/colorless
5		.	.			.	.	.	
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Low flow purge method (20/10/30psi) ~ 400 ml/min

SAMPLER: J. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** DUP2

SITE ADDRESS: McMinnville , Oregon **BLIND ID:**

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		**TEMPERATURE:**	°F 55.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
/ /	:	.	.	.	.		X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	√
VOA Glass	4/14/21	10:15	F	3	40 ml	HCl	YES	NO		✓
VOA Glass	4/14/21	10:15	F	3	40 ml	$Na_2S_2O_3$	YES	NO		✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/14/21	10:15	F	2	250, 500, 1L	None	YES	NO	NA	✓
Yellow Glass	4/14/21	10:15	F	2	250, 500, 1L	H_2SO_4	YES	NO		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/14/21	10:15	F	1	250, 500, 1L	HNO_3	YES	YES		✓
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 | 11 | Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	F(10/5)	0.00	~	~	~	.	.	.	~
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Collected at MW-16B

SAMPLER: I. Hultquist (PRINTED NAME) (SIGNATURE)

280-147466 Waybill

1401204

ORIGIN ID:SAVA (503) 534-3783
TIFFANY ANDREWS
SCS ENGINEERS
15840 SW 72ND AVENURE

PORTLAND, OR 97224
UNITED STATES US

SHIP DATE: 31MAR21
ACTWGT: 10.00 LB MAN
CAD: 0886563/CAFE3409

TO

EUROFINS TESTAMERICA DENVER
4955 YARROW STREET

ARVADA CO 800024517
(303) 736-0100
REF: S280-107586

RMA:

FedEx Express

E

J201120121801

TRK# 0221 9508 8923 9788

RETURNS MON-SAT
PRIORITY OVERNIGHT

80002

CO-US

56DC2/SEF2/05A2

eurofins

24

1401203

ORIGIN ID: AVA (303) 534-3783
TIFFANY ANDREWS
SCS ENGINEERS
15940 SW 72ND AVENURE

PORTLAND, OR 97224
UNITED STATES US

SHIP DATE: 31MAR21
ACTWGT: 15.00 LB MAN
CAD: 0886563/CAFE3409
DIMS: 24x15x15 IN

TO

EUROFINS TESTAMERICA DENVER
4955 YARROW STREET

ARVADA CO 800024517
(303) 736-0100
REF: S280-107586

RMA:

FedEx Express

FedEx
TRK# 0221 9508 8923 9722

THU - 15 APR 10:30A
PRIORITY OVERNIGHT

XH LAAA

80002
CO-US DEN

56DC2/5EF2/05A2

*757462 04/14 56DJ2/5EF2/FE4A

ORIGIN ID:SAVA (503) 534-3783
TIFFANY ANDREWS
WASTE MANAGEMENT
15940 SW 72ND AVE

PORTLAND, OR 97224
UNITED STATES US

SHIP DATE: 02APR21
ACTWGT: 15.00 LB MAN
CAD: 0886563/CAFE3409
DIMS: 24x15x15 IN

EUROFINS TESTAMERICA DENVER
4955 YARROW STREET

ARVADA CO 800024517

0.5

FedEx
TRK# 0221 9508 8924 2740

XH LAAA

THU - 15 APR 10:30A
PRIORITY OVERNIGHT

80002
CO-US DEN

FedEx Express

-SAT
NIGHT

0002

No

12/2/2021

Custody Sea

DATE 4/14/21

SIGNATURE

eurofins

1401197 2.8

ORIGIN ID:SAVA (503) 534-3783
TIFFANY ANDREWS
WASTE MANAGEMENT
15940 SW 72ND AVE

PORTLAND, OR 97224
UNITED STATES US

SHIP DATE: 02APR21
ACTWGT: 15.00 LB MAN
CAD: 0886563/CAFE3409
DIMS: 24x15x15 IN

TO

EUROFINS TESTAMERICA DENVER
4955 YARROW STREET

ARVADA CO 800024517
(303) 736-0100
REF: 6280-107583

RMA:

FedEx Express

E

TRK# 0221 9508 8924 2751

RETURNS MON-SAT
PRIORITY OVERNIGHT

80002

CO-US

56DC2/SEF2/0502

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Sara, Betsy A	Carrier Tracking No(s):	COC No: 280-563950.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Betsy.Sara@Eurofinset.com	State of Origin: Oregon	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Oregon		Job #: 280-147466-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 5/5/2021			Preservation Codes:
City: Amherst	TAT Requested (days):			A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify) Other:
State, Zip: NY, 14228-2298				
Phone: 716-691-2600(Tel) 716-691-7991(Fax)	PO #:			
Email:	WO #:			
Project Name: 1003|Riverbend Landfill - Groundwater	Project #: 28002786			
Site: 1003|Riverbend Landfill	SSOW#:			

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300.0_28D/ 300.0, Sulfate and Chloride (TA Buffalo)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-14A (280-147466-2)	4/13/21	13:30 Pacific		Water			X	1	
MW-14B (280-147466-3)	4/13/21	14:40 Pacific		Water			X	1	
MW-21A (280-147466-4)	4/13/21	15:55 Pacific		Water			X	1	
MW-21B (280-147466-5)	4/14/21	08:55 Pacific		Water			X	1	
MW-16A (280-147466-6)	4/14/21	10:50 Pacific		Water			X	1	
FB2 (280-147466-7)	4/14/21	10:10 Pacific		Water			X	1	
MW-16B (280-147466-8)	4/14/21	10:10 Pacific		Water			X	1	
DUP2 (280-147466-9)	4/14/21	10:15 Pacific		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:
Empty Kit Relinquished by:	Date: Time: Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	4/16/21 1325		[signature]	4/17/21 1000	TA
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.2 # ICE

Ver: 11/01/2020

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-147466-1

Login Number: 147466
List Number: 1
Creator: Collins, Janice S

List Source: Eurofins TestAmerica, Denver

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	
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: 280-147466-1

Login Number: 147466
List Number: 2
Creator: Kolb, Chris M

List Source: Eurofins TestAmerica, Buffalo
List Creation: 04/19/21 03:42 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.2 IR GUN #1 ICE
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

eurofins | Environment Testing America



ANALYTICAL REPORT

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

Laboratory Job ID: 280-147597-1
Client Project/Site: 1003|Riverbend Landfill - Groundwater
Sampling Event: Semiannual Compliance Wells - Apr Oct

For:
Waste Management
13469 SW Highway 18
McMinnville, Oregon 97128

Attn: Mr. Jim Denson

Betsy Sara

Authorized for release by:
12/2/2021 9:06:13 AM

Betsy Sara, Project Manager II
(303)736-0189
Betsy.Sara@Eurofinset.com

LINKS

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

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Definitions/Glossary

Client: Waste Management
Job ID: 280-147597-1
Project/Site: 1003|Riverbend Landfill - Groundwater

Qualifiers

Metals

Qualifier	Qualifier Description
^2	Calibration Blank (ICB and/or CCB) is outside acceptance limits.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits

Glossary

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

Job ID: 280-147597-1

Laboratory: Eurofins TestAmerica, Denver

Narrative

CASE NARRATIVE

Client: Waste Management

Project: 1003|Riverbend Landfill - Groundwater

Report Number: 280-147597-1

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

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

Sample Receiving

The samples were received on 04/17/2021; the samples arrived in good condition, properly preserved and on ice. The temperatures of the coolers at receipt were 1.6º C and 2.1º C.

Holding Times

All holding times were met.

Method Blanks

All Method Blanks met method criteria.

Laboratory Control Samples (LCS)

All Laboratory Control Sample recoveries were within control limits.

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

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) for Method 8260B (batches 533957, 534118 and 534267) and Method 8011, however, LCS/LCSD pairs were analyzed to demonstrate method precision and accuracy.

The Matrix Spike and Matrix Spike Duplicate performed on a sample from another client exhibited recoveries outside control limits for Chloride Method 300.0. In addition, the RPD result was outside the RPD limit for Chloride. 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.

Sample MW-12B 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 outside control limits. In addition, the RPD result was outside the RPD limit for Ammonia. Because the corresponding Laboratory Control Sample and the Method Blank sample were within control limits, this anomaly may be due to matrix interference and no corrective action was taken.

Sample MW-12A was selected to fulfill the laboratory batch quality control requirements for Method 353.2. Analysis of the laboratory generated MS/MSD for this sample exhibited recoveries of Nitrate/Nitrite below the lower control limit. In addition, the RPD result was outside the RPD limit for Nitrate/Nitrite. Because the corresponding Laboratory Control Sample and the Method Blank sample were within

Job ID: 280-147597-1 (Continued)

Laboratory: Eurofins TestAmerica, Denver (Continued)

control limits, this anomaly may be due to matrix interference and no corrective action was taken.

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

Metals

The Method 6010B Instrument Blank was above the control limits for Dissolved Calcium. Because the associated samples exhibited detections of Dissolved Calcium greater than ten times the Instrument Blank result, corrective action was deemed unnecessary.

General Comments

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.

The analysis for Chloride and Sulfate Method 300.0 was performed by TestAmerica Buffalo. Their address and phone number are:
TestAmerica Buffalo
10 Hazelwood Drive, Suite 106
Amherst, NY 14228
Phone: 716-691-2600

Detection Summary

Client: Waste Management
Job ID: 280-147597-1
Project/Site: 1003|Riverbend Landfill - Groundwater

Client Sample ID: TB2
Lab Sample ID: 280-147597-1

No Detections.

Client Sample ID: MW-12A
Lab Sample ID: 280-147597-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	27000	^2	500		ug/L	1		6010B	Dissolved
Magnesium	11000		200		ug/L	1		6010B	Dissolved
Potassium	730		500		ug/L	1		6010B	Dissolved
Sodium	28000		1000		ug/L	1		6010B	Dissolved
Chloride	55		0.50		mg/L	1		300.0	Total/NA
Sulfate	16		1.0		mg/L	1		300.0	Total/NA
Nitrate/Nitrite	2.3	F1 F2	0.050		mg/L	1		353.2	Total/NA
Total Organic Carbon - Average	1.7		1.0		mg/L	1		9060	Total/NA
Total Anions	3.6				meq/L	1		SM 1030E	Total/NA
Total Cations	3.5				meq/L	1		SM 1030E	Total/NA
Percent Difference	-2.2				%	1		SM 1030E	Total/NA
Calcium	27				mg/L	1		SM 1030E	Total/NA
Magnesium	11				mg/L	1		SM 1030E	Total/NA
Potassium	0.73				mg/L	1		SM 1030E	Total/NA
Sodium	28				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.00				mg/L	1		SM 1030E	Total/NA
Chloride	55				mg/L	1		SM 1030E	Total/NA
Sulfate	16				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	80				mg/L	1		SM 1030E	Total/NA
Alkalinity	80				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	2.3				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	-2.2				%	1		SM 1030E	Total/NA
Calculated TDS	170				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.4				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	240				mg/L	1		SM 1030E	Total/NA
Iron	0.00				mg/L	1		SM 1030E	Total/NA
Calcium	1.3				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	0.91				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.019				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	1.2				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	1.6				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.33				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	80				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	1.6				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.16				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	80		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	240		10		mg/L	1		SM 2540C	Total/NA
Field pH	6.21				SU	1		Field Sampling	Total/NA
Field Conductivity	403.3				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	8.9				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	2.67				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	246.6				millivolts	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Waste Management
Job ID: 280-147597-1
Project/Site: 1003|Riverbend Landfill - Groundwater

Client Sample ID: FB4 — Lab Sample ID: 280-147597-3

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Total Anions	0.00				meq/L	1		SM 1030E	Total/NA
Total Cations	0.00				meq/L	1		SM 1030E	Total/NA
Percent Difference	NC				%	1		SM 1030E	Total/NA
Calcium	0.00				mg/L	1		SM 1030E	Total/NA
Magnesium	0.00				mg/L	1		SM 1030E	Total/NA
Potassium	0.00				mg/L	1		SM 1030E	Total/NA
Sodium	0.00				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.00				mg/L	1		SM 1030E	Total/NA
Chloride	0.00				mg/L	1		SM 1030E	Total/NA
Sulfate	0.00				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	0.00				mg/L	1		SM 1030E	Total/NA
Alkalinity	0.00				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.00				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	NC				%	1		SM 1030E	Total/NA
Calculated TDS	0.00				mg/L	1		SM 1030E	Total/NA
TDS Ratio	NC				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	0.00				mg/L	1		SM 1030E	Total/NA
Iron	0.00				mg/L	1		SM 1030E	Total/NA
Calcium	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	0.00				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.00				meq/L	1		SM 1030E (meq)	Total/NA

Client Sample ID: MW-12B — Lab Sample ID: 280-147597-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	84000	^2	500		ug/L	1		6010B	Dissolved
Iron	1900		30		ug/L	1		6010B	Dissolved
Magnesium	24000		200		ug/L	1		6010B	Dissolved
Manganese	1400		3.0		ug/L	1		6010B	Dissolved
Potassium	690		500		ug/L	1		6010B	Dissolved
Sodium	32000		1000		ug/L	1		6010B	Dissolved
Chloride	120		0.50		mg/L	1		300.0	Total/NA
Ammonia as N	0.32		0.030		mg/L	1		350.1	Total/NA
Total Organic Carbon - Average	1.8		1.0		mg/L	1		9060	Total/NA
Total Anions	7.6				meq/L	1		SM 1030E	Total/NA
Total Cations	7.7				meq/L	1		SM 1030E	Total/NA
Percent Difference	0.79				%	1		SM 1030E	Total/NA
Calcium	84				mg/L	1		SM 1030E	Total/NA
Magnesium	24				mg/L	1		SM 1030E	Total/NA
Potassium	0.69				mg/L	1		SM 1030E	Total/NA
Sodium	32				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.32				mg/L	1		SM 1030E	Total/NA
Chloride	120				mg/L	1		SM 1030E	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-12B (Continued)
Lab Sample ID: 280-147597-4

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Sulfate	0.00				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	210				mg/L	1		SM 1030E	Total/NA
Alkalinity	210				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.00				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	0.79				%	1		SM 1030E	Total/NA
Calculated TDS	390				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.2				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	470				mg/L	1		SM 1030E	Total/NA
Iron	1.9				mg/L	1		SM 1030E	Total/NA
Calcium	4.2				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	2.0				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.018				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	1.4				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.023				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	3.4				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	210				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	4.2				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.10				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	210		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	470		10		mg/L	1		SM 2540C	Total/NA
Field pH	6.87				SU	1		Field Sampling	Total/NA
Field Conductivity	766				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	11.0				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	1.17				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	-55.2				millivolts	1		Field Sampling	Total/NA

Client Sample ID: DUP4
Lab Sample ID: 280-147597-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	84000	^2	500		ug/L	1		6010B	Dissolved
Iron	1900		30		ug/L	1		6010B	Dissolved
Magnesium	24000		200		ug/L	1		6010B	Dissolved
Manganese	1400		3.0		ug/L	1		6010B	Dissolved
Potassium	680		500		ug/L	1		6010B	Dissolved
Sodium	32000		1000		ug/L	1		6010B	Dissolved
Chloride	120		0.50		mg/L	1		300.0	Total/NA
Ammonia as N	0.35		0.030		mg/L	1		350.1	Total/NA
Total Organic Carbon - Average	1.4		1.0		mg/L	1		9060	Total/NA
Total Anions	7.8				meq/L	1		SM 1030E	Total/NA
Total Cations	7.7				meq/L	1		SM 1030E	Total/NA
Percent Difference	-0.50				%	1		SM 1030E	Total/NA
Calcium	84				mg/L	1		SM 1030E	Total/NA
Magnesium	24				mg/L	1		SM 1030E	Total/NA
Potassium	0.68				mg/L	1		SM 1030E	Total/NA
Sodium	32				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.35				mg/L	1		SM 1030E	Total/NA
Chloride	120				mg/L	1		SM 1030E	Total/NA
Sulfate	0.00				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	220				mg/L	1		SM 1030E	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DUP4 (Continued)

Lab Sample ID: 280-147597-5

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Alkalinity	220				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.00				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	-0.50				%	1		SM 1030E	Total/NA
Calculated TDS	390				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.2				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	460				mg/L	1		SM 1030E	Total/NA
Iron	1.9				mg/L	1		SM 1030E	Total/NA
Calcium	4.2				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	2.0				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.017				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	1.4				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.025				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	3.4				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	220				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	4.4				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.10				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	220		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	460		10		mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-15A

Lab Sample ID: 280-147597-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	8000	^2	500		ug/L	1		6010B	Dissolved
Iron	41		30		ug/L	1		6010B	Dissolved
Magnesium	2700		200		ug/L	1		6010B	Dissolved
Sodium	21000		1000		ug/L	1		6010B	Dissolved
Chloride	2.8		0.50		mg/L	1		300.0	Total/NA
Sulfate	29		1.0		mg/L	1		300.0	Total/NA
Nitrate/Nitrite	1.1		0.050		mg/L	1		353.2	Total/NA
Total Organic Carbon - Average	2.2		1.0		mg/L	1		9060	Total/NA
Total Anions	1.7				meq/L	1		SM 1030E	Total/NA
Total Cations	1.5				meq/L	1		SM 1030E	Total/NA
Percent Difference	-5.0				%	1		SM 1030E	Total/NA
Calcium	8.0				mg/L	1		SM 1030E	Total/NA
Magnesium	2.7				mg/L	1		SM 1030E	Total/NA
Potassium	0.00				mg/L	1		SM 1030E	Total/NA
Sodium	21				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.00				mg/L	1		SM 1030E	Total/NA
Chloride	2.8				mg/L	1		SM 1030E	Total/NA
Sulfate	29				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	47				mg/L	1		SM 1030E	Total/NA
Alkalinity	47				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	1.1				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	-5.0				%	1		SM 1030E	Total/NA
Calculated TDS	64				mg/L	1		SM 1030E	Total/NA
TDS Ratio	4.4				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	280				mg/L	1		SM 1030E	Total/NA
Iron	0.041				mg/L	1		SM 1030E	Total/NA
Calcium	0.40				meq/L	1		SM 1030E (meq)	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-15A (Continued) — Lab Sample ID: 280-147597-6

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Magnesium	0.22				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	0.91				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	0.079				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.60				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	47				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	0.94				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.079				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.0022				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	47		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	280		10		mg/L	1		SM 2540C	Total/NA
Field pH	5.94				SU	1		Field Sampling	Total/NA
Field Conductivity	175.2				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	12.8				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	6.46				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	190.7				millivolts	1		Field Sampling	Total/NA

Client Sample ID: DUP3 — Lab Sample ID: 280-147597-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	7600	^2	500		ug/L	1		6010B	Dissolved
Iron	77		30		ug/L	1		6010B	Dissolved
Magnesium	2600		200		ug/L	1		6010B	Dissolved
Sodium	19000		1000		ug/L	1		6010B	Dissolved
Chloride	2.8		0.50		mg/L	1		300.0	Total/NA
Sulfate	29		1.0		mg/L	1		300.0	Total/NA
Nitrate/Nitrite	0.83		0.050		mg/L	1		353.2	Total/NA
Total Organic Carbon - Average	1.6		1.0		mg/L	1		9060	Total/NA
Total Anions	1.5				meq/L	1		SM 1030E	Total/NA
Total Cations	1.4				meq/L	1		SM 1030E	Total/NA
Percent Difference	-4.0				%	1		SM 1030E	Total/NA
Calcium	7.6				mg/L	1		SM 1030E	Total/NA
Magnesium	2.6				mg/L	1		SM 1030E	Total/NA
Potassium	0.00				mg/L	1		SM 1030E	Total/NA
Sodium	19				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.00				mg/L	1		SM 1030E	Total/NA
Chloride	2.8				mg/L	1		SM 1030E	Total/NA
Sulfate	29				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	40				mg/L	1		SM 1030E	Total/NA
Alkalinity	40				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.83				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	-4.0				%	1		SM 1030E	Total/NA
Calculated TDS	57				mg/L	1		SM 1030E	Total/NA
TDS Ratio	4.7				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	270				mg/L	1		SM 1030E	Total/NA
Iron	0.077				mg/L	1		SM 1030E	Total/NA
Calcium	0.38				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	0.21				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	0.83				meq/L	1		SM 1030E (meq)	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DUP3 (Continued)

Lab Sample ID: 280-147597-7

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Ammonia as N	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	0.079				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.60				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	40				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	0.80				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.059				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.0041				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	40		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	270		10		mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-15B

Lab Sample ID: 280-147597-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	65000		500		ug/L	1		6010B	Dissolved
Iron	460		30		ug/L	1		6010B	Dissolved
Magnesium	28000		200		ug/L	1		6010B	Dissolved
Manganese	2300		3.0		ug/L	1		6010B	Dissolved
Sodium	32000		1000		ug/L	1		6010B	Dissolved
Chloride	35		0.50		mg/L	1		300.0	Total/NA
Sulfate	2.2		1.0		mg/L	1		300.0	Total/NA
Ammonia as N	0.032		0.030		mg/L	1		350.1	Total/NA
Total Organic Carbon - Average	1.2		1.0		mg/L	1		9060	Total/NA
Total Anions	7.0				meq/L	1		SM 1030E	Total/NA
Total Cations	7.0				meq/L	1		SM 1030E	Total/NA
Percent Difference	-0.44				%	1		SM 1030E	Total/NA
Calcium	65				mg/L	1		SM 1030E	Total/NA
Magnesium	28				mg/L	1		SM 1030E	Total/NA
Potassium	0.00				mg/L	1		SM 1030E	Total/NA
Sodium	32				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.032				mg/L	1		SM 1030E	Total/NA
Chloride	35				mg/L	1		SM 1030E	Total/NA
Sulfate	2.2				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	300				mg/L	1		SM 1030E	Total/NA
Alkalinity	300				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.00				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	-0.44				%	1		SM 1030E	Total/NA
Calculated TDS	340				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.0				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	350				mg/L	1		SM 1030E	Total/NA
Iron	0.46				mg/L	1		SM 1030E	Total/NA
Calcium	3.2				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	2.3				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	1.4				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.0023				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	0.99				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.046				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	300				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	6.0				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.025				meq/L	1		SM 1030E (meq)	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-15B (Continued)
Lab Sample ID: 280-147597-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bicarbonate Alkalinity	300		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	350		10		mg/L	1		SM 2540C	Total/NA
Field pH	6.71				SU	1		Field Sampling	Total/NA
Field Conductivity	642.3				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	13.4				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	0.45				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	19.8				millivolts	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Waste Management
Job ID: 280-147597-1
Project/Site: 1003|Riverbend Landfill - Groundwater

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-147597-1	TB2	Water	04/15/21 07:00	04/17/21 09:45
280-147597-2	MW-12A	Water	04/16/21 09:00	04/17/21 09:45
280-147597-3	FB4	Water	04/16/21 08:05	04/17/21 09:45
280-147597-4	MW-12B	Water	04/16/21 10:05	04/17/21 09:45
280-147597-5	DUP4	Water	04/16/21 10:10	04/17/21 09:45
280-147597-6	MW-15A	Water	04/15/21 10:41	04/17/21 09:45
280-147597-7	DUP3	Water	04/15/21 10:42	04/17/21 09:45
280-147597-8	MW-15B	Water	04/15/21 12:49	04/17/21 09:45

Method Summary

Client: Waste Management
Job ID: 280-147597-1
Project/Site: 1003|Riverbend Landfill - Groundwater

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL DEN
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	TAL DEN
6010B	Metals (ICP)	SW846	TAL DEN
300.0	Anions, Ion Chromatography	MCAWW	TAL BUF
350.1	Nitrogen, Ammonia	MCAWW	TAL DEN
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	TAL DEN
9060	Organic Carbon, Total (TOC)	SW846	TAL DEN
SM 1030E	Cation Anion Balance	SM	TAL DEN
SM 1030E (meq)	Cation Anion Balance	SM	TAL DEN
SM 2320B	Alkalinity	SM	TAL DEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL DEN
Field Sampling	Field Sampling	EPA	TAL DEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL DEN
5030B	Purge and Trap	SW846	TAL DEN
8011	Microextraction	SW846	TAL DEN

Protocol 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.

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL DEN = Eurofins TestAmerica, Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Groundwater

Job ID: 280-147597-1

Client Sample ID: TB2
Date Collected: 04/15/21 07:00
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147597-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/27/21 02:28	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/27/21 02:28	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/27/21 02:28	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/27/21 02:28	1
1,1-Dichloroethane	ND		1.0		ug/L			04/27/21 02:28	1
1,1-Dichloroethene	ND		1.0		ug/L			04/27/21 02:28	1
1,1-Dichloropropene	ND		1.0		ug/L			04/27/21 02:28	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/27/21 02:28	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/27/21 02:28	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/27/21 02:28	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/27/21 02:28	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/27/21 02:28	1
1,2-Dichloroethane	ND		1.0		ug/L			04/27/21 02:28	1
1,2-Dichloropropane	ND		1.0		ug/L			04/27/21 02:28	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/27/21 02:28	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/27/21 02:28	1
1,3-Dichloropropane	ND		1.0		ug/L			04/27/21 02:28	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/27/21 02:28	1
2,2-Dichloropropane	ND		5.0		ug/L			04/27/21 02:28	1
2-Butanone (MEK)	ND		6.0		ug/L			04/27/21 02:28	1
2-Chlorotoluene	ND		1.0		ug/L			04/27/21 02:28	1
2-Hexanone	ND		5.0		ug/L			04/27/21 02:28	1
4-Chlorotoluene	ND		1.0		ug/L			04/27/21 02:28	1
4-Isopropyltoluene	ND		1.0		ug/L			04/27/21 02:28	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/27/21 02:28	1
Acetone	ND		10		ug/L			04/27/21 02:28	1
Benzene	ND		1.0		ug/L			04/27/21 02:28	1
Bromobenzene	ND		1.0		ug/L			04/27/21 02:28	1
Bromochloromethane	ND		1.0		ug/L			04/27/21 02:28	1
Bromodichloromethane	ND		1.0		ug/L			04/27/21 02:28	1
Bromoform	ND		1.0		ug/L			04/27/21 02:28	1
Bromomethane	ND		2.0		ug/L			04/27/21 02:28	1
Carbon disulfide	ND		2.0		ug/L			04/27/21 02:28	1
Carbon tetrachloride	ND		1.0		ug/L			04/27/21 02:28	1
Chlorobenzene	ND		1.0		ug/L			04/27/21 02:28	1
Chloroethane	ND		2.0		ug/L			04/27/21 02:28	1
Chloroform	ND		1.0		ug/L			04/27/21 02:28	1
Chloromethane	ND		2.0		ug/L			04/27/21 02:28	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/27/21 02:28	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/27/21 02:28	1
Dibromochloromethane	ND		1.0		ug/L			04/27/21 02:28	1
Dibromomethane	ND		1.0		ug/L			04/27/21 02:28	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/27/21 02:28	1
Ethylbenzene	ND		1.0		ug/L			04/27/21 02:28	1
Hexachlorobutadiene	ND		1.0		ug/L			04/27/21 02:28	1
Isopropylbenzene	ND		1.0		ug/L			04/27/21 02:28	1
Methylene Chloride	ND		5.0		ug/L			04/27/21 02:28	1
Naphthalene	ND		1.0		ug/L			04/27/21 02:28	1
n-Butylbenzene	ND		1.0		ug/L			04/27/21 02:28	1

Client Sample ID: TB2

Lab Sample ID: 280-147597-1

Date Collected: 04/15/21 07:00

Matrix: Water

Date Received: 04/17/21 09:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		1.0		ug/L			04/27/21 02:28	1
sec-Butylbenzene	ND		1.0		ug/L			04/27/21 02:28	1
Styrene	ND		1.0		ug/L			04/27/21 02:28	1
tert-Butylbenzene	ND		1.0		ug/L			04/27/21 02:28	1
Tetrachloroethene	ND		1.0		ug/L			04/27/21 02:28	1
Toluene	ND		1.0		ug/L			04/27/21 02:28	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/27/21 02:28	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/27/21 02:28	1
Trichloroethene	ND		1.0		ug/L			04/27/21 02:28	1
Trichlorofluoromethane	ND		2.0		ug/L			04/27/21 02:28	1
Vinyl chloride	ND		1.0		ug/L			04/27/21 02:28	1
Xylenes (total)	ND		2.0		ug/L			04/27/21 02:28	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/27/21 02:28*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 127*		*04/27/21 02:28*	*1*
4-Bromofluorobenzene (Surr)	*109*		*78 - 120*		*04/27/21 02:28*	*1*
Dibromofluoromethane (Surr)	*97*		*77 - 120*		*04/27/21 02:28*	*1*
Toluene-d8 (Surr)	*106*		*80 - 125*		*04/27/21 02:28*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		04/26/21 11:23	04/26/21 18:38	1
1,2-Dibromoethane	ND		0.050		ug/L		04/26/21 11:23	04/26/21 18:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*116*		*70 - 130*	*04/26/21 11:23*	*04/26/21 18:38*	*1*

Client Sample ID: MW-12A

Lab Sample ID: 280-147597-2

Date Collected: 04/16/21 09:00

Matrix: Water

Date Received: 04/17/21 09:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/28/21 14:03	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/28/21 14:03	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/28/21 14:03	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/28/21 14:03	1
1,1-Dichloroethane	ND		1.0		ug/L			04/28/21 14:03	1
1,1-Dichloroethene	ND		1.0		ug/L			04/28/21 14:03	1
1,1-Dichloropropene	ND		1.0		ug/L			04/28/21 14:03	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/28/21 14:03	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/28/21 14:03	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/28/21 14:03	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/28/21 14:03	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/28/21 14:03	1
1,2-Dichloroethane	ND		1.0		ug/L			04/28/21 14:03	1
1,2-Dichloropropane	ND		1.0		ug/L			04/28/21 14:03	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/28/21 14:03	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Groundwater

Job ID: 280-147597-1

Client Sample ID: MW-12A
Date Collected: 04/16/21 09:00
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147597-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0		ug/L			04/28/21 14:03	1
1,3-Dichloropropane	ND		1.0		ug/L			04/28/21 14:03	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/28/21 14:03	1
2,2-Dichloropropane	ND		5.0		ug/L			04/28/21 14:03	1
2-Butanone (MEK)	ND		6.0		ug/L			04/28/21 14:03	1
2-Chlorotoluene	ND		1.0		ug/L			04/28/21 14:03	1
2-Hexanone	ND		5.0		ug/L			04/28/21 14:03	1
4-Chlorotoluene	ND		1.0		ug/L			04/28/21 14:03	1
4-Isopropyltoluene	ND		1.0		ug/L			04/28/21 14:03	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/28/21 14:03	1
Acetone	ND		10		ug/L			04/28/21 14:03	1
Benzene	ND		1.0		ug/L			04/28/21 14:03	1
Bromobenzene	ND		1.0		ug/L			04/28/21 14:03	1
Bromochloromethane	ND		1.0		ug/L			04/28/21 14:03	1
Bromodichloromethane	ND		1.0		ug/L			04/28/21 14:03	1
Bromoform	ND		1.0		ug/L			04/28/21 14:03	1
Bromomethane	ND		2.0		ug/L			04/28/21 14:03	1
Carbon disulfide	ND		2.0		ug/L			04/28/21 14:03	1
Carbon tetrachloride	ND		1.0		ug/L			04/28/21 14:03	1
Chlorobenzene	ND		1.0		ug/L			04/28/21 14:03	1
Chloroethane	ND		2.0		ug/L			04/28/21 14:03	1
Chloroform	ND		1.0		ug/L			04/28/21 14:03	1
Chloromethane	ND		2.0		ug/L			04/28/21 14:03	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/28/21 14:03	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/28/21 14:03	1
Dibromochloromethane	ND		1.0		ug/L			04/28/21 14:03	1
Dibromomethane	ND		1.0		ug/L			04/28/21 14:03	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/28/21 14:03	1
Ethylbenzene	ND		1.0		ug/L			04/28/21 14:03	1
Hexachlorobutadiene	ND		1.0		ug/L			04/28/21 14:03	1
Isopropylbenzene	ND		1.0		ug/L			04/28/21 14:03	1
Methylene Chloride	ND		5.0		ug/L			04/28/21 14:03	1
Naphthalene	ND		1.0		ug/L			04/28/21 14:03	1
n-Butylbenzene	ND		1.0		ug/L			04/28/21 14:03	1
N-Propylbenzene	ND		1.0		ug/L			04/28/21 14:03	1
sec-Butylbenzene	ND		1.0		ug/L			04/28/21 14:03	1
Styrene	ND		1.0		ug/L			04/28/21 14:03	1
tert-Butylbenzene	ND		1.0		ug/L			04/28/21 14:03	1
Tetrachloroethene	ND		1.0		ug/L			04/28/21 14:03	1
Toluene	ND		1.0		ug/L			04/28/21 14:03	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/28/21 14:03	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/28/21 14:03	1
Trichloroethene	ND		1.0		ug/L			04/28/21 14:03	1
Trichlorofluoromethane	ND		2.0		ug/L			04/28/21 14:03	1
Vinyl chloride	ND		1.0		ug/L			04/28/21 14:03	1
Xylenes (total)	ND		2.0		ug/L			04/28/21 14:03	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/28/21 14:03*	*1*

Client Sample ID: MW-12A

Date Collected: 04/16/21 09:00
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147597-2

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 127*		*04/28/21 14:03*	*1*
4-Bromofluorobenzene (Surr)	*95*		*78 - 120*		*04/28/21 14:03*	*1*
Dibromofluoromethane (Surr)	*101*		*77 - 120*		*04/28/21 14:03*	*1*
Toluene-d8 (Surr)	*98*		*80 - 125*		*04/28/21 14:03*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		04/26/21 11:23	04/26/21 19:00	1
1,2-Dibromoethane	ND		0.050		ug/L		04/26/21 11:23	04/26/21 19:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*117*		*70 - 130*	*04/26/21 11:23*	*04/26/21 19:00*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**27000**	**^2**	500		ug/L		04/28/21 08:38	04/28/21 17:23	1
Iron	ND		30		ug/L		04/28/21 08:38	04/28/21 17:23	1
Magnesium	**11000**		200		ug/L		04/28/21 08:38	04/28/21 17:23	1
Manganese	ND		3.0		ug/L		04/28/21 08:38	04/28/21 17:23	1
Potassium	**730**		500		ug/L		04/28/21 08:38	04/28/21 17:23	1
Sodium	**28000**		1000		ug/L		04/28/21 08:38	04/28/21 17:23	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	**3.6**				meq/L			05/11/21 15:51	1
Total Cations	**3.5**				meq/L			05/11/21 15:51	1
Percent Difference	**-2.2**				%			05/11/21 15:51	1
Calcium	**27**				mg/L			05/11/21 15:51	1
Magnesium	**11**				mg/L			05/11/21 15:51	1
Potassium	**0.73**				mg/L			05/11/21 15:51	1
Sodium	**28**				mg/L			05/11/21 15:51	1
Ammonia as N	**0.00**				mg/L			05/11/21 15:51	1
Chloride	**55**				mg/L			05/11/21 15:51	1
Sulfate	**16**				mg/L			05/11/21 15:51	1
Bicarbonate Alkalinity	**80**				mg/L			05/11/21 15:51	1
Alkalinity	**80**				mg/L			05/11/21 15:51	1
Nitrate/Nitrite	**2.3**				mg/L			05/11/21 15:51	1
Anion/Cation Balance	**-2.2**				%			05/11/21 15:51	1
Calculated TDS	**170**				mg/L			05/11/21 15:51	1
TDS Ratio	**1.4**				NONE			05/11/21 15:51	1
Total Dissolved Solids	**240**				mg/L			05/11/21 15:51	1
Iron	**0.00**				mg/L			05/11/21 15:51	1
Calcium	**1.3**				meq/L			05/11/21 15:51	1
Magnesium	**0.91**				meq/L			05/11/21 15:51	1
Potassium	**0.019**				meq/L			05/11/21 15:51	1
Sodium	**1.2**				meq/L			05/11/21 15:51	1
Ammonia as N	**0.00**				meq/L			05/11/21 15:51	1
Chloride	**1.6**				meq/L			05/11/21 15:51	1
Sulfate	**0.33**				meq/L			05/11/21 15:51	1
Alkalinity	**80**				mg/L			05/11/21 15:51	1
Bicarbonate Alkalinity	**1.6**				meq/L			05/11/21 15:51	1

Client Sample ID: MW-12A
Lab Sample ID: 280-147597-2
Date Collected: 04/16/21 09:00
Matrix: Water
Date Received: 04/17/21 09:45

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate/Nitrite	0.16				meq/L			05/11/21 15:51	1
Iron	0.00				meq/L			05/11/21 15:51	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	55		0.50		mg/L			04/27/21 20:35	1
Sulfate	16		1.0		mg/L			04/27/21 20:35	1
Ammonia as N	ND		0.030		mg/L			04/28/21 14:03	1
Nitrate/Nitrite	2.3	F1 F2	0.050		mg/L			05/04/21 17:46	1
Total Organic Carbon - Average	1.7		1.0		mg/L			05/04/21 20:01	1
Bicarbonate Alkalinity	80		10		mg/L			04/21/21 00:23	1
Total Dissolved Solids	240		10		mg/L			04/23/21 09:40	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.21				SU			04/16/21 10:00	1
Field Conductivity	403.3				umhos/cm			04/16/21 10:00	1
Field Temperature	8.9				Degrees C			04/16/21 10:00	1
Field Dissolved Oxygen	2.67				mg/L			04/16/21 10:00	1
Field EH/ORP	246.6				millivolts			04/16/21 10:00	1

Client Sample ID: FB4
Lab Sample ID: 280-147597-3
Date Collected: 04/16/21 08:05
Matrix: Water
Date Received: 04/17/21 09:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/28/21 11:46	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/28/21 11:46	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/28/21 11:46	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/28/21 11:46	1
1,1-Dichloroethane	ND		1.0		ug/L			04/28/21 11:46	1
1,1-Dichloroethene	ND		1.0		ug/L			04/28/21 11:46	1
1,1-Dichloropropene	ND		1.0		ug/L			04/28/21 11:46	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/28/21 11:46	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/28/21 11:46	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/28/21 11:46	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/28/21 11:46	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/28/21 11:46	1
1,2-Dichloroethane	ND		1.0		ug/L			04/28/21 11:46	1
1,2-Dichloropropane	ND		1.0		ug/L			04/28/21 11:46	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/28/21 11:46	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/28/21 11:46	1
1,3-Dichloropropane	ND		1.0		ug/L			04/28/21 11:46	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/28/21 11:46	1
2,2-Dichloropropane	ND		5.0		ug/L			04/28/21 11:46	1
2-Butanone (MEK)	ND		6.0		ug/L			04/28/21 11:46	1
2-Chlorotoluene	ND		1.0		ug/L			04/28/21 11:46	1
2-Hexanone	ND		5.0		ug/L			04/28/21 11:46	1
4-Chlorotoluene	ND		1.0		ug/L			04/28/21 11:46	1
4-Isopropyltoluene	ND		1.0		ug/L			04/28/21 11:46	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/28/21 11:46	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Groundwater

Job ID: 280-147597-1

Client Sample ID: FB4
Date Collected: 04/16/21 08:05
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147597-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10		ug/L			04/28/21 11:46	1
Benzene	ND		1.0		ug/L			04/28/21 11:46	1
Bromobenzene	ND		1.0		ug/L			04/28/21 11:46	1
Bromochloromethane	ND		1.0		ug/L			04/28/21 11:46	1
Bromodichloromethane	ND		1.0		ug/L			04/28/21 11:46	1
Bromoform	ND		1.0		ug/L			04/28/21 11:46	1
Bromomethane	ND		2.0		ug/L			04/28/21 11:46	1
Carbon disulfide	ND		2.0		ug/L			04/28/21 11:46	1
Carbon tetrachloride	ND		1.0		ug/L			04/28/21 11:46	1
Chlorobenzene	ND		1.0		ug/L			04/28/21 11:46	1
Chloroethane	ND		2.0		ug/L			04/28/21 11:46	1
Chloroform	ND		1.0		ug/L			04/28/21 11:46	1
Chloromethane	ND		2.0		ug/L			04/28/21 11:46	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/28/21 11:46	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/28/21 11:46	1
Dibromochloromethane	ND		1.0		ug/L			04/28/21 11:46	1
Dibromomethane	ND		1.0		ug/L			04/28/21 11:46	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/28/21 11:46	1
Ethylbenzene	ND		1.0		ug/L			04/28/21 11:46	1
Hexachlorobutadiene	ND		1.0		ug/L			04/28/21 11:46	1
Isopropylbenzene	ND		1.0		ug/L			04/28/21 11:46	1
Methylene Chloride	ND		5.0		ug/L			04/28/21 11:46	1
Naphthalene	ND		1.0		ug/L			04/28/21 11:46	1
n-Butylbenzene	ND		1.0		ug/L			04/28/21 11:46	1
N-Propylbenzene	ND		1.0		ug/L			04/28/21 11:46	1
sec-Butylbenzene	ND		1.0		ug/L			04/28/21 11:46	1
Styrene	ND		1.0		ug/L			04/28/21 11:46	1
tert-Butylbenzene	ND		1.0		ug/L			04/28/21 11:46	1
Tetrachloroethene	ND		1.0		ug/L			04/28/21 11:46	1
Toluene	ND		1.0		ug/L			04/28/21 11:46	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/28/21 11:46	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/28/21 11:46	1
Trichloroethene	ND		1.0		ug/L			04/28/21 11:46	1
Trichlorofluoromethane	ND		2.0		ug/L			04/28/21 11:46	1
Vinyl chloride	ND		1.0		ug/L			04/28/21 11:46	1
Xylenes (total)	ND		2.0		ug/L			04/28/21 11:46	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/28/21 11:46*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 127*		*04/28/21 11:46*	*1*
4-Bromofluorobenzene (Surr)	*95*		*78 - 120*		*04/28/21 11:46*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 120*		*04/28/21 11:46*	*1*
Toluene-d8 (Surr)	*100*		*80 - 125*		*04/28/21 11:46*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		04/26/21 11:23	04/26/21 19:22	1
1,2-Dibromoethane	ND		0.050		ug/L		04/26/21 11:23	04/26/21 19:22	1

Client Sample ID: FB4

Date Collected: 04/16/21 08:05
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147597-3

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*117*		*70 - 130*	*04/26/21 11:23*	*04/26/21 19:22*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		500		ug/L		04/28/21 08:38	04/28/21 17:29	1
Iron	ND		30		ug/L		04/28/21 08:38	04/28/21 17:29	1
Magnesium	ND		200		ug/L		04/28/21 08:38	04/28/21 17:29	1
Manganese	ND		3.0		ug/L		04/28/21 08:38	04/28/21 17:29	1
Potassium	ND		500		ug/L		04/28/21 08:38	04/28/21 17:29	1
Sodium	ND		1000		ug/L		04/28/21 08:38	04/28/21 17:29	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	**0.00**				meq/L			05/11/21 15:51	1
Total Cations	**0.00**				meq/L			05/11/21 15:51	1
Percent Difference	**NC**				%			05/11/21 15:51	1
Calcium	**0.00**				mg/L			05/11/21 15:51	1
Magnesium	**0.00**				mg/L			05/11/21 15:51	1
Potassium	**0.00**				mg/L			05/11/21 15:51	1
Sodium	**0.00**				mg/L			05/11/21 15:51	1
Ammonia as N	**0.00**				mg/L			05/11/21 15:51	1
Chloride	**0.00**				mg/L			05/11/21 15:51	1
Sulfate	**0.00**				mg/L			05/11/21 15:51	1
Bicarbonate Alkalinity	**0.00**				mg/L			05/11/21 15:51	1
Alkalinity	**0.00**				mg/L			05/11/21 15:51	1
Nitrate/Nitrite	**0.00**				mg/L			05/11/21 15:51	1
Anion/Cation Balance	**NC**				%			05/11/21 15:51	1
Calculated TDS	**0.00**				mg/L			05/11/21 15:51	1
TDS Ratio	**NC**				NONE			05/11/21 15:51	1
Total Dissolved Solids	**0.00**				mg/L			05/11/21 15:51	1
Iron	**0.00**				mg/L			05/11/21 15:51	1
Calcium	**0.00**				meq/L			05/11/21 15:51	1
Magnesium	**0.00**				meq/L			05/11/21 15:51	1
Potassium	**0.00**				meq/L			05/11/21 15:51	1
Sodium	**0.00**				meq/L			05/11/21 15:51	1
Ammonia as N	**0.00**				meq/L			05/11/21 15:51	1
Chloride	**0.00**				meq/L			05/11/21 15:51	1
Sulfate	**0.00**				meq/L			05/11/21 15:51	1
Alkalinity	**0.00**				mg/L			05/11/21 15:51	1
Bicarbonate Alkalinity	**0.00**				meq/L			05/11/21 15:51	1
Nitrate/Nitrite	**0.00**				meq/L			05/11/21 15:51	1
Iron	**0.00**				meq/L			05/11/21 15:51	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			04/27/21 20:53	1
Sulfate	ND		1.0		mg/L			04/27/21 20:53	1
Ammonia as N	ND		0.030		mg/L			04/28/21 14:05	1
Nitrate/Nitrite	ND		0.050		mg/L			05/04/21 17:52	1
Total Organic Carbon - Average	ND		1.0		mg/L			05/04/21 20:23	1
Bicarbonate Alkalinity	ND		10		mg/L			04/21/21 00:29	1
Total Dissolved Solids	ND		10		mg/L			04/23/21 09:40	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Groundwater

Job ID: 280-147597-1

Client Sample ID: MW-12B
Date Collected: 04/16/21 10:05
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147597-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/29/21 13:21	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/29/21 13:21	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/29/21 13:21	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/29/21 13:21	1
1,1-Dichloroethane	ND		1.0		ug/L			04/29/21 13:21	1
1,1-Dichloroethene	ND		1.0		ug/L			04/29/21 13:21	1
1,1-Dichloropropene	ND		1.0		ug/L			04/29/21 13:21	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/29/21 13:21	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/29/21 13:21	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/29/21 13:21	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/29/21 13:21	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/29/21 13:21	1
1,2-Dichloroethane	ND		1.0		ug/L			04/29/21 13:21	1
1,2-Dichloropropane	ND		1.0		ug/L			04/29/21 13:21	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/29/21 13:21	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/29/21 13:21	1
1,3-Dichloropropane	ND		1.0		ug/L			04/29/21 13:21	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/29/21 13:21	1
2,2-Dichloropropane	ND		5.0		ug/L			04/29/21 13:21	1
2-Butanone (MEK)	ND		6.0		ug/L			04/29/21 13:21	1
2-Chlorotoluene	ND		1.0		ug/L			04/29/21 13:21	1
2-Hexanone	ND		5.0		ug/L			04/29/21 13:21	1
4-Chlorotoluene	ND		1.0		ug/L			04/29/21 13:21	1
4-Isopropyltoluene	ND		1.0		ug/L			04/29/21 13:21	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/29/21 13:21	1
Acetone	ND		10		ug/L			04/29/21 13:21	1
Benzene	ND		1.0		ug/L			04/29/21 13:21	1
Bromobenzene	ND		1.0		ug/L			04/29/21 13:21	1
Bromochloromethane	ND		1.0		ug/L			04/29/21 13:21	1
Bromodichloromethane	ND		1.0		ug/L			04/29/21 13:21	1
Bromoform	ND		1.0		ug/L			04/29/21 13:21	1
Bromomethane	ND		2.0		ug/L			04/29/21 13:21	1
Carbon disulfide	ND		2.0		ug/L			04/29/21 13:21	1
Carbon tetrachloride	ND		1.0		ug/L			04/29/21 13:21	1
Chlorobenzene	ND		1.0		ug/L			04/29/21 13:21	1
Chloroethane	ND		2.0		ug/L			04/29/21 13:21	1
Chloroform	ND		1.0		ug/L			04/29/21 13:21	1
Chloromethane	ND		2.0		ug/L			04/29/21 13:21	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/29/21 13:21	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/29/21 13:21	1
Dibromochloromethane	ND		1.0		ug/L			04/29/21 13:21	1
Dibromomethane	ND		1.0		ug/L			04/29/21 13:21	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/29/21 13:21	1
Ethylbenzene	ND		1.0		ug/L			04/29/21 13:21	1
Hexachlorobutadiene	ND		1.0		ug/L			04/29/21 13:21	1
Isopropylbenzene	ND		1.0		ug/L			04/29/21 13:21	1
Methylene Chloride	ND		5.0		ug/L			04/29/21 13:21	1
Naphthalene	ND		1.0		ug/L			04/29/21 13:21	1
n-Butylbenzene	ND		1.0		ug/L			04/29/21 13:21	1

Client Sample ID: MW-12B

Date Collected: 04/16/21 10:05
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147597-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		1.0		ug/L			04/29/21 13:21	1
sec-Butylbenzene	ND		1.0		ug/L			04/29/21 13:21	1
Styrene	ND		1.0		ug/L			04/29/21 13:21	1
tert-Butylbenzene	ND		1.0		ug/L			04/29/21 13:21	1
Tetrachloroethene	ND		1.0		ug/L			04/29/21 13:21	1
Toluene	ND		1.0		ug/L			04/29/21 13:21	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/29/21 13:21	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/29/21 13:21	1
Trichloroethene	ND		1.0		ug/L			04/29/21 13:21	1
Trichlorofluoromethane	ND		2.0		ug/L			04/29/21 13:21	1
Vinyl chloride	ND		1.0		ug/L			04/29/21 13:21	1
Xylenes (total)	ND		2.0		ug/L			04/29/21 13:21	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/29/21 13:21*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 127*		*04/29/21 13:21*	*1*
4-Bromofluorobenzene (Surr)	*95*		*78 - 120*		*04/29/21 13:21*	*1*
Dibromofluoromethane (Surr)	*104*		*77 - 120*		*04/29/21 13:21*	*1*
Toluene-d8 (Surr)	*95*		*80 - 125*		*04/29/21 13:21*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		04/26/21 11:23	04/26/21 19:43	1
1,2-Dibromoethane	ND		0.050		ug/L		04/26/21 11:23	04/26/21 19:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*118*		*70 - 130*	*04/26/21 11:23*	*04/26/21 19:43*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**84000**	**^2**	500		ug/L		04/28/21 08:38	04/28/21 17:32	1
Iron	**1900**		30		ug/L		04/28/21 08:38	04/28/21 17:32	1
Magnesium	**24000**		200		ug/L		04/28/21 08:38	04/28/21 17:32	1
Manganese	**1400**		3.0		ug/L		04/28/21 08:38	04/28/21 17:32	1
Potassium	**690**		500		ug/L		04/28/21 08:38	04/28/21 17:32	1
Sodium	**32000**		1000		ug/L		04/28/21 08:38	04/28/21 17:32	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	**7.6**				meq/L			05/11/21 15:51	1
Total Cations	**7.7**				meq/L			05/11/21 15:51	1
Percent Difference	**0.79**				%			05/11/21 15:51	1
Calcium	**84**				mg/L			05/11/21 15:51	1
Magnesium	**24**				mg/L			05/11/21 15:51	1
Potassium	**0.69**				mg/L			05/11/21 15:51	1
Sodium	**32**				mg/L			05/11/21 15:51	1
Ammonia as N	**0.32**				mg/L			05/11/21 15:51	1
Chloride	**120**				mg/L			05/11/21 15:51	1
Sulfate	**0.00**				mg/L			05/11/21 15:51	1

Client Sample ID: MW-12B
Lab Sample ID: 280-147597-4
Date Collected: 04/16/21 10:05
Matrix: Water
Date Received: 04/17/21 09:45

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity	210				mg/L			05/11/21 15:51	1
Alkalinity	210				mg/L			05/11/21 15:51	1
Nitrate/Nitrite	0.00				mg/L			05/11/21 15:51	1
Anion/Cation Balance	0.79				%			05/11/21 15:51	1
Calculated TDS	390				mg/L			05/11/21 15:51	1
TDS Ratio	1.2				NONE			05/11/21 15:51	1
Total Dissolved Solids	470				mg/L			05/11/21 15:51	1
Iron	1.9				mg/L			05/11/21 15:51	1
Calcium	4.2				meq/L			05/11/21 15:51	1
Magnesium	2.0				meq/L			05/11/21 15:51	1
Potassium	0.018				meq/L			05/11/21 15:51	1
Sodium	1.4				meq/L			05/11/21 15:51	1
Ammonia as N	0.023				meq/L			05/11/21 15:51	1
Chloride	3.4				meq/L			05/11/21 15:51	1
Sulfate	0.00				meq/L			05/11/21 15:51	1
Alkalinity	210				mg/L			05/11/21 15:51	1
Bicarbonate Alkalinity	4.2				meq/L			05/11/21 15:51	1
Nitrate/Nitrite	0.00				meq/L			05/11/21 15:51	1
Iron	0.10				meq/L			05/11/21 15:51	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	120		0.50		mg/L			04/27/21 21:11	1
Sulfate	ND		1.0		mg/L			04/27/21 21:11	1
Ammonia as N	0.32		0.030		mg/L			04/30/21 14:58	1
Nitrate/Nitrite	ND		0.050		mg/L			05/04/21 17:54	1
Total Organic Carbon - Average	1.8		1.0		mg/L			05/05/21 18:06	1
Bicarbonate Alkalinity	210		10		mg/L			04/21/21 00:35	1
Total Dissolved Solids	470		10		mg/L			04/23/21 09:40	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.87				SU			04/16/21 11:05	1
Field Conductivity	766				umhos/cm			04/16/21 11:05	1
Field Temperature	11.0				Degrees C			04/16/21 11:05	1
Field Dissolved Oxygen	1.17				mg/L			04/16/21 11:05	1
Field EH/ORP	-55.2				millivolts			04/16/21 11:05	1

Client Sample ID: DUP4
Lab Sample ID: 280-147597-5
Date Collected: 04/16/21 10:10
Matrix: Water
Date Received: 04/17/21 09:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/29/21 13:43	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/29/21 13:43	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/29/21 13:43	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/29/21 13:43	1
1,1-Dichloroethane	ND		1.0		ug/L			04/29/21 13:43	1
1,1-Dichloroethene	ND		1.0		ug/L			04/29/21 13:43	1
1,1-Dichloropropene	ND		1.0		ug/L			04/29/21 13:43	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/29/21 13:43	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Groundwater

Job ID: 280-147597-1

Client Sample ID: DUP4
Date Collected: 04/16/21 10:10
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147597-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		1.0		ug/L			04/29/21 13:43	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/29/21 13:43	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/29/21 13:43	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/29/21 13:43	1
1,2-Dichloroethane	ND		1.0		ug/L			04/29/21 13:43	1
1,2-Dichloropropane	ND		1.0		ug/L			04/29/21 13:43	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/29/21 13:43	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/29/21 13:43	1
1,3-Dichloropropane	ND		1.0		ug/L			04/29/21 13:43	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/29/21 13:43	1
2,2-Dichloropropane	ND		5.0		ug/L			04/29/21 13:43	1
2-Butanone (MEK)	ND		6.0		ug/L			04/29/21 13:43	1
2-Chlorotoluene	ND		1.0		ug/L			04/29/21 13:43	1
2-Hexanone	ND		5.0		ug/L			04/29/21 13:43	1
4-Chlorotoluene	ND		1.0		ug/L			04/29/21 13:43	1
4-Isopropyltoluene	ND		1.0		ug/L			04/29/21 13:43	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/29/21 13:43	1
Acetone	ND		10		ug/L			04/29/21 13:43	1
Benzene	ND		1.0		ug/L			04/29/21 13:43	1
Bromobenzene	ND		1.0		ug/L			04/29/21 13:43	1
Bromochloromethane	ND		1.0		ug/L			04/29/21 13:43	1
Bromodichloromethane	ND		1.0		ug/L			04/29/21 13:43	1
Bromoform	ND		1.0		ug/L			04/29/21 13:43	1
Bromomethane	ND		2.0		ug/L			04/29/21 13:43	1
Carbon disulfide	ND		2.0		ug/L			04/29/21 13:43	1
Carbon tetrachloride	ND		1.0		ug/L			04/29/21 13:43	1
Chlorobenzene	ND		1.0		ug/L			04/29/21 13:43	1
Chloroethane	ND		2.0		ug/L			04/29/21 13:43	1
Chloroform	ND		1.0		ug/L			04/29/21 13:43	1
Chloromethane	ND		2.0		ug/L			04/29/21 13:43	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/29/21 13:43	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/29/21 13:43	1
Dibromochloromethane	ND		1.0		ug/L			04/29/21 13:43	1
Dibromomethane	ND		1.0		ug/L			04/29/21 13:43	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/29/21 13:43	1
Ethylbenzene	ND		1.0		ug/L			04/29/21 13:43	1
Hexachlorobutadiene	ND		1.0		ug/L			04/29/21 13:43	1
Isopropylbenzene	ND		1.0		ug/L			04/29/21 13:43	1
Methylene Chloride	ND		5.0		ug/L			04/29/21 13:43	1
Naphthalene	ND		1.0		ug/L			04/29/21 13:43	1
n-Butylbenzene	ND		1.0		ug/L			04/29/21 13:43	1
N-Propylbenzene	ND		1.0		ug/L			04/29/21 13:43	1
sec-Butylbenzene	ND		1.0		ug/L			04/29/21 13:43	1
Styrene	ND		1.0		ug/L			04/29/21 13:43	1
tert-Butylbenzene	ND		1.0		ug/L			04/29/21 13:43	1
Tetrachloroethene	ND		1.0		ug/L			04/29/21 13:43	1
Toluene	ND		1.0		ug/L			04/29/21 13:43	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/29/21 13:43	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/29/21 13:43	1

Client Sample ID: DUP4

Date Collected: 04/16/21 10:10
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147597-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		1.0		ug/L			04/29/21 13:43	1
Trichlorofluoromethane	ND		2.0		ug/L			04/29/21 13:43	1
Vinyl chloride	ND		1.0		ug/L			04/29/21 13:43	1
Xylenes (total)	ND		2.0		ug/L			04/29/21 13:43	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/29/21 13:43*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 127*		*04/29/21 13:43*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*04/29/21 13:43*	*1*
Dibromofluoromethane (Surr)	*103*		*77 - 120*		*04/29/21 13:43*	*1*
Toluene-d8 (Surr)	*95*		*80 - 125*		*04/29/21 13:43*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		04/26/21 11:23	04/26/21 20:05	1
1,2-Dibromoethane	ND		0.050		ug/L		04/26/21 11:23	04/26/21 20:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*116*		*70 - 130*	*04/26/21 11:23*	*04/26/21 20:05*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**84000**	**^2**	500		ug/L		04/28/21 08:38	04/28/21 17:37	1
Iron	**1900**		30		ug/L		04/28/21 08:38	04/28/21 17:37	1
Magnesium	**24000**		200		ug/L		04/28/21 08:38	04/28/21 17:37	1
Manganese	**1400**		3.0		ug/L		04/28/21 08:38	04/28/21 17:37	1
Potassium	**680**		500		ug/L		04/28/21 08:38	04/28/21 17:37	1
Sodium	**32000**		1000		ug/L		04/28/21 08:38	04/28/21 17:37	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	**7.8**				meq/L			05/11/21 15:51	1
Total Cations	**7.7**				meq/L			05/11/21 15:51	1
Percent Difference	**-0.50**				%			05/11/21 15:51	1
Calcium	**84**				mg/L			05/11/21 15:51	1
Magnesium	**24**				mg/L			05/11/21 15:51	1
Potassium	**0.68**				mg/L			05/11/21 15:51	1
Sodium	**32**				mg/L			05/11/21 15:51	1
Ammonia as N	**0.35**				mg/L			05/11/21 15:51	1
Chloride	**120**				mg/L			05/11/21 15:51	1
Sulfate	**0.00**				mg/L			05/11/21 15:51	1
Bicarbonate Alkalinity	**220**				mg/L			05/11/21 15:51	1
Alkalinity	**220**				mg/L			05/11/21 15:51	1
Nitrate/Nitrite	**0.00**				mg/L			05/11/21 15:51	1
Anion/Cation Balance	**-0.50**				%			05/11/21 15:51	1
Calculated TDS	**390**				mg/L			05/11/21 15:51	1
TDS Ratio	**1.2**				NONE			05/11/21 15:51	1
Total Dissolved Solids	**460**				mg/L			05/11/21 15:51	1
Iron	**1.9**				mg/L			05/11/21 15:51	1

Client Sample ID: DUP4
Lab Sample ID: 280-147597-5
Date Collected: 04/16/21 10:10
Matrix: Water
Date Received: 04/17/21 09:45

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	4.2				meq/L			05/11/21 15:51	1
Magnesium	2.0				meq/L			05/11/21 15:51	1
Potassium	0.017				meq/L			05/11/21 15:51	1
Sodium	1.4				meq/L			05/11/21 15:51	1
Ammonia as N	0.025				meq/L			05/11/21 15:51	1
Chloride	3.4				meq/L			05/11/21 15:51	1
Sulfate	0.00				meq/L			05/11/21 15:51	1
Alkalinity	220				mg/L			05/11/21 15:51	1
Bicarbonate Alkalinity	4.4				meq/L			05/11/21 15:51	1
Nitrate/Nitrite	0.00				meq/L			05/11/21 15:51	1
Iron	0.10				meq/L			05/11/21 15:51	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	120		0.50		mg/L			04/27/21 21:29	1
Sulfate	ND		1.0		mg/L			04/30/21 00:50	1
Ammonia as N	0.35		0.030		mg/L			04/28/21 14:31	1
Nitrate/Nitrite	ND		0.050		mg/L			05/04/21 17:56	1
Total Organic Carbon - Average	1.4		1.0		mg/L			05/05/21 18:23	1
Bicarbonate Alkalinity	220		10		mg/L			04/21/21 00:42	1
Total Dissolved Solids	460		10		mg/L			04/23/21 09:40	1

Client Sample ID: MW-15A
Lab Sample ID: 280-147597-6
Date Collected: 04/15/21 10:41
Matrix: Water
Date Received: 04/17/21 09:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/28/21 00:52	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/28/21 00:52	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/28/21 00:52	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/28/21 00:52	1
1,1-Dichloroethane	ND		1.0		ug/L			04/28/21 00:52	1
1,1-Dichloroethene	ND		1.0		ug/L			04/28/21 00:52	1
1,1-Dichloropropene	ND		1.0		ug/L			04/28/21 00:52	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/28/21 00:52	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/28/21 00:52	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/28/21 00:52	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/28/21 00:52	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/28/21 00:52	1
1,2-Dichloroethane	ND		1.0		ug/L			04/28/21 00:52	1
1,2-Dichloropropane	ND		1.0		ug/L			04/28/21 00:52	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/28/21 00:52	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/28/21 00:52	1
1,3-Dichloropropane	ND		1.0		ug/L			04/28/21 00:52	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/28/21 00:52	1
2,2-Dichloropropane	ND		5.0		ug/L			04/28/21 00:52	1
2-Butanone (MEK)	ND		6.0		ug/L			04/28/21 00:52	1
2-Chlorotoluene	ND		1.0		ug/L			04/28/21 00:52	1
2-Hexanone	ND		5.0		ug/L			04/28/21 00:52	1
4-Chlorotoluene	ND		1.0		ug/L			04/28/21 00:52	1
4-Isopropyltoluene	ND		1.0		ug/L			04/28/21 00:52	1

Client Sample ID: MW-15A
Date Collected: 04/15/21 10:41
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147597-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone	ND		5.0		ug/L			04/28/21 00:52	1
Acetone	ND		10		ug/L			04/28/21 00:52	1
Benzene	ND		1.0		ug/L			04/28/21 00:52	1
Bromobenzene	ND		1.0		ug/L			04/28/21 00:52	1
Bromochloromethane	ND		1.0		ug/L			04/28/21 00:52	1
Bromodichloromethane	ND		1.0		ug/L			04/28/21 00:52	1
Bromoform	ND		1.0		ug/L			04/28/21 00:52	1
Bromomethane	ND		2.0		ug/L			04/28/21 00:52	1
Carbon disulfide	ND		2.0		ug/L			04/28/21 00:52	1
Carbon tetrachloride	ND		1.0		ug/L			04/28/21 00:52	1
Chlorobenzene	ND		1.0		ug/L			04/28/21 00:52	1
Chloroethane	ND		2.0		ug/L			04/28/21 00:52	1
Chloroform	ND		1.0		ug/L			04/28/21 00:52	1
Chloromethane	ND		2.0		ug/L			04/28/21 00:52	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/28/21 00:52	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/28/21 00:52	1
Dibromochloromethane	ND		1.0		ug/L			04/28/21 00:52	1
Dibromomethane	ND		1.0		ug/L			04/28/21 00:52	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/28/21 00:52	1
Ethylbenzene	ND		1.0		ug/L			04/28/21 00:52	1
Hexachlorobutadiene	ND		1.0		ug/L			04/28/21 00:52	1
Isopropylbenzene	ND		1.0		ug/L			04/28/21 00:52	1
Methylene Chloride	ND		5.0		ug/L			04/28/21 00:52	1
Naphthalene	ND		1.0		ug/L			04/28/21 00:52	1
n-Butylbenzene	ND		1.0		ug/L			04/28/21 00:52	1
N-Propylbenzene	ND		1.0		ug/L			04/28/21 00:52	1
sec-Butylbenzene	ND		1.0		ug/L			04/28/21 00:52	1
Styrene	ND		1.0		ug/L			04/28/21 00:52	1
tert-Butylbenzene	ND		1.0		ug/L			04/28/21 00:52	1
Tetrachloroethene	ND		1.0		ug/L			04/28/21 00:52	1
Toluene	ND		1.0		ug/L			04/28/21 00:52	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/28/21 00:52	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/28/21 00:52	1
Trichloroethene	ND		1.0		ug/L			04/28/21 00:52	1
Trichlorofluoromethane	ND		2.0		ug/L			04/28/21 00:52	1
Vinyl chloride	ND		1.0		ug/L			04/28/21 00:52	1
Xylenes (total)	ND		2.0		ug/L			04/28/21 00:52	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/28/21 00:52*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 127*		*04/28/21 00:52*	*1*
4-Bromofluorobenzene (Surr)	*102*		*78 - 120*		*04/28/21 00:52*	*1*
Dibromofluoromethane (Surr)	*104*		*77 - 120*		*04/28/21 00:52*	*1*
Toluene-d8 (Surr)	*100*		*80 - 125*		*04/28/21 00:52*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		04/26/21 11:23	04/26/21 20:26	1

Client Sample ID: MW-15A

Date Collected: 04/15/21 10:41
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147597-6

Matrix: Water

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.050		ug/L		04/26/21 11:23	04/26/21 20:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*114*		*70 - 130*	*04/26/21 11:23*	*04/26/21 20:26*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**8000**	**^2**	500		ug/L		04/28/21 08:38	04/28/21 17:41	1
Iron	**41**		30		ug/L		04/28/21 08:38	04/28/21 17:41	1
Magnesium	**2700**		200		ug/L		04/28/21 08:38	04/28/21 17:41	1
Manganese	ND		3.0		ug/L		04/28/21 08:38	04/28/21 17:41	1
Potassium	ND		500		ug/L		04/28/21 08:38	04/28/21 17:41	1
Sodium	**21000**		1000		ug/L		04/28/21 08:38	04/28/21 17:41	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	**1.7**				meq/L			05/11/21 15:51	1
Total Cations	**1.5**				meq/L			05/11/21 15:51	1
Percent Difference	**-5.0**				%			05/11/21 15:51	1
Calcium	**8.0**				mg/L			05/11/21 15:51	1
Magnesium	**2.7**				mg/L			05/11/21 15:51	1
Potassium	**0.00**				mg/L			05/11/21 15:51	1
Sodium	**21**				mg/L			05/11/21 15:51	1
Ammonia as N	**0.00**				mg/L			05/11/21 15:51	1
Chloride	**2.8**				mg/L			05/11/21 15:51	1
Sulfate	**29**				mg/L			05/11/21 15:51	1
Bicarbonate Alkalinity	**47**				mg/L			05/11/21 15:51	1
Alkalinity	**47**				mg/L			05/11/21 15:51	1
Nitrate/Nitrite	**1.1**				mg/L			05/11/21 15:51	1
Anion/Cation Balance	**-5.0**				%			05/11/21 15:51	1
Calculated TDS	**64**				mg/L			05/11/21 15:51	1
TDS Ratio	**4.4**				NONE			05/11/21 15:51	1
Total Dissolved Solids	**280**				mg/L			05/11/21 15:51	1
Iron	**0.041**				mg/L			05/11/21 15:51	1
Calcium	**0.40**				meq/L			05/11/21 15:51	1
Magnesium	**0.22**				meq/L			05/11/21 15:51	1
Potassium	**0.00**				meq/L			05/11/21 15:51	1
Sodium	**0.91**				meq/L			05/11/21 15:51	1
Ammonia as N	**0.00**				meq/L			05/11/21 15:51	1
Chloride	**0.079**				meq/L			05/11/21 15:51	1
Sulfate	**0.60**				meq/L			05/11/21 15:51	1
Alkalinity	**47**				mg/L			05/11/21 15:51	1
Bicarbonate Alkalinity	**0.94**				meq/L			05/11/21 15:51	1
Nitrate/Nitrite	**0.079**				meq/L			05/11/21 15:51	1
Iron	**0.0022**				meq/L			05/11/21 15:51	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2.8**		0.50		mg/L			04/27/21 21:47	1
Sulfate	**29**		1.0		mg/L			04/27/21 21:47	1
Ammonia as N	ND		0.030		mg/L			04/28/21 14:33	1
Nitrate/Nitrite	**1.1**		0.050		mg/L			05/04/21 17:58	1

Client Sample ID: MW-15A

Lab Sample ID: 280-147597-6

Date Collected: 04/15/21 10:41

Matrix: Water

Date Received: 04/17/21 09:45

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Average	2.2		1.0		mg/L			05/04/21 21:38	1
Bicarbonate Alkalinity	47		10		mg/L			04/20/21 17:27	1
Total Dissolved Solids	280		10		mg/L			04/22/21 16:27	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.94				SU			04/15/21 11:41	1
Field Conductivity	175.2				umhos/cm			04/15/21 11:41	1
Field Temperature	12.8				Degrees C			04/15/21 11:41	1
Field Dissolved Oxygen	6.46				mg/L			04/15/21 11:41	1
Field EH/ORP	190.7				millivolts			04/15/21 11:41	1

Client Sample ID: DUP3

Lab Sample ID: 280-147597-7

Date Collected: 04/15/21 10:42

Matrix: Water

Date Received: 04/17/21 09:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/28/21 01:15	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/28/21 01:15	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/28/21 01:15	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/28/21 01:15	1
1,1-Dichloroethane	ND		1.0		ug/L			04/28/21 01:15	1
1,1-Dichloroethene	ND		1.0		ug/L			04/28/21 01:15	1
1,1-Dichloropropene	ND		1.0		ug/L			04/28/21 01:15	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/28/21 01:15	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/28/21 01:15	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/28/21 01:15	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/28/21 01:15	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/28/21 01:15	1
1,2-Dichloroethane	ND		1.0		ug/L			04/28/21 01:15	1
1,2-Dichloropropane	ND		1.0		ug/L			04/28/21 01:15	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/28/21 01:15	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/28/21 01:15	1
1,3-Dichloropropane	ND		1.0		ug/L			04/28/21 01:15	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/28/21 01:15	1
2,2-Dichloropropane	ND		5.0		ug/L			04/28/21 01:15	1
2-Butanone (MEK)	ND		6.0		ug/L			04/28/21 01:15	1
2-Chlorotoluene	ND		1.0		ug/L			04/28/21 01:15	1
2-Hexanone	ND		5.0		ug/L			04/28/21 01:15	1
4-Chlorotoluene	ND		1.0		ug/L			04/28/21 01:15	1
4-Isopropyltoluene	ND		1.0		ug/L			04/28/21 01:15	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/28/21 01:15	1
Acetone	ND		10		ug/L			04/28/21 01:15	1
Benzene	ND		1.0		ug/L			04/28/21 01:15	1
Bromobenzene	ND		1.0		ug/L			04/28/21 01:15	1
Bromochloromethane	ND		1.0		ug/L			04/28/21 01:15	1
Bromodichloromethane	ND		1.0		ug/L			04/28/21 01:15	1
Bromoform	ND		1.0		ug/L			04/28/21 01:15	1
Bromomethane	ND		2.0		ug/L			04/28/21 01:15	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Groundwater

Job ID: 280-147597-1

Client Sample ID: DUP3
Date Collected: 04/15/21 10:42
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147597-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		2.0		ug/L			04/28/21 01:15	1
Carbon tetrachloride	ND		1.0		ug/L			04/28/21 01:15	1
Chlorobenzene	ND		1.0		ug/L			04/28/21 01:15	1
Chloroethane	ND		2.0		ug/L			04/28/21 01:15	1
Chloroform	ND		1.0		ug/L			04/28/21 01:15	1
Chloromethane	ND		2.0		ug/L			04/28/21 01:15	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/28/21 01:15	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/28/21 01:15	1
Dibromochloromethane	ND		1.0		ug/L			04/28/21 01:15	1
Dibromomethane	ND		1.0		ug/L			04/28/21 01:15	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/28/21 01:15	1
Ethylbenzene	ND		1.0		ug/L			04/28/21 01:15	1
Hexachlorobutadiene	ND		1.0		ug/L			04/28/21 01:15	1
Isopropylbenzene	ND		1.0		ug/L			04/28/21 01:15	1
Methylene Chloride	ND		5.0		ug/L			04/28/21 01:15	1
Naphthalene	ND		1.0		ug/L			04/28/21 01:15	1
n-Butylbenzene	ND		1.0		ug/L			04/28/21 01:15	1
N-Propylbenzene	ND		1.0		ug/L			04/28/21 01:15	1
sec-Butylbenzene	ND		1.0		ug/L			04/28/21 01:15	1
Styrene	ND		1.0		ug/L			04/28/21 01:15	1
tert-Butylbenzene	ND		1.0		ug/L			04/28/21 01:15	1
Tetrachloroethene	ND		1.0		ug/L			04/28/21 01:15	1
Toluene	ND		1.0		ug/L			04/28/21 01:15	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/28/21 01:15	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/28/21 01:15	1
Trichloroethene	ND		1.0		ug/L			04/28/21 01:15	1
Trichlorofluoromethane	ND		2.0		ug/L			04/28/21 01:15	1
Vinyl chloride	ND		1.0		ug/L			04/28/21 01:15	1
Xylenes (total)	ND		2.0		ug/L			04/28/21 01:15	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/28/21 01:15*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 127*		*04/28/21 01:15*	*1*
4-Bromofluorobenzene (Surr)	*101*		*78 - 120*		*04/28/21 01:15*	*1*
Dibromofluoromethane (Surr)	*102*		*77 - 120*		*04/28/21 01:15*	*1*
Toluene-d8 (Surr)	*101*		*80 - 125*		*04/28/21 01:15*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		04/26/21 11:23	04/26/21 20:48	1
1,2-Dibromoethane	ND		0.050		ug/L		04/26/21 11:23	04/26/21 20:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*113*		*70 - 130*	*04/26/21 11:23*	*04/26/21 20:48*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**7600**	**^2**	500		ug/L		04/28/21 08:38	04/28/21 17:45	1
Iron	**77**		30		ug/L		04/28/21 08:38	04/28/21 17:45	1

Client Sample ID: DUP3

Date Collected: 04/15/21 10:42
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147597-7

Matrix: Water

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	2600		200		ug/L		04/28/21 08:38	04/28/21 17:45	1
Manganese	ND		3.0		ug/L		04/28/21 08:38	04/28/21 17:45	1
Potassium	ND		500		ug/L		04/28/21 08:38	04/28/21 17:45	1
Sodium	19000		1000		ug/L		04/28/21 08:38	04/28/21 17:45	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	1.5				meq/L			05/11/21 15:51	1
Total Cations	1.4				meq/L			05/11/21 15:51	1
Percent Difference	-4.0				%			05/11/21 15:51	1
Calcium	7.6				mg/L			05/11/21 15:51	1
Magnesium	2.6				mg/L			05/11/21 15:51	1
Potassium	0.00				mg/L			05/11/21 15:51	1
Sodium	19				mg/L			05/11/21 15:51	1
Ammonia as N	0.00				mg/L			05/11/21 15:51	1
Chloride	2.8				mg/L			05/11/21 15:51	1
Sulfate	29				mg/L			05/11/21 15:51	1
Bicarbonate Alkalinity	40				mg/L			05/11/21 15:51	1
Alkalinity	40				mg/L			05/11/21 15:51	1
Nitrate/Nitrite	0.83				mg/L			05/11/21 15:51	1
Anion/Cation Balance	-4.0				%			05/11/21 15:51	1
Calculated TDS	57				mg/L			05/11/21 15:51	1
TDS Ratio	4.7				NONE			05/11/21 15:51	1
Total Dissolved Solids	270				mg/L			05/11/21 15:51	1
Iron	0.077				mg/L			05/11/21 15:51	1
Calcium	0.38				meq/L			05/11/21 15:51	1
Magnesium	0.21				meq/L			05/11/21 15:51	1
Potassium	0.00				meq/L			05/11/21 15:51	1
Sodium	0.83				meq/L			05/11/21 15:51	1
Ammonia as N	0.00				meq/L			05/11/21 15:51	1
Chloride	0.079				meq/L			05/11/21 15:51	1
Sulfate	0.60				meq/L			05/11/21 15:51	1
Alkalinity	40				mg/L			05/11/21 15:51	1
Bicarbonate Alkalinity	0.80				meq/L			05/11/21 15:51	1
Nitrate/Nitrite	0.059				meq/L			05/11/21 15:51	1
Iron	0.0041				meq/L			05/11/21 15:51	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.8		0.50		mg/L			04/27/21 22:05	1
Sulfate	29		1.0		mg/L			04/30/21 01:08	1
Ammonia as N	ND		0.030		mg/L			04/28/21 14:35	1
Nitrate/Nitrite	0.83		0.050		mg/L			05/05/21 22:18	1
Total Organic Carbon - Average	1.6		1.0		mg/L			05/04/21 22:00	1
Bicarbonate Alkalinity	40		10		mg/L			04/20/21 17:32	1
Total Dissolved Solids	270		10		mg/L			04/22/21 16:27	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Groundwater

Job ID: 280-147597-1

Client Sample ID: MW-15B
Date Collected: 04/15/21 12:49
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147597-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/28/21 01:37	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/28/21 01:37	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/28/21 01:37	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/28/21 01:37	1
1,1-Dichloroethane	ND		1.0		ug/L			04/28/21 01:37	1
1,1-Dichloroethene	ND		1.0		ug/L			04/28/21 01:37	1
1,1-Dichloropropene	ND		1.0		ug/L			04/28/21 01:37	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/28/21 01:37	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/28/21 01:37	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/28/21 01:37	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/28/21 01:37	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/28/21 01:37	1
1,2-Dichloroethane	ND		1.0		ug/L			04/28/21 01:37	1
1,2-Dichloropropane	ND		1.0		ug/L			04/28/21 01:37	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/28/21 01:37	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/28/21 01:37	1
1,3-Dichloropropane	ND		1.0		ug/L			04/28/21 01:37	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/28/21 01:37	1
2,2-Dichloropropane	ND		5.0		ug/L			04/28/21 01:37	1
2-Butanone (MEK)	ND		6.0		ug/L			04/28/21 01:37	1
2-Chlorotoluene	ND		1.0		ug/L			04/28/21 01:37	1
2-Hexanone	ND		5.0		ug/L			04/28/21 01:37	1
4-Chlorotoluene	ND		1.0		ug/L			04/28/21 01:37	1
4-Isopropyltoluene	ND		1.0		ug/L			04/28/21 01:37	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/28/21 01:37	1
Acetone	ND		10		ug/L			04/28/21 01:37	1
Benzene	ND		1.0		ug/L			04/28/21 01:37	1
Bromobenzene	ND		1.0		ug/L			04/28/21 01:37	1
Bromochloromethane	ND		1.0		ug/L			04/28/21 01:37	1
Bromodichloromethane	ND		1.0		ug/L			04/28/21 01:37	1
Bromoform	ND		1.0		ug/L			04/28/21 01:37	1
Bromomethane	ND		2.0		ug/L			04/28/21 01:37	1
Carbon disulfide	ND		2.0		ug/L			04/28/21 01:37	1
Carbon tetrachloride	ND		1.0		ug/L			04/28/21 01:37	1
Chlorobenzene	ND		1.0		ug/L			04/28/21 01:37	1
Chloroethane	ND		2.0		ug/L			04/28/21 01:37	1
Chloroform	ND		1.0		ug/L			04/28/21 01:37	1
Chloromethane	ND		2.0		ug/L			04/28/21 01:37	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/28/21 01:37	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/28/21 01:37	1
Dibromochloromethane	ND		1.0		ug/L			04/28/21 01:37	1
Dibromomethane	ND		1.0		ug/L			04/28/21 01:37	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/28/21 01:37	1
Ethylbenzene	ND		1.0		ug/L			04/28/21 01:37	1
Hexachlorobutadiene	ND		1.0		ug/L			04/28/21 01:37	1
Isopropylbenzene	ND		1.0		ug/L			04/28/21 01:37	1
Methylene Chloride	ND		5.0		ug/L			04/28/21 01:37	1
Naphthalene	ND		1.0		ug/L			04/28/21 01:37	1
n-Butylbenzene	ND		1.0		ug/L			04/28/21 01:37	1

Client Sample ID: MW-15B

Date Collected: 04/15/21 12:49
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147597-8

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		1.0		ug/L			04/28/21 01:37	1
sec-Butylbenzene	ND		1.0		ug/L			04/28/21 01:37	1
Styrene	ND		1.0		ug/L			04/28/21 01:37	1
tert-Butylbenzene	ND		1.0		ug/L			04/28/21 01:37	1
Tetrachloroethene	ND		1.0		ug/L			04/28/21 01:37	1
Toluene	ND		1.0		ug/L			04/28/21 01:37	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/28/21 01:37	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/28/21 01:37	1
Trichloroethene	ND		1.0		ug/L			04/28/21 01:37	1
Trichlorofluoromethane	ND		2.0		ug/L			04/28/21 01:37	1
Vinyl chloride	ND		1.0		ug/L			04/28/21 01:37	1
Xylenes (total)	ND		2.0		ug/L			04/28/21 01:37	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/28/21 01:37*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 127*		*04/28/21 01:37*	*1*
4-Bromofluorobenzene (Surr)	*101*		*78 - 120*		*04/28/21 01:37*	*1*
Dibromofluoromethane (Surr)	*101*		*77 - 120*		*04/28/21 01:37*	*1*
Toluene-d8 (Surr)	*100*		*80 - 125*		*04/28/21 01:37*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		04/26/21 11:23	04/26/21 21:09	1
1,2-Dibromoethane	ND		0.050		ug/L		04/26/21 11:23	04/26/21 21:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*112*		*70 - 130*	*04/26/21 11:23*	*04/26/21 21:09*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**65000**		500		ug/L		04/28/21 08:38	04/28/21 18:02	1
Iron	**460**		30		ug/L		04/28/21 08:38	04/28/21 18:02	1
Magnesium	**28000**		200		ug/L		04/28/21 08:38	04/28/21 18:02	1
Manganese	**2300**		3.0		ug/L		04/28/21 08:38	04/28/21 18:02	1
Potassium	ND		500		ug/L		04/28/21 08:38	04/28/21 18:02	1
Sodium	**32000**		1000		ug/L		04/28/21 08:38	04/28/21 18:02	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	**7.0**				meq/L			05/11/21 15:51	1
Total Cations	**7.0**				meq/L			05/11/21 15:51	1
Percent Difference	**-0.44**				%			05/11/21 15:51	1
Calcium	**65**				mg/L			05/11/21 15:51	1
Magnesium	**28**				mg/L			05/11/21 15:51	1
Potassium	**0.00**				mg/L			05/11/21 15:51	1
Sodium	**32**				mg/L			05/11/21 15:51	1
Ammonia as N	**0.032**				mg/L			05/11/21 15:51	1
Chloride	**35**				mg/L			05/11/21 15:51	1
Sulfate	**2.2**				mg/L			05/11/21 15:51	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Groundwater

Job ID: 280-147597-1

Client Sample ID: MW-15B

Date Collected: 04/15/21 12:49
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147597-8

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity	300				mg/L			05/11/21 15:51	1
Alkalinity	300				mg/L			05/11/21 15:51	1
Nitrate/Nitrite	0.00				mg/L			05/11/21 15:51	1
Anion/Cation Balance	-0.44				%			05/11/21 15:51	1
Calculated TDS	340				mg/L			05/11/21 15:51	1
TDS Ratio	1.0				NONE			05/11/21 15:51	1
Total Dissolved Solids	350				mg/L			05/11/21 15:51	1
Iron	0.46				mg/L			05/11/21 15:51	1
Calcium	3.2				meq/L			05/11/21 15:51	1
Magnesium	2.3				meq/L			05/11/21 15:51	1
Potassium	0.00				meq/L			05/11/21 15:51	1
Sodium	1.4				meq/L			05/11/21 15:51	1
Ammonia as N	0.0023				meq/L			05/11/21 15:51	1
Chloride	0.99				meq/L			05/11/21 15:51	1
Sulfate	0.046				meq/L			05/11/21 15:51	1
Alkalinity	300				mg/L			05/11/21 15:51	1
Bicarbonate Alkalinity	6.0				meq/L			05/11/21 15:51	1
Nitrate/Nitrite	0.00				meq/L			05/11/21 15:51	1
Iron	0.025				meq/L			05/11/21 15:51	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	35		0.50		mg/L			04/27/21 22:23	1
Sulfate	2.2		1.0		mg/L			04/27/21 22:23	1
Ammonia as N	0.032		0.030		mg/L			04/28/21 14:37	1
Nitrate/Nitrite	ND		0.050		mg/L			05/04/21 18:14	1
Total Organic Carbon - Average	1.2		1.0		mg/L			05/04/21 23:14	1
Bicarbonate Alkalinity	300		10		mg/L			04/21/21 00:50	1
Total Dissolved Solids	350		10		mg/L			04/22/21 16:27	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.71				SU			04/15/21 13:49	1
Field Conductivity	642.3				umhos/cm			04/15/21 13:49	1
Field Temperature	13.4				Degrees C			04/15/21 13:49	1
Field Dissolved Oxygen	0.45				mg/L			04/15/21 13:49	1
Field EH/ORP	19.8				millivolts			04/15/21 13:49	1

Surrogate Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Groundwater

Job ID: 280-147597-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-127)	(78-120)	(77-120)	(80-125)
280-146973-E-3 MSD	Matrix Spike Duplicate	101	98	104	99
280-146973-G-3 MS	Matrix Spike	101	101	103	100
280-147597-1	TB2	102	109	97	106
280-147597-2	MW-12A	99	95	101	98
280-147597-3	FB4	98	95	100	100
280-147597-4	MW-12B	102	95	104	95
280-147597-5	DUP4	100	96	103	95
280-147597-6	MW-15A	103	102	104	100
280-147597-7	DUP3	103	101	102	101
280-147597-8	MW-15B	103	101	101	100
LCS 280-533957/4	Lab Control Sample	104	104	100	106
LCS 280-534087/5	Lab Control Sample	100	101	102	100
LCS 280-534118/5	Lab Control Sample	98	96	100	99
LCS 280-534267/5	Lab Control Sample	97	96	101	98
LCSD 280-533957/5	Lab Control Sample Dup	102	106	100	106
LCSD 280-534087/6	Lab Control Sample Dup	101	100	103	101
LCSD 280-534118/6	Lab Control Sample Dup	97	96	101	100
LCSD 280-534267/6	Lab Control Sample Dup	96	96	101	98
MB 280-533957/9	Method Blank	103	106	99	108
MB 280-534087/10	Method Blank	103	100	101	100
MB 280-534118/10	Method Blank	99	96	100	99
MB 280-534267/10	Method Blank	100	95	102	96

Surrogate Legend

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

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)
		12DBP1
Lab Sample ID	Client Sample ID	(70-130)
280-147597-1	TB2	116
280-147597-2	MW-12A	117
280-147597-3	FB4	117
280-147597-4	MW-12B	118
280-147597-5	DUP4	116
280-147597-6	MW-15A	114
280-147597-7	DUP3	113
280-147597-8	MW-15B	112
LCS 280-533889/2-A	Lab Control Sample	114
LCSD 280-533889/3-A	Lab Control Sample Dup	116
MB 280-533889/1-A	Method Blank	117

Surrogate Legend

12DBP = 1,2-Dibromopropane

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

Lab Sample ID: MB 280-533957/9
Matrix: Water
Analysis Batch: 533957

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/27/21 00:10	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/27/21 00:10	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/27/21 00:10	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/27/21 00:10	1
1,1-Dichloroethane	ND		1.0		ug/L			04/27/21 00:10	1
1,1-Dichloroethene	ND		1.0		ug/L			04/27/21 00:10	1
1,1-Dichloropropene	ND		1.0		ug/L			04/27/21 00:10	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/27/21 00:10	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/27/21 00:10	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/27/21 00:10	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/27/21 00:10	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/27/21 00:10	1
1,2-Dichloroethane	ND		1.0		ug/L			04/27/21 00:10	1
1,2-Dichloropropane	ND		1.0		ug/L			04/27/21 00:10	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/27/21 00:10	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/27/21 00:10	1
1,3-Dichloropropane	ND		1.0		ug/L			04/27/21 00:10	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/27/21 00:10	1
2,2-Dichloropropane	ND		5.0		ug/L			04/27/21 00:10	1
2-Butanone (MEK)	ND		6.0		ug/L			04/27/21 00:10	1
2-Chlorotoluene	ND		1.0		ug/L			04/27/21 00:10	1
2-Hexanone	ND		5.0		ug/L			04/27/21 00:10	1
4-Chlorotoluene	ND		1.0		ug/L			04/27/21 00:10	1
4-Isopropyltoluene	ND		1.0		ug/L			04/27/21 00:10	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/27/21 00:10	1
Acetone	ND		10		ug/L			04/27/21 00:10	1
Benzene	ND		1.0		ug/L			04/27/21 00:10	1
Bromobenzene	ND		1.0		ug/L			04/27/21 00:10	1
Bromochloromethane	ND		1.0		ug/L			04/27/21 00:10	1
Bromodichloromethane	ND		1.0		ug/L			04/27/21 00:10	1
Bromoform	ND		1.0		ug/L			04/27/21 00:10	1
Bromomethane	ND		2.0		ug/L			04/27/21 00:10	1
Carbon disulfide	ND		2.0		ug/L			04/27/21 00:10	1
Carbon tetrachloride	ND		1.0		ug/L			04/27/21 00:10	1
Chlorobenzene	ND		1.0		ug/L			04/27/21 00:10	1
Chloroethane	ND		2.0		ug/L			04/27/21 00:10	1
Chloroform	ND		1.0		ug/L			04/27/21 00:10	1
Chloromethane	ND		2.0		ug/L			04/27/21 00:10	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/27/21 00:10	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/27/21 00:10	1
Dibromochloromethane	ND		1.0		ug/L			04/27/21 00:10	1
Dibromomethane	ND		1.0		ug/L			04/27/21 00:10	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/27/21 00:10	1
Ethylbenzene	ND		1.0		ug/L			04/27/21 00:10	1
Hexachlorobutadiene	ND		1.0		ug/L			04/27/21 00:10	1
Isopropylbenzene	ND		1.0		ug/L			04/27/21 00:10	1
Methylene Chloride	ND		5.0		ug/L			04/27/21 00:10	1
Naphthalene	ND		1.0		ug/L			04/27/21 00:10	1

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

Lab Sample ID: MB 280-533957/9
Matrix: Water
Analysis Batch: 533957

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		1.0		ug/L			04/27/21 00:10	1
N-Propylbenzene	ND		1.0		ug/L			04/27/21 00:10	1
sec-Butylbenzene	ND		1.0		ug/L			04/27/21 00:10	1
Styrene	ND		1.0		ug/L			04/27/21 00:10	1
tert-Butylbenzene	ND		1.0		ug/L			04/27/21 00:10	1
Tetrachloroethene	ND		1.0		ug/L			04/27/21 00:10	1
Toluene	ND		1.0		ug/L			04/27/21 00:10	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/27/21 00:10	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/27/21 00:10	1
Trichloroethene	ND		1.0		ug/L			04/27/21 00:10	1
Trichlorofluoromethane	ND		2.0		ug/L			04/27/21 00:10	1
Vinyl chloride	ND		1.0		ug/L			04/27/21 00:10	1
Xylenes (total)	ND		2.0		ug/L			04/27/21 00:10	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/27/21 00:10*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 127*		*04/27/21 00:10*	*1*
4-Bromofluorobenzene (Surr)	*106*		*78 - 120*		*04/27/21 00:10*	*1*
Dibromofluoromethane (Surr)	*99*		*77 - 120*		*04/27/21 00:10*	*1*
Toluene-d8 (Surr)	*108*		*80 - 125*		*04/27/21 00:10*	*1*

Lab Sample ID: LCS 280-533957/4
Matrix: Water
Analysis Batch: 533957

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	27.5		ug/L		110	65 - 135
1,1,1-Trichloroethane	25.0	27.2		ug/L		109	65 - 135
1,1,2,2-Tetrachloroethane	25.0	26.2		ug/L		105	58 - 135
1,1,2-Trichloroethane	25.0	24.0		ug/L		96	64 - 135
1,1-Dichloroethane	25.0	27.5		ug/L		110	65 - 135
1,1-Dichloroethene	25.0	27.2		ug/L		109	65 - 136
1,1-Dichloropropene	25.0	28.1		ug/L		112	65 - 135
1,2,3-Trichlorobenzene	25.0	27.4		ug/L		110	60 - 135
1,2,3-Trichloropropane	25.0	25.1		ug/L		100	65 - 135
1,2,4-Trichlorobenzene	25.0	27.1		ug/L		108	58 - 135
1,2,4-Trimethylbenzene	25.0	28.2		ug/L		113	65 - 135
1,2-Dichlorobenzene	25.0	26.0		ug/L		104	65 - 135
1,2-Dichloroethane	25.0	23.7		ug/L		95	65 - 135
1,2-Dichloropropane	25.0	26.5		ug/L		106	64 - 135
1,3,5-Trimethylbenzene	25.0	29.1		ug/L		116	65 - 135
1,3-Dichlorobenzene	25.0	26.6		ug/L		106	65 - 135
1,3-Dichloropropane	25.0	26.2		ug/L		105	64 - 135
1,4-Dichlorobenzene	25.0	25.5		ug/L		102	65 - 135
2,2-Dichloropropane	25.0	27.4		ug/L		110	65 - 135
2-Butanone (MEK)	100	81.9		ug/L		82	44 - 177

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

Lab Sample ID: LCS 280-533957/4
Matrix: Water
Analysis Batch: 533957

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chlorotoluene	25.0	27.3		ug/L		109	65 - 135
2-Hexanone	100	93.2		ug/L		93	57 - 139
4-Chlorotoluene	25.0	27.0		ug/L		108	65 - 135
4-Isopropyltoluene	25.0	29.2		ug/L		117	65 - 135
4-Methyl-2-pentanone	100	89.0		ug/L		89	60 - 150
Acetone	100	85.0		ug/L		85	39 - 156
Benzene	25.0	26.5		ug/L		106	65 - 135
Bromobenzene	25.0	25.8		ug/L		103	65 - 135
Bromochloromethane	25.0	25.1		ug/L		101	65 - 135
Bromodichloromethane	25.0	26.2		ug/L		105	65 - 135
Bromoform	25.0	22.8		ug/L		91	62 - 135
Bromomethane	25.0	19.9		ug/L		80	45 - 135
Carbon disulfide	25.0	29.4		ug/L		118	55 - 143
Carbon tetrachloride	25.0	25.3		ug/L		101	65 - 135
Chlorobenzene	25.0	25.7		ug/L		103	65 - 135
Chloroethane	25.0	23.4		ug/L		93	46 - 136
Chloroform	25.0	25.9		ug/L		104	65 - 135
Chloromethane	25.0	17.9		ug/L		72	34 - 145
cis-1,2-Dichloroethene	25.0	24.9		ug/L		99	65 - 135
cis-1,3-Dichloropropene	25.0	27.9		ug/L		112	65 - 135
Dibromochloromethane	25.0	24.0		ug/L		96	65 - 135
Dibromomethane	25.0	24.0		ug/L		96	65 - 135
Dichlorodifluoromethane	25.0	18.0		ug/L		72	43 - 142
Ethylbenzene	25.0	26.2		ug/L		105	65 - 135
Hexachlorobutadiene	25.0	26.1		ug/L		104	65 - 135
Isopropylbenzene	25.0	29.1		ug/L		116	65 - 135
Methylene Chloride	25.0	23.7		ug/L		95	54 - 141
Naphthalene	25.0	25.8		ug/L		103	42 - 135
n-Butylbenzene	25.0	30.7		ug/L		123	64 - 135
N-Propylbenzene	25.0	27.7		ug/L		111	65 - 135
sec-Butylbenzene	25.0	28.0		ug/L		112	64 - 135
Styrene	25.0	27.6		ug/L		111	65 - 135
tert-Butylbenzene	25.0	28.7		ug/L		115	65 - 135
Tetrachloroethene	25.0	26.5		ug/L		106	65 - 135
Toluene	25.0	25.1		ug/L		100	65 - 135
trans-1,2-Dichloroethene	25.0	27.6		ug/L		110	65 - 135
trans-1,3-Dichloropropene	25.0	26.0		ug/L		104	65 - 135
Trichloroethene	25.0	28.4		ug/L		114	65 - 135
Trichlorofluoromethane	25.0	25.7		ug/L		103	53 - 137
Vinyl chloride	25.0	20.9		ug/L		84	40 - 137

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 127*
4-Bromofluorobenzene (Surr)	*104*		*78 - 120*
Dibromofluoromethane (Surr)	*100*		*77 - 120*
Toluene-d8 (Surr)	*106*		*80 - 125*

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

Lab Sample ID: LCSD 280-533957/5
Matrix: Water
Analysis Batch: 533957

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane			25.0	26.0		ug/L		104	65 - 135	6	20
1,1,1-Trichloroethane			25.0	26.8		ug/L		107	65 - 135	1	20
1,1,2,2-Tetrachloroethane			25.0	25.1		ug/L		101	58 - 135	4	20
1,1,2-Trichloroethane			25.0	23.1		ug/L		93	64 - 135	4	27
1,1-Dichloroethane			25.0	27.0		ug/L		108	65 - 135	2	21
1,1-Dichloroethene			25.0	24.5		ug/L		98	65 - 136	10	20
1,1-Dichloropropene			25.0	27.3		ug/L		109	65 - 135	3	21
1,2,3-Trichlorobenzene			25.0	26.2		ug/L		105	60 - 135	4	36
1,2,3-Trichloropropane			25.0	25.6		ug/L		102	65 - 135	2	23
1,2,4-Trichlorobenzene			25.0	27.1		ug/L		108	58 - 135	0	25
1,2,4-Trimethylbenzene			25.0	27.3		ug/L		109	65 - 135	3	20
1,2-Dichlorobenzene			25.0	25.0		ug/L		100	65 - 135	4	20
1,2-Dichloroethane			25.0	23.3		ug/L		93	65 - 135	2	20
1,2-Dichloropropane			25.0	25.3		ug/L		101	64 - 135	4	20
1,3,5-Trimethylbenzene			25.0	27.8		ug/L		111	65 - 135	4	20
1,3-Dichlorobenzene			25.0	25.4		ug/L		102	65 - 135	4	20
1,3-Dichloropropane			25.0	25.6		ug/L		102	64 - 135	2	20
1,4-Dichlorobenzene			25.0	24.7		ug/L		99	65 - 135	3	23
2,2-Dichloropropane			25.0	27.5		ug/L		110	65 - 135	0	20
2-Butanone (MEK)			100	83.0		ug/L		83	44 - 177	1	32
2-Chlorotoluene			25.0	25.9		ug/L		104	65 - 135	5	20
2-Hexanone			100	93.9		ug/L		94	57 - 139	1	25
4-Chlorotoluene			25.0	26.2		ug/L		105	65 - 135	3	20
4-Isopropyltoluene			25.0	28.4		ug/L		113	65 - 135	3	20
4-Methyl-2-pentanone			100	91.2		ug/L		91	60 - 150	2	22
Acetone			100	85.3		ug/L		85	39 - 156	0	23
Benzene			25.0	25.5		ug/L		102	65 - 135	4	20
Bromobenzene			25.0	25.2		ug/L		101	65 - 135	3	26
Bromochloromethane			25.0	24.0		ug/L		96	65 - 135	5	29
Bromodichloromethane			25.0	26.0		ug/L		104	65 - 135	1	20
Bromoform			25.0	21.7		ug/L		87	62 - 135	5	27
Bromomethane			25.0	19.4		ug/L		77	45 - 135	3	33
Carbon disulfide			25.0	27.9		ug/L		112	55 - 143	5	20
Carbon tetrachloride			25.0	24.6		ug/L		98	65 - 135	3	21
Chlorobenzene			25.0	25.0		ug/L		100	65 - 135	3	20
Chloroethane			25.0	22.4		ug/L		90	46 - 136	4	25
Chloroform			25.0	24.7		ug/L		99	65 - 135	5	20
Chloromethane			25.0	16.8		ug/L		67	34 - 145	7	24
cis-1,2-Dichloroethene			25.0	24.1		ug/L		97	65 - 135	3	20
cis-1,3-Dichloropropene			25.0	26.6		ug/L		106	65 - 135	5	26
Dibromochloromethane			25.0	23.0		ug/L		92	65 - 135	4	20
Dibromomethane			25.0	23.5		ug/L		94	65 - 135	2	26
Dichlorodifluoromethane			25.0	16.8		ug/L		67	43 - 142	7	30
Ethylbenzene			25.0	25.9		ug/L		104	65 - 135	1	20
Hexachlorobutadiene			25.0	26.5		ug/L		106	65 - 135	2	25
Isopropylbenzene			25.0	27.7		ug/L		111	65 - 135	5	20
Methylene Chloride			25.0	23.5		ug/L		94	54 - 141	1	26
Naphthalene			25.0	25.7		ug/L		103	42 - 135	0	23

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

Lab Sample ID: LCSD 280-533957/5
Matrix: Water
Analysis Batch: 533957

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
n-Butylbenzene			25.0	29.5		ug/L		118	64 - 135	4	21
N-Propylbenzene			25.0	26.5		ug/L		106	65 - 135	4	20
sec-Butylbenzene			25.0	26.2		ug/L		105	64 - 135	7	21
Styrene			25.0	26.3		ug/L		105	65 - 135	5	26
tert-Butylbenzene			25.0	27.2		ug/L		109	65 - 135	5	21
Tetrachloroethene			25.0	25.6		ug/L		103	65 - 135	3	20
Toluene			25.0	24.1		ug/L		97	65 - 135	4	20
trans-1,2-Dichloroethene			25.0	26.4		ug/L		105	65 - 135	5	24
trans-1,3-Dichloropropene			25.0	25.7		ug/L		103	65 - 135	1	26
Trichloroethene			25.0	26.3		ug/L		105	65 - 135	8	20
Trichlorofluoromethane			25.0	24.4		ug/L		97	53 - 137	5	27
Vinyl chloride			25.0	20.0		ug/L		80	40 - 137	4	24

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 127*
4-Bromofluorobenzene (Surr)	*106*		*78 - 120*
Dibromofluoromethane (Surr)	*100*		*77 - 120*
Toluene-d8 (Surr)	*106*		*80 - 125*

Lab Sample ID: MB 280-534087/10
Matrix: Water
Analysis Batch: 534087

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/27/21 18:26	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/27/21 18:26	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/27/21 18:26	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/27/21 18:26	1
1,1-Dichloroethane	ND		1.0		ug/L			04/27/21 18:26	1
1,1-Dichloroethene	ND		1.0		ug/L			04/27/21 18:26	1
1,1-Dichloropropene	ND		1.0		ug/L			04/27/21 18:26	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/27/21 18:26	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/27/21 18:26	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/27/21 18:26	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/27/21 18:26	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/27/21 18:26	1
1,2-Dichloroethane	ND		1.0		ug/L			04/27/21 18:26	1
1,2-Dichloropropane	ND		1.0		ug/L			04/27/21 18:26	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/27/21 18:26	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/27/21 18:26	1
1,3-Dichloropropane	ND		1.0		ug/L			04/27/21 18:26	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/27/21 18:26	1
2,2-Dichloropropane	ND		5.0		ug/L			04/27/21 18:26	1
2-Butanone (MEK)	ND		6.0		ug/L			04/27/21 18:26	1
2-Chlorotoluene	ND		1.0		ug/L			04/27/21 18:26	1
2-Hexanone	ND		5.0		ug/L			04/27/21 18:26	1
4-Chlorotoluene	ND		1.0		ug/L			04/27/21 18:26	1
4-Isopropyltoluene	ND		1.0		ug/L			04/27/21 18:26	1

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

Lab Sample ID: MB 280-534087/10
Matrix: Water
Analysis Batch: 534087

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone	ND		5.0		ug/L			04/27/21 18:26	1
Acetone	ND		10		ug/L			04/27/21 18:26	1
Benzene	ND		1.0		ug/L			04/27/21 18:26	1
Bromobenzene	ND		1.0		ug/L			04/27/21 18:26	1
Bromochloromethane	ND		1.0		ug/L			04/27/21 18:26	1
Bromodichloromethane	ND		1.0		ug/L			04/27/21 18:26	1
Bromoform	ND		1.0		ug/L			04/27/21 18:26	1
Bromomethane	ND		2.0		ug/L			04/27/21 18:26	1
Carbon disulfide	ND		2.0		ug/L			04/27/21 18:26	1
Carbon tetrachloride	ND		1.0		ug/L			04/27/21 18:26	1
Chlorobenzene	ND		1.0		ug/L			04/27/21 18:26	1
Chloroethane	ND		2.0		ug/L			04/27/21 18:26	1
Chloroform	ND		1.0		ug/L			04/27/21 18:26	1
Chloromethane	ND		2.0		ug/L			04/27/21 18:26	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/27/21 18:26	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/27/21 18:26	1
Dibromochloromethane	ND		1.0		ug/L			04/27/21 18:26	1
Dibromomethane	ND		1.0		ug/L			04/27/21 18:26	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/27/21 18:26	1
Ethylbenzene	ND		1.0		ug/L			04/27/21 18:26	1
Hexachlorobutadiene	ND		1.0		ug/L			04/27/21 18:26	1
Isopropylbenzene	ND		1.0		ug/L			04/27/21 18:26	1
Methylene Chloride	ND		5.0		ug/L			04/27/21 18:26	1
Naphthalene	ND		1.0		ug/L			04/27/21 18:26	1
n-Butylbenzene	ND		1.0		ug/L			04/27/21 18:26	1
N-Propylbenzene	ND		1.0		ug/L			04/27/21 18:26	1
sec-Butylbenzene	ND		1.0		ug/L			04/27/21 18:26	1
Styrene	ND		1.0		ug/L			04/27/21 18:26	1
tert-Butylbenzene	ND		1.0		ug/L			04/27/21 18:26	1
Tetrachloroethene	ND		1.0		ug/L			04/27/21 18:26	1
Toluene	ND		1.0		ug/L			04/27/21 18:26	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/27/21 18:26	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/27/21 18:26	1
Trichloroethene	ND		1.0		ug/L			04/27/21 18:26	1
Trichlorofluoromethane	ND		2.0		ug/L			04/27/21 18:26	1
Vinyl chloride	ND		1.0		ug/L			04/27/21 18:26	1
Xylenes (total)	ND		2.0		ug/L			04/27/21 18:26	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/27/21 18:26*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 127*		*04/27/21 18:26*	*1*
4-Bromofluorobenzene (Surr)	*100*		*78 - 120*		*04/27/21 18:26*	*1*
Dibromofluoromethane (Surr)	*101*		*77 - 120*		*04/27/21 18:26*	*1*
Toluene-d8 (Surr)	*100*		*80 - 125*		*04/27/21 18:26*	*1*

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

Lab Sample ID: LCS 280-534087/5
Matrix: Water
Analysis Batch: 534087

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	24.7		ug/L		99	65 - 135
1,1,1-Trichloroethane	25.0	23.6		ug/L		94	65 - 135
1,1,2,2-Tetrachloroethane	25.0	22.9		ug/L		92	58 - 135
1,1,2-Trichloroethane	25.0	23.5		ug/L		94	64 - 135
1,1-Dichloroethane	25.0	23.5		ug/L		94	65 - 135
1,1-Dichloroethene	25.0	21.6		ug/L		87	65 - 136
1,1-Dichloropropene	25.0	23.0		ug/L		92	65 - 135
1,2,3-Trichlorobenzene	25.0	23.0		ug/L		92	60 - 135
1,2,3-Trichloropropane	25.0	23.6		ug/L		94	65 - 135
1,2,4-Trichlorobenzene	25.0	22.7		ug/L		91	58 - 135
1,2,4-Trimethylbenzene	25.0	23.9		ug/L		96	65 - 135
1,2-Dichlorobenzene	25.0	24.9		ug/L		100	65 - 135
1,2-Dichloroethane	25.0	25.3		ug/L		101	65 - 135
1,2-Dichloropropane	25.0	23.5		ug/L		94	64 - 135
1,3,5-Trimethylbenzene	25.0	23.7		ug/L		95	65 - 135
1,3-Dichlorobenzene	25.0	24.9		ug/L		99	65 - 135
1,3-Dichloropropane	25.0	23.4		ug/L		93	64 - 135
1,4-Dichlorobenzene	25.0	25.0		ug/L		100	65 - 135
2,2-Dichloropropane	25.0	24.4		ug/L		97	65 - 135
2-Butanone (MEK)	100	83.6		ug/L		84	44 - 177
2-Chlorotoluene	25.0	23.2		ug/L		93	65 - 135
2-Hexanone	100	88.2		ug/L		88	57 - 139
4-Chlorotoluene	25.0	23.5		ug/L		94	65 - 135
4-Isopropyltoluene	25.0	23.8		ug/L		95	65 - 135
4-Methyl-2-pentanone	100	90.6		ug/L		91	60 - 150
Acetone	100	89.3		ug/L		89	39 - 156
Benzene	25.0	23.8		ug/L		95	65 - 135
Bromobenzene	25.0	22.9		ug/L		92	65 - 135
Bromochloromethane	25.0	23.5		ug/L		94	65 - 135
Bromodichloromethane	25.0	24.0		ug/L		96	65 - 135
Bromoform	25.0	20.4		ug/L		81	62 - 135
Bromomethane	25.0	18.9		ug/L		76	45 - 135
Carbon disulfide	25.0	19.0		ug/L		76	55 - 143
Carbon tetrachloride	25.0	23.6		ug/L		94	65 - 135
Chlorobenzene	25.0	23.9		ug/L		96	65 - 135
Chloroethane	25.0	30.6		ug/L		123	46 - 136
Chloroform	25.0	24.1		ug/L		97	65 - 135
Chloromethane	25.0	24.5		ug/L		98	34 - 145
cis-1,2-Dichloroethene	25.0	23.4		ug/L		94	65 - 135
cis-1,3-Dichloropropene	25.0	23.2		ug/L		93	65 - 135
Dibromochloromethane	25.0	23.5		ug/L		94	65 - 135
Dibromomethane	25.0	23.0		ug/L		92	65 - 135
Dichlorodifluoromethane	25.0	21.1		ug/L		84	43 - 142
Ethylbenzene	25.0	23.5		ug/L		94	65 - 135
Hexachlorobutadiene	25.0	22.6		ug/L		90	65 - 135
Isopropylbenzene	25.0	23.4		ug/L		94	65 - 135
Methylene Chloride	25.0	25.0		ug/L		100	54 - 141
Naphthalene	25.0	21.5		ug/L		86	42 - 135

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

Lab Sample ID: LCS 280-534087/5
Matrix: Water
Analysis Batch: 534087

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
n-Butylbenzene			25.0	23.6		ug/L		94	64 - 135		
N-Propylbenzene			25.0	23.7		ug/L		95	65 - 135		
sec-Butylbenzene			25.0	23.3		ug/L		93	64 - 135		
Styrene			25.0	23.7		ug/L		95	65 - 135		
tert-Butylbenzene			25.0	23.2		ug/L		93	65 - 135		
Tetrachloroethene			25.0	23.2		ug/L		93	65 - 135		
Toluene			25.0	25.1		ug/L		101	65 - 135		
trans-1,2-Dichloroethene			25.0	22.3		ug/L		89	65 - 135		
trans-1,3-Dichloropropene			25.0	22.8		ug/L		91	65 - 135		
Trichloroethene			25.0	23.2		ug/L		93	65 - 135		
Trichlorofluoromethane			25.0	26.4		ug/L		106	53 - 137		
Vinyl chloride			25.0	27.6		ug/L		110	40 - 137		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 127*
4-Bromofluorobenzene (Surr)	*101*		*78 - 120*
Dibromofluoromethane (Surr)	*102*		*77 - 120*
Toluene-d8 (Surr)	*100*		*80 - 125*

Lab Sample ID: LCSD 280-534087/6
Matrix: Water
Analysis Batch: 534087

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane			25.0	24.3		ug/L		97	65 - 135	1	20
1,1,1-Trichloroethane			25.0	22.4		ug/L		89	65 - 135	5	20
1,1,2,2-Tetrachloroethane			25.0	23.1		ug/L		92	58 - 135	1	20
1,1,2-Trichloroethane			25.0	23.0		ug/L		92	64 - 135	3	27
1,1-Dichloroethane			25.0	22.7		ug/L		91	65 - 135	3	21
1,1-Dichloroethene			25.0	21.0		ug/L		84	65 - 136	3	20
1,1-Dichloropropene			25.0	22.1		ug/L		88	65 - 135	4	21
1,2,3-Trichlorobenzene			25.0	23.0		ug/L		92	60 - 135	0	36
1,2,3-Trichloropropane			25.0	23.5		ug/L		94	65 - 135	0	23
1,2,4-Trichlorobenzene			25.0	22.3		ug/L		89	58 - 135	2	25
1,2,4-Trimethylbenzene			25.0	23.0		ug/L		92	65 - 135	4	20
1,2-Dichlorobenzene			25.0	24.3		ug/L		97	65 - 135	2	20
1,2-Dichloroethane			25.0	25.1		ug/L		100	65 - 135	1	20
1,2-Dichloropropane			25.0	22.9		ug/L		92	64 - 135	3	20
1,3,5-Trimethylbenzene			25.0	22.7		ug/L		91	65 - 135	4	20
1,3-Dichlorobenzene			25.0	24.1		ug/L		96	65 - 135	3	20
1,3-Dichloropropane			25.0	23.0		ug/L		92	64 - 135	2	20
1,4-Dichlorobenzene			25.0	24.1		ug/L		96	65 - 135	3	23
2,2-Dichloropropane			25.0	23.3		ug/L		93	65 - 135	5	20
2-Butanone (MEK)			100	86.4		ug/L		86	44 - 177	3	32
2-Chlorotoluene			25.0	22.3		ug/L		89	65 - 135	4	20
2-Hexanone			100	91.8		ug/L		92	57 - 139	4	25
4-Chlorotoluene			25.0	22.4		ug/L		90	65 - 135	5	20
4-Isopropyltoluene			25.0	22.8		ug/L		91	65 - 135	4	20

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Groundwater

Job ID: 280-147597-1

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

Lab Sample ID: LCSD 280-534087/6
Matrix: Water
Analysis Batch: 534087

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Methyl-2-pentanone			100	93.8		ug/L		94	60 - 150	3	22
Acetone			100	93.8		ug/L		94	39 - 156	5	23
Benzene			25.0	23.0		ug/L		92	65 - 135	3	20
Bromobenzene			25.0	22.0		ug/L		88	65 - 135	4	26
Bromochloromethane			25.0	22.9		ug/L		91	65 - 135	3	29
Bromodichloromethane			25.0	23.2		ug/L		93	65 - 135	3	20
Bromoform			25.0	20.4		ug/L		82	62 - 135	0	27
Bromomethane			25.0	18.3		ug/L		73	45 - 135	3	33
Carbon disulfide			25.0	18.1		ug/L		72	55 - 143	5	20
Carbon tetrachloride			25.0	22.8		ug/L		91	65 - 135	3	21
Chlorobenzene			25.0	23.1		ug/L		93	65 - 135	3	20
Chloroethane			25.0	27.1		ug/L		108	46 - 136	12	25
Chloroform			25.0	23.4		ug/L		94	65 - 135	3	20
Chloromethane			25.0	23.6		ug/L		94	34 - 145	4	24
cis-1,2-Dichloroethene			25.0	22.7		ug/L		91	65 - 135	3	20
cis-1,3-Dichloropropene			25.0	22.8		ug/L		91	65 - 135	2	26
Dibromochloromethane			25.0	23.2		ug/L		93	65 - 135	1	20
Dibromomethane			25.0	22.7		ug/L		91	65 - 135	1	26
Dichlorodifluoromethane			25.0	20.3		ug/L		81	43 - 142	4	30
Ethylbenzene			25.0	22.7		ug/L		91	65 - 135	4	20
Hexachlorobutadiene			25.0	21.5		ug/L		86	65 - 135	5	25
Isopropylbenzene			25.0	22.2		ug/L		89	65 - 135	5	20
Methylene Chloride			25.0	24.1		ug/L		97	54 - 141	3	26
Naphthalene			25.0	21.9		ug/L		87	42 - 135	2	23
n-Butylbenzene			25.0	22.4		ug/L		89	64 - 135	5	21
N-Propylbenzene			25.0	22.4		ug/L		89	65 - 135	6	20
sec-Butylbenzene			25.0	22.3		ug/L		89	64 - 135	4	21
Styrene			25.0	23.2		ug/L		93	65 - 135	2	26
tert-Butylbenzene			25.0	22.0		ug/L		88	65 - 135	5	21
Tetrachloroethene			25.0	22.5		ug/L		90	65 - 135	3	20
Toluene			25.0	24.3		ug/L		97	65 - 135	3	20
trans-1,2-Dichloroethene			25.0	21.5		ug/L		86	65 - 135	3	24
trans-1,3-Dichloropropene			25.0	22.4		ug/L		90	65 - 135	2	26
Trichloroethene			25.0	22.5		ug/L		90	65 - 135	3	20
Trichlorofluoromethane			25.0	25.1		ug/L		101	53 - 137	5	27
Vinyl chloride			25.0	25.9		ug/L		104	40 - 137	6	24

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 127*
4-Bromofluorobenzene (Surr)	*100*		*78 - 120*
Dibromofluoromethane (Surr)	*103*		*77 - 120*
Toluene-d8 (Surr)	*101*		*80 - 125*

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

Lab Sample ID: 280-146973-E-3 MSD
Matrix: Water
Analysis Batch: 534087

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		25.0	24.5		ug/L		98	65 - 135	8	20
1,1,1-Trichloroethane	ND		25.0	23.2		ug/L		93	65 - 135	8	20
1,1,2,2-Tetrachloroethane	ND		25.0	23.2		ug/L		93	58 - 135	3	20
1,1,2-Trichloroethane	ND		25.0	23.9		ug/L		95	64 - 135	7	27
1,1-Dichloroethane	ND		25.0	23.4		ug/L		94	65 - 135	6	21
1,1-Dichloroethene	ND		25.0	21.5		ug/L		86	65 - 136	8	20
1,1-Dichloropropene	ND		25.0	22.3		ug/L		89	65 - 135	7	21
1,2,3-Trichlorobenzene	ND		25.0	23.4		ug/L		94	60 - 135	4	36
1,2,3-Trichloropropane	ND		25.0	24.3		ug/L		97	65 - 135	6	23
1,2,4-Trichlorobenzene	ND		25.0	22.4		ug/L		90	58 - 135	6	25
1,2,4-Trimethylbenzene	ND		25.0	22.9		ug/L		92	65 - 135	4	20
1,2-Dichlorobenzene	ND		25.0	24.7		ug/L		99	65 - 135	5	20
1,2-Dichloroethane	ND		25.0	25.5		ug/L		102	65 - 135	5	20
1,2-Dichloropropane	ND		25.0	23.4		ug/L		94	64 - 135	7	20
1,3,5-Trimethylbenzene	ND		25.0	22.8		ug/L		91	65 - 135	7	20
1,3-Dichlorobenzene	ND		25.0	24.2		ug/L		97	65 - 135	5	20
1,3-Dichloropropane	ND		25.0	23.3		ug/L		93	64 - 135	5	20
1,4-Dichlorobenzene	ND		25.0	24.7		ug/L		99	65 - 135	6	23
2,2-Dichloropropane	ND		25.0	22.0		ug/L		88	65 - 135	7	20
2-Butanone (MEK)	ND		100	90.1		ug/L		90	44 - 177	7	32
2-Chlorotoluene	ND		25.0	22.7		ug/L		91	65 - 135	5	20
2-Hexanone	ND		100	94.2		ug/L		94	57 - 139	6	25
4-Chlorotoluene	ND		25.0	22.8		ug/L		91	65 - 135	6	20
4-Isopropyltoluene	ND		25.0	22.5		ug/L		90	65 - 135	6	20
4-Methyl-2-pentanone	ND		100	96.8		ug/L		97	60 - 150	6	22
Acetone	ND		100	97.2		ug/L		97	39 - 156	7	23
Benzene	ND		25.0	23.6		ug/L		94	65 - 135	6	20
Bromobenzene	ND		25.0	22.4		ug/L		90	65 - 135	4	26
Bromochloromethane	ND		25.0	23.5		ug/L		94	65 - 135	7	29
Bromodichloromethane	ND		25.0	23.9		ug/L		96	65 - 135	9	20
Bromoform	ND		25.0	21.2		ug/L		85	62 - 135	11	27
Bromomethane	ND		25.0	18.0		ug/L		72	45 - 135	22	33
Carbon disulfide	ND		25.0	17.9		ug/L		72	55 - 143	10	20
Carbon tetrachloride	ND		25.0	23.0		ug/L		92	65 - 135	8	21
Chlorobenzene	ND		25.0	23.8		ug/L		95	65 - 135	7	20
Chloroethane	ND		25.0	26.9		ug/L		108	46 - 136	7	25
Chloroform	ND		25.0	24.1		ug/L		97	65 - 135	8	20
Chloromethane	ND		25.0	23.3		ug/L		93	34 - 145	9	24
cis-1,2-Dichloroethene	20		25.0	39.6		ug/L		77	65 - 135	5	20
cis-1,3-Dichloropropene	ND		25.0	22.5		ug/L		90	65 - 135	8	26
Dibromochloromethane	ND		25.0	23.4		ug/L		94	65 - 135	9	20
Dibromomethane	ND		25.0	23.2		ug/L		93	65 - 135	7	26
Dichlorodifluoromethane	ND		25.0	19.9		ug/L		80	43 - 142	5	30
Ethylbenzene	ND		25.0	22.8		ug/L		91	65 - 135	6	20
Hexachlorobutadiene	ND		25.0	20.6		ug/L		83	65 - 135	7	25
Isopropylbenzene	ND		25.0	22.0		ug/L		88	65 - 135	5	20
Methylene Chloride	ND		25.0	25.1		ug/L		100	54 - 141	8	26
Naphthalene	ND		25.0	22.4		ug/L		90	42 - 135	5	23

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

Lab Sample ID: 280-146973-E-3 MSD
Matrix: Water
Analysis Batch: 534087

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
n-Butylbenzene	ND		25.0	21.6		ug/L		86	64 - 135	4	21
N-Propylbenzene	ND		25.0	22.4		ug/L		90	65 - 135	6	20
sec-Butylbenzene	ND		25.0	22.1		ug/L		89	64 - 135	7	21
Styrene	ND		25.0	23.5		ug/L		94	65 - 135	7	26
tert-Butylbenzene	ND		25.0	22.1		ug/L		88	65 - 135	6	21
Tetrachloroethene	ND		25.0	22.8		ug/L		91	65 - 135	8	20
Toluene	ND		25.0	24.9		ug/L		100	65 - 135	7	20
trans-1,2-Dichloroethene	6.0		25.0	26.1		ug/L		80	65 - 135	6	24
trans-1,3-Dichloropropene	ND		25.0	22.5		ug/L		90	65 - 135	9	26
Trichloroethene	7.0		25.0	27.2		ug/L		81	65 - 135	7	20
Trichlorofluoromethane	ND		25.0	25.0		ug/L		100	53 - 137	7	27
Vinyl chloride	11		25.0	33.4		ug/L		91	40 - 137	7	24

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 127*
4-Bromofluorobenzene (Surr)	*98*		*78 - 120*
Dibromofluoromethane (Surr)	*104*		*77 - 120*
Toluene-d8 (Surr)	*99*		*80 - 125*

Lab Sample ID: 280-146973-G-3 MS
Matrix: Water
Analysis Batch: 534087

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	ND		25.0	22.7		ug/L		91	65 - 135
1,1,1-Trichloroethane	ND		25.0	21.3		ug/L		85	65 - 135
1,1,2,2-Tetrachloroethane	ND		25.0	22.5		ug/L		90	58 - 135
1,1,2-Trichloroethane	ND		25.0	22.2		ug/L		89	64 - 135
1,1-Dichloroethane	ND		25.0	22.0		ug/L		88	65 - 135
1,1-Dichloroethene	ND		25.0	19.8		ug/L		79	65 - 136
1,1-Dichloropropene	ND		25.0	20.7		ug/L		83	65 - 135
1,2,3-Trichlorobenzene	ND		25.0	22.4		ug/L		90	60 - 135
1,2,3-Trichloropropane	ND		25.0	23.0		ug/L		92	65 - 135
1,2,4-Trichlorobenzene	ND		25.0	21.1		ug/L		85	58 - 135
1,2,4-Trimethylbenzene	ND		25.0	21.9		ug/L		88	65 - 135
1,2-Dichlorobenzene	ND		25.0	23.4		ug/L		94	65 - 135
1,2-Dichloroethane	ND		25.0	24.2		ug/L		97	65 - 135
1,2-Dichloropropane	ND		25.0	21.9		ug/L		87	64 - 135
1,3,5-Trimethylbenzene	ND		25.0	21.3		ug/L		85	65 - 135
1,3-Dichlorobenzene	ND		25.0	23.0		ug/L		92	65 - 135
1,3-Dichloropropane	ND		25.0	22.2		ug/L		89	64 - 135
1,4-Dichlorobenzene	ND		25.0	23.2		ug/L		93	65 - 135
2,2-Dichloropropane	ND		25.0	20.5		ug/L		82	65 - 135
2-Butanone (MEK)	ND		100	84.2		ug/L		84	44 - 177
2-Chlorotoluene	ND		25.0	21.6		ug/L		86	65 - 135
2-Hexanone	ND		100	88.9		ug/L		89	57 - 139
4-Chlorotoluene	ND		25.0	21.5		ug/L		86	65 - 135
4-Isopropyltoluene	ND		25.0	21.3		ug/L		85	65 - 135

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

Lab Sample ID: 280-146973-G-3 MS
Matrix: Water
Analysis Batch: 534087

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Methyl-2-pentanone	ND		100	91.4		ug/L		91	60 - 150
Acetone	ND		100	90.8		ug/L		91	39 - 156
Benzene	ND		25.0	22.1		ug/L		89	65 - 135
Bromobenzene	ND		25.0	21.5		ug/L		86	65 - 135
Bromochloromethane	ND		25.0	22.0		ug/L		88	65 - 135
Bromodichloromethane	ND		25.0	21.9		ug/L		88	65 - 135
Bromoform	ND		25.0	19.1		ug/L		76	62 - 135
Bromomethane	ND		25.0	14.4		ug/L		58	45 - 135
Carbon disulfide	ND		25.0	16.3		ug/L		65	55 - 143
Carbon tetrachloride	ND		25.0	21.2		ug/L		85	65 - 135
Chlorobenzene	ND		25.0	22.2		ug/L		89	65 - 135
Chloroethane	ND		25.0	25.1		ug/L		100	46 - 136
Chloroform	ND		25.0	22.4		ug/L		89	65 - 135
Chloromethane	ND		25.0	21.2		ug/L		85	34 - 145
cis-1,2-Dichloroethene	20		25.0	37.7		ug/L		69	65 - 135
cis-1,3-Dichloropropene	ND		25.0	20.8		ug/L		83	65 - 135
Dibromochloromethane	ND		25.0	21.4		ug/L		86	65 - 135
Dibromomethane	ND		25.0	21.7		ug/L		87	65 - 135
Dichlorodifluoromethane	ND		25.0	18.9		ug/L		75	43 - 142
Ethylbenzene	ND		25.0	21.4		ug/L		86	65 - 135
Hexachlorobutadiene	ND		25.0	19.2		ug/L		77	65 - 135
Isopropylbenzene	ND		25.0	21.0		ug/L		84	65 - 135
Methylene Chloride	ND		25.0	23.2		ug/L		93	54 - 141
Naphthalene	ND		25.0	21.2		ug/L		85	42 - 135
n-Butylbenzene	ND		25.0	20.7		ug/L		83	64 - 135
N-Propylbenzene	ND		25.0	21.2		ug/L		85	65 - 135
sec-Butylbenzene	ND		25.0	20.7		ug/L		83	64 - 135
Styrene	ND		25.0	21.9		ug/L		88	65 - 135
tert-Butylbenzene	ND		25.0	20.8		ug/L		83	65 - 135
Tetrachloroethene	ND		25.0	21.1		ug/L		84	65 - 135
Toluene	ND		25.0	23.2		ug/L		93	65 - 135
trans-1,2-Dichloroethene	6.0		25.0	24.5		ug/L		74	65 - 135
trans-1,3-Dichloropropene	ND		25.0	20.6		ug/L		82	65 - 135
Trichloroethene	7.0		25.0	25.3		ug/L		73	65 - 135
Trichlorofluoromethane	ND		25.0	23.4		ug/L		94	53 - 137
Vinyl chloride	11		25.0	31.2		ug/L		82	40 - 137

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 127*
4-Bromofluorobenzene (Surr)	*101*		*78 - 120*
Dibromofluoromethane (Surr)	*103*		*77 - 120*
Toluene-d8 (Surr)	*100*		*80 - 125*

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

Lab Sample ID: MB 280-534118/10
Matrix: Water
Analysis Batch: 534118

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/28/21 09:52	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/28/21 09:52	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/28/21 09:52	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/28/21 09:52	1
1,1-Dichloroethane	ND		1.0		ug/L			04/28/21 09:52	1
1,1-Dichloroethene	ND		1.0		ug/L			04/28/21 09:52	1
1,1-Dichloropropene	ND		1.0		ug/L			04/28/21 09:52	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/28/21 09:52	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/28/21 09:52	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/28/21 09:52	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/28/21 09:52	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/28/21 09:52	1
1,2-Dichloroethane	ND		1.0		ug/L			04/28/21 09:52	1
1,2-Dichloropropane	ND		1.0		ug/L			04/28/21 09:52	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/28/21 09:52	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/28/21 09:52	1
1,3-Dichloropropane	ND		1.0		ug/L			04/28/21 09:52	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/28/21 09:52	1
2,2-Dichloropropane	ND		5.0		ug/L			04/28/21 09:52	1
2-Butanone (MEK)	ND		6.0		ug/L			04/28/21 09:52	1
2-Chlorotoluene	ND		1.0		ug/L			04/28/21 09:52	1
2-Hexanone	ND		5.0		ug/L			04/28/21 09:52	1
4-Chlorotoluene	ND		1.0		ug/L			04/28/21 09:52	1
4-Isopropyltoluene	ND		1.0		ug/L			04/28/21 09:52	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/28/21 09:52	1
Acetone	ND		10		ug/L			04/28/21 09:52	1
Benzene	ND		1.0		ug/L			04/28/21 09:52	1
Bromobenzene	ND		1.0		ug/L			04/28/21 09:52	1
Bromochloromethane	ND		1.0		ug/L			04/28/21 09:52	1
Bromodichloromethane	ND		1.0		ug/L			04/28/21 09:52	1
Bromoform	ND		1.0		ug/L			04/28/21 09:52	1
Bromomethane	ND		2.0		ug/L			04/28/21 09:52	1
Carbon disulfide	ND		2.0		ug/L			04/28/21 09:52	1
Carbon tetrachloride	ND		1.0		ug/L			04/28/21 09:52	1
Chlorobenzene	ND		1.0		ug/L			04/28/21 09:52	1
Chloroethane	ND		2.0		ug/L			04/28/21 09:52	1
Chloroform	ND		1.0		ug/L			04/28/21 09:52	1
Chloromethane	ND		2.0		ug/L			04/28/21 09:52	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/28/21 09:52	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/28/21 09:52	1
Dibromochloromethane	ND		1.0		ug/L			04/28/21 09:52	1
Dibromomethane	ND		1.0		ug/L			04/28/21 09:52	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/28/21 09:52	1
Ethylbenzene	ND		1.0		ug/L			04/28/21 09:52	1
Hexachlorobutadiene	ND		1.0		ug/L			04/28/21 09:52	1
Isopropylbenzene	ND		1.0		ug/L			04/28/21 09:52	1
Methylene Chloride	ND		5.0		ug/L			04/28/21 09:52	1
Naphthalene	ND		1.0		ug/L			04/28/21 09:52	1

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

Lab Sample ID: MB 280-534118/10
Matrix: Water
Analysis Batch: 534118

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		1.0		ug/L			04/28/21 09:52	1
N-Propylbenzene	ND		1.0		ug/L			04/28/21 09:52	1
sec-Butylbenzene	ND		1.0		ug/L			04/28/21 09:52	1
Styrene	ND		1.0		ug/L			04/28/21 09:52	1
tert-Butylbenzene	ND		1.0		ug/L			04/28/21 09:52	1
Tetrachloroethene	ND		1.0		ug/L			04/28/21 09:52	1
Toluene	ND		1.0		ug/L			04/28/21 09:52	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/28/21 09:52	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/28/21 09:52	1
Trichloroethene	ND		1.0		ug/L			04/28/21 09:52	1
Trichlorofluoromethane	ND		2.0		ug/L			04/28/21 09:52	1
Vinyl chloride	ND		1.0		ug/L			04/28/21 09:52	1
Xylenes (total)	ND		2.0		ug/L			04/28/21 09:52	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/28/21 09:52*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 127*		*04/28/21 09:52*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*04/28/21 09:52*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 120*		*04/28/21 09:52*	*1*
Toluene-d8 (Surr)	*99*		*80 - 125*		*04/28/21 09:52*	*1*

Lab Sample ID: LCS 280-534118/5
Matrix: Water
Analysis Batch: 534118

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	24.4		ug/L		98	65 - 135
1,1,1-Trichloroethane	25.0	24.2		ug/L		97	65 - 135
1,1,2,2-Tetrachloroethane	25.0	23.4		ug/L		94	58 - 135
1,1,2-Trichloroethane	25.0	24.7		ug/L		99	64 - 135
1,1-Dichloroethane	25.0	25.4		ug/L		101	65 - 135
1,1-Dichloroethene	25.0	24.0		ug/L		96	65 - 136
1,1-Dichloropropene	25.0	24.2		ug/L		97	65 - 135
1,2,3-Trichlorobenzene	25.0	23.6		ug/L		94	60 - 135
1,2,3-Trichloropropane	25.0	22.2		ug/L		89	65 - 135
1,2,4-Trichlorobenzene	25.0	23.2		ug/L		93	58 - 135
1,2,4-Trimethylbenzene	25.0	24.9		ug/L		100	65 - 135
1,2-Dichlorobenzene	25.0	24.1		ug/L		97	65 - 135
1,2-Dichloroethane	25.0	22.8		ug/L		91	65 - 135
1,2-Dichloropropane	25.0	25.5		ug/L		102	64 - 135
1,3,5-Trimethylbenzene	25.0	24.9		ug/L		100	65 - 135
1,3-Dichlorobenzene	25.0	24.5		ug/L		98	65 - 135
1,3-Dichloropropane	25.0	24.4		ug/L		98	64 - 135
1,4-Dichlorobenzene	25.0	23.6		ug/L		94	65 - 135
2,2-Dichloropropane	25.0	25.4		ug/L		102	65 - 135
2-Butanone (MEK)	100	85.3		ug/L		85	44 - 177

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

Lab Sample ID: LCS 280-534118/5
Matrix: Water
Analysis Batch: 534118

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chlorotoluene	25.0	24.6		ug/L		99	65 - 135
2-Hexanone	100	81.1		ug/L		81	57 - 139
4-Chlorotoluene	25.0	24.0		ug/L		96	65 - 135
4-Isopropyltoluene	25.0	24.9		ug/L		100	65 - 135
4-Methyl-2-pentanone	100	84.0		ug/L		84	60 - 150
Acetone	100	80.9		ug/L		81	39 - 156
Benzene	25.0	24.7		ug/L		99	65 - 135
Bromobenzene	25.0	24.2		ug/L		97	65 - 135
Bromochloromethane	25.0	27.5		ug/L		110	65 - 135
Bromodichloromethane	25.0	25.0		ug/L		100	65 - 135
Bromoform	25.0	22.1		ug/L		88	62 - 135
Bromomethane	25.0	29.4		ug/L		118	45 - 135
Carbon disulfide	25.0	24.1		ug/L		96	55 - 143
Carbon tetrachloride	25.0	25.0		ug/L		100	65 - 135
Chlorobenzene	25.0	24.6		ug/L		99	65 - 135
Chloroethane	25.0	26.8		ug/L		107	46 - 136
Chloroform	25.0	25.0		ug/L		100	65 - 135
Chloromethane	25.0	27.0		ug/L		108	34 - 145
cis-1,2-Dichloroethene	25.0	24.3		ug/L		97	65 - 135
cis-1,3-Dichloropropene	25.0	25.0		ug/L		100	65 - 135
Dibromochloromethane	25.0	25.9		ug/L		104	65 - 135
Dibromomethane	25.0	23.8		ug/L		95	65 - 135
Dichlorodifluoromethane	25.0	28.1		ug/L		112	43 - 142
Ethylbenzene	25.0	25.1		ug/L		100	65 - 135
Hexachlorobutadiene	25.0	24.4		ug/L		98	65 - 135
Isopropylbenzene	25.0	24.2		ug/L		97	65 - 135
Methylene Chloride	25.0	24.5		ug/L		98	54 - 141
Naphthalene	25.0	22.0		ug/L		88	42 - 135
n-Butylbenzene	25.0	24.2		ug/L		97	64 - 135
N-Propylbenzene	25.0	24.9		ug/L		100	65 - 135
sec-Butylbenzene	25.0	24.9		ug/L		100	64 - 135
Styrene	25.0	25.4		ug/L		102	65 - 135
tert-Butylbenzene	25.0	24.5		ug/L		98	65 - 135
Tetrachloroethene	25.0	24.5		ug/L		98	65 - 135
Toluene	25.0	24.9		ug/L		99	65 - 135
trans-1,2-Dichloroethene	25.0	24.3		ug/L		97	65 - 135
trans-1,3-Dichloropropene	25.0	25.2		ug/L		101	65 - 135
Trichloroethene	25.0	23.3		ug/L		93	65 - 135
Trichlorofluoromethane	25.0	24.5		ug/L		98	53 - 137
Vinyl chloride	25.0	24.0		ug/L		96	40 - 137

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 127*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*
Dibromofluoromethane (Surr)	*100*		*77 - 120*
Toluene-d8 (Surr)	*99*		*80 - 125*

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

Lab Sample ID: LCSD 280-534118/6
Matrix: Water
Analysis Batch: 534118

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane			25.0	24.3		ug/L		97	65 - 135	0	20
1,1,1-Trichloroethane			25.0	23.9		ug/L		96	65 - 135	1	20
1,1,2,2-Tetrachloroethane			25.0	23.0		ug/L		92	58 - 135	2	20
1,1,2-Trichloroethane			25.0	24.3		ug/L		97	64 - 135	2	27
1,1-Dichloroethane			25.0	24.7		ug/L		99	65 - 135	3	21
1,1-Dichloroethene			25.0	23.5		ug/L		94	65 - 136	2	20
1,1-Dichloropropene			25.0	23.4		ug/L		94	65 - 135	3	21
1,2,3-Trichlorobenzene			25.0	23.8		ug/L		95	60 - 135	1	36
1,2,3-Trichloropropane			25.0	22.7		ug/L		91	65 - 135	2	23
1,2,4-Trichlorobenzene			25.0	23.0		ug/L		92	58 - 135	1	25
1,2,4-Trimethylbenzene			25.0	24.6		ug/L		98	65 - 135	1	20
1,2-Dichlorobenzene			25.0	24.1		ug/L		96	65 - 135	0	20
1,2-Dichloroethane			25.0	22.6		ug/L		90	65 - 135	1	20
1,2-Dichloropropane			25.0	24.8		ug/L		99	64 - 135	3	20
1,3,5-Trimethylbenzene			25.0	24.4		ug/L		98	65 - 135	2	20
1,3-Dichlorobenzene			25.0	24.2		ug/L		97	65 - 135	1	20
1,3-Dichloropropane			25.0	24.2		ug/L		97	64 - 135	1	20
1,4-Dichlorobenzene			25.0	23.5		ug/L		94	65 - 135	0	23
2,2-Dichloropropane			25.0	24.7		ug/L		99	65 - 135	3	20
2-Butanone (MEK)			100	84.1		ug/L		84	44 - 177	1	32
2-Chlorotoluene			25.0	24.4		ug/L		98	65 - 135	1	20
2-Hexanone			100	80.5		ug/L		80	57 - 139	1	25
4-Chlorotoluene			25.0	23.9		ug/L		96	65 - 135	0	20
4-Isopropyltoluene			25.0	24.3		ug/L		97	65 - 135	2	20
4-Methyl-2-pentanone			100	82.1		ug/L		82	60 - 150	2	22
Acetone			100	80.3		ug/L		80	39 - 156	1	23
Benzene			25.0	24.1		ug/L		96	65 - 135	2	20
Bromobenzene			25.0	23.7		ug/L		95	65 - 135	2	26
Bromochloromethane			25.0	27.4		ug/L		110	65 - 135	0	29
Bromodichloromethane			25.0	24.8		ug/L		99	65 - 135	1	20
Bromoform			25.0	21.6		ug/L		86	62 - 135	2	27
Bromomethane			25.0	28.9		ug/L		115	45 - 135	2	33
Carbon disulfide			25.0	23.6		ug/L		94	55 - 143	2	20
Carbon tetrachloride			25.0	23.7		ug/L		95	65 - 135	5	21
Chlorobenzene			25.0	24.4		ug/L		98	65 - 135	1	20
Chloroethane			25.0	26.8		ug/L		107	46 - 136	0	25
Chloroform			25.0	24.4		ug/L		98	65 - 135	3	20
Chloromethane			25.0	26.5		ug/L		106	34 - 145	2	24
cis-1,2-Dichloroethene			25.0	24.0		ug/L		96	65 - 135	2	20
cis-1,3-Dichloropropene			25.0	24.8		ug/L		99	65 - 135	1	26
Dibromochloromethane			25.0	26.0		ug/L		104	65 - 135	1	20
Dibromomethane			25.0	23.3		ug/L		93	65 - 135	2	26
Dichlorodifluoromethane			25.0	26.8		ug/L		107	43 - 142	5	30
Ethylbenzene			25.0	24.3		ug/L		97	65 - 135	3	20
Hexachlorobutadiene			25.0	24.5		ug/L		98	65 - 135	0	25
Isopropylbenzene			25.0	23.7		ug/L		95	65 - 135	2	20
Methylene Chloride			25.0	24.1		ug/L		96	54 - 141	2	26
Naphthalene			25.0	21.4		ug/L		86	42 - 135	3	23

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

Lab Sample ID: LCSD 280-534118/6
Matrix: Water
Analysis Batch: 534118

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
n-Butylbenzene			25.0	23.6		ug/L		94	64 - 135	3	21
N-Propylbenzene			25.0	24.2		ug/L		97	65 - 135	3	20
sec-Butylbenzene			25.0	24.5		ug/L		98	64 - 135	2	21
Styrene			25.0	25.1		ug/L		100	65 - 135	1	26
tert-Butylbenzene			25.0	23.8		ug/L		95	65 - 135	3	21
Tetrachloroethene			25.0	24.4		ug/L		97	65 - 135	1	20
Toluene			25.0	24.4		ug/L		98	65 - 135	2	20
trans-1,2-Dichloroethene			25.0	23.0		ug/L		92	65 - 135	5	24
trans-1,3-Dichloropropene			25.0	24.9		ug/L		99	65 - 135	1	26
Trichloroethene			25.0	23.0		ug/L		92	65 - 135	1	20
Trichlorofluoromethane			25.0	23.9		ug/L		96	53 - 137	2	27
Vinyl chloride			25.0	24.0		ug/L		96	40 - 137	0	24

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 127*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*
Dibromofluoromethane (Surr)	*101*		*77 - 120*
Toluene-d8 (Surr)	*100*		*80 - 125*

Lab Sample ID: MB 280-534267/10
Matrix: Water
Analysis Batch: 534267

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/29/21 09:33	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/29/21 09:33	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/29/21 09:33	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/29/21 09:33	1
1,1-Dichloroethane	ND		1.0		ug/L			04/29/21 09:33	1
1,1-Dichloroethene	ND		1.0		ug/L			04/29/21 09:33	1
1,1-Dichloropropene	ND		1.0		ug/L			04/29/21 09:33	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/29/21 09:33	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/29/21 09:33	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/29/21 09:33	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/29/21 09:33	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/29/21 09:33	1
1,2-Dichloroethane	ND		1.0		ug/L			04/29/21 09:33	1
1,2-Dichloropropane	ND		1.0		ug/L			04/29/21 09:33	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/29/21 09:33	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/29/21 09:33	1
1,3-Dichloropropane	ND		1.0		ug/L			04/29/21 09:33	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/29/21 09:33	1
2,2-Dichloropropane	ND		5.0		ug/L			04/29/21 09:33	1
2-Butanone (MEK)	ND		6.0		ug/L			04/29/21 09:33	1
2-Chlorotoluene	ND		1.0		ug/L			04/29/21 09:33	1
2-Hexanone	ND		5.0		ug/L			04/29/21 09:33	1
4-Chlorotoluene	ND		1.0		ug/L			04/29/21 09:33	1
4-Isopropyltoluene	ND		1.0		ug/L			04/29/21 09:33	1

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

Lab Sample ID: MB 280-534267/10
Matrix: Water
Analysis Batch: 534267

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone	ND		5.0		ug/L			04/29/21 09:33	1
Acetone	ND		10		ug/L			04/29/21 09:33	1
Benzene	ND		1.0		ug/L			04/29/21 09:33	1
Bromobenzene	ND		1.0		ug/L			04/29/21 09:33	1
Bromochloromethane	ND		1.0		ug/L			04/29/21 09:33	1
Bromodichloromethane	ND		1.0		ug/L			04/29/21 09:33	1
Bromoform	ND		1.0		ug/L			04/29/21 09:33	1
Bromomethane	ND		2.0		ug/L			04/29/21 09:33	1
Carbon disulfide	ND		2.0		ug/L			04/29/21 09:33	1
Carbon tetrachloride	ND		1.0		ug/L			04/29/21 09:33	1
Chlorobenzene	ND		1.0		ug/L			04/29/21 09:33	1
Chloroethane	ND		2.0		ug/L			04/29/21 09:33	1
Chloroform	ND		1.0		ug/L			04/29/21 09:33	1
Chloromethane	ND		2.0		ug/L			04/29/21 09:33	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/29/21 09:33	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/29/21 09:33	1
Dibromochloromethane	ND		1.0		ug/L			04/29/21 09:33	1
Dibromomethane	ND		1.0		ug/L			04/29/21 09:33	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/29/21 09:33	1
Ethylbenzene	ND		1.0		ug/L			04/29/21 09:33	1
Hexachlorobutadiene	ND		1.0		ug/L			04/29/21 09:33	1
Isopropylbenzene	ND		1.0		ug/L			04/29/21 09:33	1
Methylene Chloride	ND		5.0		ug/L			04/29/21 09:33	1
Naphthalene	ND		1.0		ug/L			04/29/21 09:33	1
n-Butylbenzene	ND		1.0		ug/L			04/29/21 09:33	1
N-Propylbenzene	ND		1.0		ug/L			04/29/21 09:33	1
sec-Butylbenzene	ND		1.0		ug/L			04/29/21 09:33	1
Styrene	ND		1.0		ug/L			04/29/21 09:33	1
tert-Butylbenzene	ND		1.0		ug/L			04/29/21 09:33	1
Tetrachloroethene	ND		1.0		ug/L			04/29/21 09:33	1
Toluene	ND		1.0		ug/L			04/29/21 09:33	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/29/21 09:33	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/29/21 09:33	1
Trichloroethene	ND		1.0		ug/L			04/29/21 09:33	1
Trichlorofluoromethane	ND		2.0		ug/L			04/29/21 09:33	1
Vinyl chloride	ND		1.0		ug/L			04/29/21 09:33	1
Xylenes (total)	ND		2.0		ug/L			04/29/21 09:33	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/29/21 09:33*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 127*		*04/29/21 09:33*	*1*
4-Bromofluorobenzene (Surr)	*95*		*78 - 120*		*04/29/21 09:33*	*1*
Dibromofluoromethane (Surr)	*102*		*77 - 120*		*04/29/21 09:33*	*1*
Toluene-d8 (Surr)	*96*		*80 - 125*		*04/29/21 09:33*	*1*

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

Lab Sample ID: LCS 280-534267/5
Matrix: Water
Analysis Batch: 534267

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	24.1		ug/L		96	65 - 135
1,1,1-Trichloroethane	25.0	24.1		ug/L		96	65 - 135
1,1,2,2-Tetrachloroethane	25.0	22.5		ug/L		90	58 - 135
1,1,2-Trichloroethane	25.0	24.3		ug/L		97	64 - 135
1,1-Dichloroethane	25.0	25.1		ug/L		100	65 - 135
1,1-Dichloroethene	25.0	23.6		ug/L		94	65 - 136
1,1-Dichloropropene	25.0	23.5		ug/L		94	65 - 135
1,2,3-Trichlorobenzene	25.0	22.7		ug/L		91	60 - 135
1,2,3-Trichloropropane	25.0	22.5		ug/L		90	65 - 135
1,2,4-Trichlorobenzene	25.0	21.8		ug/L		87	58 - 135
1,2,4-Trimethylbenzene	25.0	23.7		ug/L		95	65 - 135
1,2-Dichlorobenzene	25.0	23.5		ug/L		94	65 - 135
1,2-Dichloroethane	25.0	22.6		ug/L		90	65 - 135
1,2-Dichloropropane	25.0	24.7		ug/L		99	64 - 135
1,3,5-Trimethylbenzene	25.0	23.5		ug/L		94	65 - 135
1,3-Dichlorobenzene	25.0	23.3		ug/L		93	65 - 135
1,3-Dichloropropane	25.0	23.7		ug/L		95	64 - 135
1,4-Dichlorobenzene	25.0	22.6		ug/L		90	65 - 135
2,2-Dichloropropane	25.0	23.8		ug/L		95	65 - 135
2-Butanone (MEK)	100	85.0		ug/L		85	44 - 177
2-Chlorotoluene	25.0	23.8		ug/L		95	65 - 135
2-Hexanone	100	78.7		ug/L		79	57 - 139
4-Chlorotoluene	25.0	23.6		ug/L		94	65 - 135
4-Isopropyltoluene	25.0	23.6		ug/L		95	65 - 135
4-Methyl-2-pentanone	100	84.5		ug/L		85	60 - 150
Acetone	100	80.4		ug/L		80	39 - 156
Benzene	25.0	24.3		ug/L		97	65 - 135
Bromobenzene	25.0	23.2		ug/L		93	65 - 135
Bromochloromethane	25.0	27.6		ug/L		111	65 - 135
Bromodichloromethane	25.0	24.9		ug/L		100	65 - 135
Bromoform	25.0	21.4		ug/L		86	62 - 135
Bromomethane	25.0	31.2		ug/L		125	45 - 135
Carbon disulfide	25.0	23.5		ug/L		94	55 - 143
Carbon tetrachloride	25.0	24.1		ug/L		96	65 - 135
Chlorobenzene	25.0	23.8		ug/L		95	65 - 135
Chloroethane	25.0	25.5		ug/L		102	46 - 136
Chloroform	25.0	24.7		ug/L		99	65 - 135
Chloromethane	25.0	25.3		ug/L		101	34 - 145
cis-1,2-Dichloroethene	25.0	24.0		ug/L		96	65 - 135
cis-1,3-Dichloropropene	25.0	24.0		ug/L		96	65 - 135
Dibromochloromethane	25.0	24.9		ug/L		99	65 - 135
Dibromomethane	25.0	23.5		ug/L		94	65 - 135
Dichlorodifluoromethane	25.0	26.1		ug/L		105	43 - 142
Ethylbenzene	25.0	24.1		ug/L		96	65 - 135
Hexachlorobutadiene	25.0	23.2		ug/L		93	65 - 135
Isopropylbenzene	25.0	23.2		ug/L		93	65 - 135
Methylene Chloride	25.0	24.1		ug/L		96	54 - 141
Naphthalene	25.0	20.4		ug/L		82	42 - 135

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

Lab Sample ID: LCS 280-534267/5
Matrix: Water
Analysis Batch: 534267

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
n-Butylbenzene			25.0	22.6		ug/L		91	64 - 135		
N-Propylbenzene			25.0	23.2		ug/L		93	65 - 135		
sec-Butylbenzene			25.0	23.4		ug/L		93	64 - 135		
Styrene			25.0	24.7		ug/L		99	65 - 135		
tert-Butylbenzene			25.0	22.9		ug/L		92	65 - 135		
Tetrachloroethene			25.0	23.4		ug/L		94	65 - 135		
Toluene			25.0	24.4		ug/L		97	65 - 135		
trans-1,2-Dichloroethene			25.0	23.3		ug/L		93	65 - 135		
trans-1,3-Dichloropropene			25.0	25.0		ug/L		100	65 - 135		
Trichloroethene			25.0	22.5		ug/L		90	65 - 135		
Trichlorofluoromethane			25.0	23.4		ug/L		94	53 - 137		
Vinyl chloride			25.0	23.0		ug/L		92	40 - 137		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 127*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*
Dibromofluoromethane (Surr)	*101*		*77 - 120*
Toluene-d8 (Surr)	*98*		*80 - 125*

Lab Sample ID: LCSD 280-534267/6
Matrix: Water
Analysis Batch: 534267

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane			25.0	24.0		ug/L		96	65 - 135	1	20
1,1,1-Trichloroethane			25.0	24.5		ug/L		98	65 - 135	2	20
1,1,2,2-Tetrachloroethane			25.0	22.3		ug/L		89	58 - 135	1	20
1,1,2-Trichloroethane			25.0	24.4		ug/L		98	64 - 135	0	27
1,1-Dichloroethane			25.0	25.4		ug/L		101	65 - 135	1	21
1,1-Dichloroethene			25.0	24.2		ug/L		97	65 - 136	2	20
1,1-Dichloropropene			25.0	24.0		ug/L		96	65 - 135	2	21
1,2,3-Trichlorobenzene			25.0	23.0		ug/L		92	60 - 135	1	36
1,2,3-Trichloropropane			25.0	22.5		ug/L		90	65 - 135	0	23
1,2,4-Trichlorobenzene			25.0	22.5		ug/L		90	58 - 135	3	25
1,2,4-Trimethylbenzene			25.0	24.3		ug/L		97	65 - 135	3	20
1,2-Dichlorobenzene			25.0	23.9		ug/L		96	65 - 135	2	20
1,2-Dichloroethane			25.0	22.9		ug/L		92	65 - 135	1	20
1,2-Dichloropropane			25.0	25.1		ug/L		100	64 - 135	1	20
1,3,5-Trimethylbenzene			25.0	24.1		ug/L		96	65 - 135	2	20
1,3-Dichlorobenzene			25.0	23.8		ug/L		95	65 - 135	2	20
1,3-Dichloropropane			25.0	23.8		ug/L		95	64 - 135	0	20
1,4-Dichlorobenzene			25.0	23.0		ug/L		92	65 - 135	2	23
2,2-Dichloropropane			25.0	24.4		ug/L		98	65 - 135	2	20
2-Butanone (MEK)			100	86.0		ug/L		86	44 - 177	1	32
2-Chlorotoluene			25.0	23.8		ug/L		95	65 - 135	0	20
2-Hexanone			100	79.5		ug/L		80	57 - 139	1	25
4-Chlorotoluene			25.0	23.6		ug/L		94	65 - 135	0	20
4-Isopropyltoluene			25.0	24.3		ug/L		97	65 - 135	3	20

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

Lab Sample ID: LCSD 280-534267/6
Matrix: Water
Analysis Batch: 534267

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Methyl-2-pentanone			100	84.7		ug/L		85	60 - 150	0	22
Acetone			100	79.6		ug/L		80	39 - 156	1	23
Benzene			25.0	24.6		ug/L		99	65 - 135	1	20
Bromobenzene			25.0	23.8		ug/L		95	65 - 135	3	26
Bromochloromethane			25.0	27.8		ug/L		111	65 - 135	0	29
Bromodichloromethane			25.0	25.3		ug/L		101	65 - 135	1	20
Bromoform			25.0	21.4		ug/L		86	62 - 135	0	27
Bromomethane			25.0	29.8		ug/L		119	45 - 135	5	33
Carbon disulfide			25.0	23.9		ug/L		96	55 - 143	2	20
Carbon tetrachloride			25.0	24.5		ug/L		98	65 - 135	2	21
Chlorobenzene			25.0	23.9		ug/L		96	65 - 135	0	20
Chloroethane			25.0	26.9		ug/L		108	46 - 136	5	25
Chloroform			25.0	25.2		ug/L		101	65 - 135	2	20
Chloromethane			25.0	26.3		ug/L		105	34 - 145	4	24
cis-1,2-Dichloroethene			25.0	24.5		ug/L		98	65 - 135	2	20
cis-1,3-Dichloropropene			25.0	24.2		ug/L		97	65 - 135	1	26
Dibromochloromethane			25.0	25.3		ug/L		101	65 - 135	2	20
Dibromomethane			25.0	23.5		ug/L		94	65 - 135	0	26
Dichlorodifluoromethane			25.0	29.5		ug/L		118	43 - 142	12	30
Ethylbenzene			25.0	24.5		ug/L		98	65 - 135	2	20
Hexachlorobutadiene			25.0	24.0		ug/L		96	65 - 135	3	25
Isopropylbenzene			25.0	23.5		ug/L		94	65 - 135	1	20
Methylene Chloride			25.0	24.3		ug/L		97	54 - 141	1	26
Naphthalene			25.0	21.1		ug/L		84	42 - 135	3	23
n-Butylbenzene			25.0	23.3		ug/L		93	64 - 135	3	21
N-Propylbenzene			25.0	23.9		ug/L		96	65 - 135	3	20
sec-Butylbenzene			25.0	24.2		ug/L		97	64 - 135	3	21
Styrene			25.0	24.7		ug/L		99	65 - 135	0	26
tert-Butylbenzene			25.0	23.6		ug/L		94	65 - 135	3	21
Tetrachloroethene			25.0	24.1		ug/L		97	65 - 135	3	20
Toluene			25.0	24.8		ug/L		99	65 - 135	2	20
trans-1,2-Dichloroethene			25.0	24.0		ug/L		96	65 - 135	3	24
trans-1,3-Dichloropropene			25.0	25.1		ug/L		101	65 - 135	1	26
Trichloroethene			25.0	22.9		ug/L		92	65 - 135	2	20
Trichlorofluoromethane			25.0	26.1		ug/L		104	53 - 137	11	27
Vinyl chloride			25.0	24.6		ug/L		99	40 - 137	7	24

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 127*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*
Dibromofluoromethane (Surr)	*101*		*77 - 120*
Toluene-d8 (Surr)	*98*		*80 - 125*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Lab Sample ID: MB 280-533889/1-A
Matrix: Water
Analysis Batch: 533925

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 533889

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		04/26/21 11:23	04/26/21 17:11	1
1,2-Dibromoethane	ND		0.050		ug/L		04/26/21 11:23	04/26/21 17:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*117*		*70 - 130*	*04/26/21 11:23*	*04/26/21 17:11*	*1*

Lab Sample ID: LCS 280-533889/2-A
Matrix: Water
Analysis Batch: 533925

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 533889

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2-Dibromo-3-Chloropropane			0.250	0.255		ug/L		102	60 - 140		
1,2-Dibromoethane			0.250	0.290		ug/L		116	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dibromopropane	*114*		*70 - 130*

Lab Sample ID: LCSD 280-533889/3-A
Matrix: Water
Analysis Batch: 533925

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 533889

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.250	0.254		ug/L		102	60 - 140	0	10
1,2-Dibromoethane			0.250	0.277		ug/L		111	60 - 140	5	10

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dibromopropane	*116*		*70 - 130*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 280-533806/1-A
Matrix: Water
Analysis Batch: 534364

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 533806

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		500		ug/L		04/28/21 08:38	04/28/21 16:25	1
Iron	ND		30		ug/L		04/28/21 08:38	04/28/21 16:25	1
Magnesium	ND		200		ug/L		04/28/21 08:38	04/28/21 16:25	1
Manganese	ND		3.0		ug/L		04/28/21 08:38	04/28/21 16:25	1
Potassium	ND		500		ug/L		04/28/21 08:38	04/28/21 16:25	1
Sodium	ND		1000		ug/L		04/28/21 08:38	04/28/21 16:25	1

Lab Sample ID: LCS 280-533806/2-A
Matrix: Water
Analysis Batch: 534364

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 533806

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Calcium			50000	49200		ug/L		98	90 - 111		

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 280-533806/2-A
Matrix: Water
Analysis Batch: 534364

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 533806

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Iron			10000	9900		ug/L		99	89 - 115		
Magnesium			50000	49200		ug/L		98	90 - 113		
Manganese			1000	1020		ug/L		102	90 - 110		
Potassium			50000	50000		ug/L		100	89 - 114		
Sodium			50000	45900		ug/L		92	90 - 115		

Lab Sample ID: 280-147511-N-1-B MS
Matrix: Water
Analysis Batch: 534364

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 533806

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Calcium	28000	^2	50000	78600		ug/L		101	48 - 153		
Iron	35		10000	10200		ug/L		102	52 - 155		
Magnesium	12000		50000	63300		ug/L		102	62 - 146		
Manganese	330		1000	1340		ug/L		101	79 - 121		
Potassium	5400		50000	57100		ug/L		103	76 - 132		
Sodium	42000		50000	91200		ug/L		98	70 - 203		

Lab Sample ID: 280-147511-N-1-C MSD
Matrix: Water
Analysis Batch: 534364

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 533806

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium	28000	^2	50000	79800		ug/L		104	48 - 153	2	20
Iron	35		10000	10300		ug/L		103	52 - 155	1	20
Magnesium	12000		50000	64200		ug/L		104	62 - 146	1	20
Manganese	330		1000	1350		ug/L		101	79 - 121	0	20
Potassium	5400		50000	58200		ug/L		105	76 - 132	2	20
Sodium	42000		50000	92900		ug/L		102	70 - 203	2	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 480-578101/4
Matrix: Water
Analysis Batch: 578101

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			04/27/21 17:18	1
Sulfate	ND		1.0		mg/L			04/27/21 17:18	1

Lab Sample ID: LCS 480-578101/3
Matrix: Water
Analysis Batch: 578101

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			50.0	48.6		mg/L		97	90 - 110		
Sulfate			50.0	48.6		mg/L		97	90 - 110		

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 280-147596-D-2 MS
Matrix: Water
Analysis Batch: 578101

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	24		50.0	71.7		mg/L		95	81 - 120
Sulfate	6.2		50.0	54.6		mg/L		97	80 - 120

Lab Sample ID: 280-147596-D-2 MSD
Matrix: Water
Analysis Batch: 578101

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	24		50.0	71.8		mg/L		95	81 - 120	0	15
Sulfate	6.2		50.0	54.7		mg/L		97	80 - 120	0	15

Lab Sample ID: 480-183540-F-2 MS
Matrix: Water
Analysis Batch: 578101

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2200		2500	4810		mg/L		105	81 - 120
Sulfate	150		2500	2590		mg/L		97	80 - 120

Lab Sample ID: MB 480-578589/4
Matrix: Water
Analysis Batch: 578589

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			04/29/21 20:40	1
Sulfate	ND		1.0		mg/L			04/29/21 20:40	1

Lab Sample ID: LCS 480-578589/3
Matrix: Water
Analysis Batch: 578589

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	48.5		mg/L		97	90 - 110
Sulfate	50.0	48.5		mg/L		97	90 - 110

Lab Sample ID: 480-183704-J-6 MS
Matrix: Water
Analysis Batch: 578589

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	4.5		100	96.4		mg/L		92	81 - 120
Sulfate	33		100	123		mg/L		90	80 - 120

Lab Sample ID: 480-183933-E-4 MS
Matrix: Water
Analysis Batch: 578589

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	40	F1 F2	250	346	F1	mg/L		123	81 - 120
Sulfate	ND		250	230		mg/L		92	80 - 120

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 480-183933-E-4 MSD
Matrix: Water
Analysis Batch: 578589

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	40	F1 F2	250	266	F2	mg/L		91	81 - 120	26	15
Sulfate	ND		250	233		mg/L		93	80 - 120	1	15

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-534285/19
Matrix: Water
Analysis Batch: 534285

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.030		mg/L			04/28/21 13:29	1

Lab Sample ID: LCS 280-534285/18
Matrix: Water
Analysis Batch: 534285

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia as N			2.50	2.51		mg/L		100	90 - 110		

Lab Sample ID: 280-147597-4 MS
Matrix: Water
Analysis Batch: 534285

Client Sample ID: MW-12B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia as N	0.68	F1 F2	1.00	2.03	F1	mg/L		135	90 - 110		

Lab Sample ID: 280-147597-4 MSD
Matrix: Water
Analysis Batch: 534285

Client Sample ID: MW-12B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N	0.68	F1 F2	1.00	1.38	F1 F2	mg/L		70	90 - 110	38	10

Lab Sample ID: MB 280-534560/31
Matrix: Water
Analysis Batch: 534560

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.030		mg/L			04/30/21 14:22	1

Lab Sample ID: LCS 280-534560/29
Matrix: Water
Analysis Batch: 534560

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia as N			2.50	2.29		mg/L		92	90 - 110		

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: LCSD 280-534560/30
Matrix: Water
Analysis Batch: 534560

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N			2.50	2.52		mg/L		101	90 - 110	9	10

Lab Sample ID: 280-147896-A-8 MS
Matrix: Water
Analysis Batch: 534560

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N	ND		1.00	0.898		mg/L		90	90 - 110

Lab Sample ID: 280-147896-A-8 MSD
Matrix: Water
Analysis Batch: 534560

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N	ND		1.00	0.986		mg/L		99	90 - 110	9	10

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-534909/22
Matrix: Water
Analysis Batch: 534909

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate/Nitrite	ND		0.050		mg/L			05/04/21 17:08	1

Lab Sample ID: LCS 280-534909/21
Matrix: Water
Analysis Batch: 534909

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate/Nitrite			5.00	5.05		mg/L		101	90 - 110

Lab Sample ID: 280-147597-2 MS
Matrix: Water
Analysis Batch: 534909

Client Sample ID: MW-12A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate/Nitrite	2.3	F1 F2	4.00	5.60	F1	mg/L		82	90 - 110

Lab Sample ID: 280-147597-2 MSD
Matrix: Water
Analysis Batch: 534909

Client Sample ID: MW-12A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate/Nitrite	2.3	F1 F2	4.00	6.48	F2	mg/L		104	90 - 110	15	10

Method: 353.2 - Nitrogen, Nitrate-Nitrite (Continued)

Lab Sample ID: MB 280-535096/62
Matrix: Water
Analysis Batch: 535096

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate/Nitrite	ND		0.050		mg/L			05/05/21 21:08	1

Lab Sample ID: LCS 280-535096/60
Matrix: Water
Analysis Batch: 535096

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate/Nitrite			5.00	5.41		mg/L		108	90 - 110		

Lab Sample ID: LCSD 280-535096/61
Matrix: Water
Analysis Batch: 535096

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate/Nitrite			5.00	5.48		mg/L		110	90 - 110	1	10

Lab Sample ID: 280-147651-A-4 MS
Matrix: Water
Analysis Batch: 535096

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate/Nitrite	0.055		4.00	3.88		mg/L		96	90 - 110		

Lab Sample ID: 280-147651-A-4 MSD
Matrix: Water
Analysis Batch: 535096

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate/Nitrite	0.055		4.00	4.01		mg/L		99	90 - 110	3	10

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 280-535008/4
Matrix: Water
Analysis Batch: 535008

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Average	ND		1.0		mg/L			05/04/21 15:57	1

Lab Sample ID: LCS 280-535008/3
Matrix: Water
Analysis Batch: 535008

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon - Average			25.0	24.8		mg/L		99	88 - 112		

Method: 9060 - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: 280-147597-7 MS
Matrix: Water
Analysis Batch: 535008

Client Sample ID: DUP3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon - Average	1.6		25.0	26.6		mg/L		100	88 - 112		

Lab Sample ID: 280-147597-7 MSD
Matrix: Water
Analysis Batch: 535008

Client Sample ID: DUP3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Average	1.6		25.0	26.3		mg/L		99	88 - 112	1	15

Lab Sample ID: MB 280-535153/4
Matrix: Water
Analysis Batch: 535153

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Average	ND		1.0		mg/L			05/05/21 17:09	1

Lab Sample ID: LCS 280-535153/3
Matrix: Water
Analysis Batch: 535153

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon - Average			25.0	25.1		mg/L		100	88 - 112		

Lab Sample ID: 280-147602-G-7 MS
Matrix: Water
Analysis Batch: 535153

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon - Average	9.2		25.0	34.5		mg/L		101	88 - 112		

Lab Sample ID: 280-147602-G-7 MSD
Matrix: Water
Analysis Batch: 535153

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Average	9.2		25.0	34.3		mg/L		100	88 - 112	0	15

Method: SM 1030E (meq) - Cation Anion Balance

Lab Sample ID: MB 280-535761/1
Matrix: Water
Analysis Batch: 535761

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

Analyte	MB Result	MB Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	0.000				meq/L			05/11/21 15:51	1
Magnesium	0.000				meq/L			05/11/21 15:51	1
Potassium	0.000				meq/L			05/11/21 15:51	1
Sodium	0.000				meq/L			05/11/21 15:51	1
Ammonia as N	0.000				meq/L			05/11/21 15:51	1
Chloride	0.000				meq/L			05/11/21 15:51	1

Method: SM 1030E (meq) - Cation Anion Balance (Continued)

Lab Sample ID: MB 280-535761/1
Matrix: Water
Analysis Batch: 535761

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

Analyte	MB Result	MB Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	0.000				meq/L			05/11/21 15:51	1
Alkalinity	0.000				mg/L			05/11/21 15:51	1
Bicarbonate Alkalinity	0.000				meq/L			05/11/21 15:51	1
Nitrate/Nitrite	0.000				meq/L			05/11/21 15:51	1
Iron	0.000				meq/L			05/11/21 15:51	1

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-533319/6
Matrix: Water
Analysis Batch: 533319

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity	ND		10		mg/L			04/20/21 15:04	1

Lab Sample ID: MB 280-533319/60
Matrix: Water
Analysis Batch: 533319

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity	ND		10		mg/L			04/20/21 23:45	1

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

Lab Sample ID: MB 280-533539/1
Matrix: Water
Analysis Batch: 533539

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10		mg/L			04/22/21 16:27	1

Lab Sample ID: LCS 280-533539/2
Matrix: Water
Analysis Batch: 533539

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			501	502		mg/L		100	88 - 114		

Lab Sample ID: 280-147597-8 DU
Matrix: Water
Analysis Batch: 533539

Client Sample ID: MW-15B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	350			362		mg/L				3	10

Lab Sample ID: MB 280-533623/1
Matrix: Water
Analysis Batch: 533623

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10		mg/L			04/23/21 09:40	1

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

Lab Sample ID: LCS 280-533623/2
Matrix: Water
Analysis Batch: 533623

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			501	512		mg/L		102	88 - 114		

Lab Sample ID: LCSD 280-533623/3
Matrix: Water
Analysis Batch: 533623

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Dissolved Solids			501	502		mg/L		100	88 - 114	2	20

Lab Sample ID: 280-147648-A-29 DU
Matrix: Water
Analysis Batch: 533623

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	140			144		mg/L				4	10

QC Association Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Groundwater

Job ID: 280-147597-1

GC/MS VOA

Analysis Batch: 533957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147597-1	TB2	Total/NA	Water	8260B	
MB 280-533957/9	Method Blank	Total/NA	Water	8260B	
LCS 280-533957/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-533957/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 534087

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147597-6	MW-15A	Total/NA	Water	8260B	
280-147597-7	DUP3	Total/NA	Water	8260B	
280-147597-8	MW-15B	Total/NA	Water	8260B	
MB 280-534087/10	Method Blank	Total/NA	Water	8260B	
LCS 280-534087/5	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-534087/6	Lab Control Sample Dup	Total/NA	Water	8260B	
280-146973-E-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
280-146973-G-3 MS	Matrix Spike	Total/NA	Water	8260B	

Analysis Batch: 534118

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147597-2	MW-12A	Total/NA	Water	8260B	
280-147597-3	FB4	Total/NA	Water	8260B	
MB 280-534118/10	Method Blank	Total/NA	Water	8260B	
LCS 280-534118/5	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-534118/6	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 534267

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147597-4	MW-12B	Total/NA	Water	8260B	
280-147597-5	DUP4	Total/NA	Water	8260B	
MB 280-534267/10	Method Blank	Total/NA	Water	8260B	
LCS 280-534267/5	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-534267/6	Lab Control Sample Dup	Total/NA	Water	8260B	

GC Semi VOA

Prep Batch: 533889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147597-1	TB2	Total/NA	Water	8011	
280-147597-2	MW-12A	Total/NA	Water	8011	
280-147597-3	FB4	Total/NA	Water	8011	
280-147597-4	MW-12B	Total/NA	Water	8011	
280-147597-5	DUP4	Total/NA	Water	8011	
280-147597-6	MW-15A	Total/NA	Water	8011	
280-147597-7	DUP3	Total/NA	Water	8011	
280-147597-8	MW-15B	Total/NA	Water	8011	
MB 280-533889/1-A	Method Blank	Total/NA	Water	8011	
LCS 280-533889/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 280-533889/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 533925

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147597-1	TB2	Total/NA	Water	8011	533889

GC Semi VOA (Continued)

Analysis Batch: 533925 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147597-2	MW-12A	Total/NA	Water	8011	533889
280-147597-3	FB4	Total/NA	Water	8011	533889
280-147597-4	MW-12B	Total/NA	Water	8011	533889
280-147597-5	DUP4	Total/NA	Water	8011	533889
280-147597-6	MW-15A	Total/NA	Water	8011	533889
280-147597-7	DUP3	Total/NA	Water	8011	533889
280-147597-8	MW-15B	Total/NA	Water	8011	533889
MB 280-533889/1-A	Method Blank	Total/NA	Water	8011	533889
LCS 280-533889/2-A	Lab Control Sample	Total/NA	Water	8011	533889
LCSD 280-533889/3-A	Lab Control Sample Dup	Total/NA	Water	8011	533889

Metals

Prep Batch: 533806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147597-2	MW-12A	Dissolved	Water	3005A	
280-147597-3	FB4	Dissolved	Water	3005A	
280-147597-4	MW-12B	Dissolved	Water	3005A	
280-147597-5	DUP4	Dissolved	Water	3005A	
280-147597-6	MW-15A	Dissolved	Water	3005A	
280-147597-7	DUP3	Dissolved	Water	3005A	
280-147597-8	MW-15B	Dissolved	Water	3005A	
MB 280-533806/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-533806/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-147511-N-1-B MS	Matrix Spike	Dissolved	Water	3005A	
280-147511-N-1-C MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	

Analysis Batch: 534364

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147597-2	MW-12A	Dissolved	Water	6010B	533806
280-147597-3	FB4	Dissolved	Water	6010B	533806
280-147597-4	MW-12B	Dissolved	Water	6010B	533806
280-147597-5	DUP4	Dissolved	Water	6010B	533806
280-147597-6	MW-15A	Dissolved	Water	6010B	533806
280-147597-7	DUP3	Dissolved	Water	6010B	533806
280-147597-8	MW-15B	Dissolved	Water	6010B	533806
MB 280-533806/1-A	Method Blank	Total Recoverable	Water	6010B	533806
LCS 280-533806/2-A	Lab Control Sample	Total Recoverable	Water	6010B	533806
280-147511-N-1-B MS	Matrix Spike	Dissolved	Water	6010B	533806
280-147511-N-1-C MSD	Matrix Spike Duplicate	Dissolved	Water	6010B	533806

General Chemistry

Analysis Batch: 533319

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147597-2	MW-12A	Total/NA	Water	SM 2320B	
280-147597-3	FB4	Total/NA	Water	SM 2320B	
280-147597-4	MW-12B	Total/NA	Water	SM 2320B	
280-147597-5	DUP4	Total/NA	Water	SM 2320B	
280-147597-6	MW-15A	Total/NA	Water	SM 2320B	
280-147597-7	DUP3	Total/NA	Water	SM 2320B	
280-147597-8	MW-15B	Total/NA	Water	SM 2320B	

General Chemistry (Continued)

Analysis Batch: 533319 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-533319/6	Method Blank	Total/NA	Water	SM 2320B	
MB 280-533319/60	Method Blank	Total/NA	Water	SM 2320B	

Analysis Batch: 533539

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147597-6	MW-15A	Total/NA	Water	SM 2540C	
280-147597-7	DUP3	Total/NA	Water	SM 2540C	
280-147597-8	MW-15B	Total/NA	Water	SM 2540C	
MB 280-533539/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-533539/2	Lab Control Sample	Total/NA	Water	SM 2540C	
280-147597-8 DU	MW-15B	Total/NA	Water	SM 2540C	

Analysis Batch: 533623

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147597-2	MW-12A	Total/NA	Water	SM 2540C	
280-147597-3	FB4	Total/NA	Water	SM 2540C	
280-147597-4	MW-12B	Total/NA	Water	SM 2540C	
280-147597-5	DUP4	Total/NA	Water	SM 2540C	
MB 280-533623/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-533623/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 280-533623/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
280-147648-A-29 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 534285

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147597-2	MW-12A	Total/NA	Water	350.1	
280-147597-3	FB4	Total/NA	Water	350.1	
280-147597-5	DUP4	Total/NA	Water	350.1	
280-147597-6	MW-15A	Total/NA	Water	350.1	
280-147597-7	DUP3	Total/NA	Water	350.1	
280-147597-8	MW-15B	Total/NA	Water	350.1	
MB 280-534285/19	Method Blank	Total/NA	Water	350.1	
LCS 280-534285/18	Lab Control Sample	Total/NA	Water	350.1	
280-147597-4 MS	MW-12B	Total/NA	Water	350.1	
280-147597-4 MSD	MW-12B	Total/NA	Water	350.1	

Analysis Batch: 534560

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147597-4	MW-12B	Total/NA	Water	350.1	
MB 280-534560/31	Method Blank	Total/NA	Water	350.1	
LCS 280-534560/29	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-534560/30	Lab Control Sample Dup	Total/NA	Water	350.1	
280-147896-A-8 MS	Matrix Spike	Total/NA	Water	350.1	
280-147896-A-8 MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	

Analysis Batch: 534909

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147597-2	MW-12A	Total/NA	Water	353.2	
280-147597-3	FB4	Total/NA	Water	353.2	
280-147597-4	MW-12B	Total/NA	Water	353.2	
280-147597-5	DUP4	Total/NA	Water	353.2	

General Chemistry (Continued)

Analysis Batch: 534909 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147597-6	MW-15A	Total/NA	Water	353.2	
280-147597-8	MW-15B	Total/NA	Water	353.2	
MB 280-534909/22	Method Blank	Total/NA	Water	353.2	
LCS 280-534909/21	Lab Control Sample	Total/NA	Water	353.2	
280-147597-2 MS	MW-12A	Total/NA	Water	353.2	
280-147597-2 MSD	MW-12A	Total/NA	Water	353.2	

Analysis Batch: 535008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147597-2	MW-12A	Total/NA	Water	9060	
280-147597-3	FB4	Total/NA	Water	9060	
280-147597-6	MW-15A	Total/NA	Water	9060	
280-147597-7	DUP3	Total/NA	Water	9060	
280-147597-8	MW-15B	Total/NA	Water	9060	
MB 280-535008/4	Method Blank	Total/NA	Water	9060	
LCS 280-535008/3	Lab Control Sample	Total/NA	Water	9060	
280-147597-7 MS	DUP3	Total/NA	Water	9060	
280-147597-7 MSD	DUP3	Total/NA	Water	9060	

Analysis Batch: 535096

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147597-7	DUP3	Total/NA	Water	353.2	
MB 280-535096/62	Method Blank	Total/NA	Water	353.2	
LCS 280-535096/60	Lab Control Sample	Total/NA	Water	353.2	
LCSD 280-535096/61	Lab Control Sample Dup	Total/NA	Water	353.2	
280-147651-A-4 MS	Matrix Spike	Total/NA	Water	353.2	
280-147651-A-4 MSD	Matrix Spike Duplicate	Total/NA	Water	353.2	

Analysis Batch: 535153

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147597-4	MW-12B	Total/NA	Water	9060	
280-147597-5	DUP4	Total/NA	Water	9060	
MB 280-535153/4	Method Blank	Total/NA	Water	9060	
LCS 280-535153/3	Lab Control Sample	Total/NA	Water	9060	
280-147602-G-7 MS	Matrix Spike	Total/NA	Water	9060	
280-147602-G-7 MSD	Matrix Spike Duplicate	Total/NA	Water	9060	

Analysis Batch: 535761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147597-2	MW-12A	Total/NA	Water	SM 1030E	
280-147597-2	MW-12A	Total/NA	Water	SM 1030E (meq)	
280-147597-3	FB4	Total/NA	Water	SM 1030E	
280-147597-3	FB4	Total/NA	Water	SM 1030E (meq)	
280-147597-4	MW-12B	Total/NA	Water	SM 1030E	
280-147597-4	MW-12B	Total/NA	Water	SM 1030E (meq)	
280-147597-5	DUP4	Total/NA	Water	SM 1030E	
280-147597-5	DUP4	Total/NA	Water	SM 1030E (meq)	
280-147597-6	MW-15A	Total/NA	Water	SM 1030E	
280-147597-6	MW-15A	Total/NA	Water	SM 1030E (meq)	
280-147597-7	DUP3	Total/NA	Water	SM 1030E	
280-147597-7	DUP3	Total/NA	Water	SM 1030E (meq)	

General Chemistry (Continued)

Analysis Batch: 535761 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147597-8	MW-15B	Total/NA	Water	SM 1030E	
280-147597-8	MW-15B	Total/NA	Water	SM 1030E (meq)	
MB 280-535761/1	Method Blank	Total/NA	Water	SM 1030E (meq)	

Analysis Batch: 578101

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147597-2	MW-12A	Total/NA	Water	300.0	
280-147597-3	FB4	Total/NA	Water	300.0	
280-147597-4	MW-12B	Total/NA	Water	300.0	
280-147597-5	DUP4	Total/NA	Water	300.0	
280-147597-6	MW-15A	Total/NA	Water	300.0	
280-147597-7	DUP3	Total/NA	Water	300.0	
280-147597-8	MW-15B	Total/NA	Water	300.0	
MB 480-578101/4	Method Blank	Total/NA	Water	300.0	
LCS 480-578101/3	Lab Control Sample	Total/NA	Water	300.0	
280-147596-D-2 MS	Matrix Spike	Total/NA	Water	300.0	
280-147596-D-2 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
480-183540-F-2 MS	Matrix Spike	Total/NA	Water	300.0	

Analysis Batch: 578589

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147597-5	DUP4	Total/NA	Water	300.0	
280-147597-7	DUP3	Total/NA	Water	300.0	
MB 480-578589/4	Method Blank	Total/NA	Water	300.0	
LCS 480-578589/3	Lab Control Sample	Total/NA	Water	300.0	
480-183704-J-6 MS	Matrix Spike	Total/NA	Water	300.0	
480-183933-E-4 MS	Matrix Spike	Total/NA	Water	300.0	
480-183933-E-4 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Field Service / Mobile Lab

Analysis Batch: 533841

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147597-2	MW-12A	Total/NA	Water	Field Sampling	
280-147597-4	MW-12B	Total/NA	Water	Field Sampling	
280-147597-6	MW-15A	Total/NA	Water	Field Sampling	
280-147597-8	MW-15B	Total/NA	Water	Field Sampling	

Lab Chronicle

Client: Waste Management
Job ID: 280-147597-1
Project/Site: 1003|Riverbend Landfill - Groundwater

Client Sample ID: TB2
Lab Sample ID: 280-147597-1
Date Collected: 04/15/21 07:00
Matrix: Water
Date Received: 04/17/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	533957	04/27/21 02:28	PP	TAL DEN
Total/NA	Prep	8011			35.4 mL	35 mL	533889	04/26/21 11:23	JSM	TAL DEN
Total/NA	Analysis	8011		1			533925	04/26/21 18:38	JSM	TAL DEN

Client Sample ID: MW-12A
Lab Sample ID: 280-147597-2
Date Collected: 04/16/21 09:00
Matrix: Water
Date Received: 04/17/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	534118	04/28/21 14:03	TAW	TAL DEN
Total/NA	Prep	8011			35.7 mL	35 mL	533889	04/26/21 11:23	JSM	TAL DEN
Total/NA	Analysis	8011		1			533925	04/26/21 19:00	JSM	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	533806	04/28/21 08:38	MAB	TAL DEN
Dissolved	Analysis	6010B		1			534364	04/28/21 17:23	LMT	TAL DEN
Total/NA	Analysis	300.0		1			578101	04/27/21 20:35	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	534285	04/28/21 14:03	QJB	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	534909	05/04/21 17:46	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	535008	05/04/21 20:01	RAF	TAL DEN
Total/NA	Analysis	SM 1030E		1			535761	05/11/21 15:51	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			535761	05/11/21 15:51	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			533319	04/21/21 00:23	QJB	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	533623	04/23/21 09:40	JMH	TAL DEN
Total/NA	Analysis	Field Sampling		1			533841	04/16/21 10:00	A1S	TAL DEN

Client Sample ID: FB4
Lab Sample ID: 280-147597-3
Date Collected: 04/16/21 08:05
Matrix: Water
Date Received: 04/17/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	534118	04/28/21 11:46	TAW	TAL DEN
Total/NA	Prep	8011			35.5 mL	35 mL	533889	04/26/21 11:23	JSM	TAL DEN
Total/NA	Analysis	8011		1			533925	04/26/21 19:22	JSM	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	533806	04/28/21 08:38	MAB	TAL DEN
Dissolved	Analysis	6010B		1			534364	04/28/21 17:29	LMT	TAL DEN
Total/NA	Analysis	300.0		1			578101	04/27/21 20:53	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	534285	04/28/21 14:05	QJB	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	534909	05/04/21 17:52	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	535008	05/04/21 20:23	RAF	TAL DEN
Total/NA	Analysis	SM 1030E		1			535761	05/11/21 15:51	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			535761	05/11/21 15:51	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			533319	04/21/21 00:29	QJB	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	533623	04/23/21 09:40	JMH	TAL DEN

Client Sample ID: MW-12B

Lab Sample ID: 280-147597-4

Date Collected: 04/16/21 10:05

Matrix: Water

Date Received: 04/17/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	534267	04/29/21 13:21	TAW	TAL DEN
Total/NA	Prep	8011			35.2 mL	35 mL	533889	04/26/21 11:23	JSM	TAL DEN
Total/NA	Analysis	8011		1			533925	04/26/21 19:43	JSM	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	533806	04/28/21 08:38	MAB	TAL DEN
Dissolved	Analysis	6010B		1			534364	04/28/21 17:32	LMT	TAL DEN
Total/NA	Analysis	300.0		1			578101	04/27/21 21:11	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	534560	04/30/21 14:58	QJB	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	534909	05/04/21 17:54	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	535153	05/05/21 18:06	RAF	TAL DEN
Total/NA	Analysis	SM 1030E		1			535761	05/11/21 15:51	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			535761	05/11/21 15:51	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			533319	04/21/21 00:35	QJB	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	533623	04/23/21 09:40	JMH	TAL DEN
Total/NA	Analysis	Field Sampling		1			533841	04/16/21 11:05	A1S	TAL DEN

Client Sample ID: DUP4

Lab Sample ID: 280-147597-5

Date Collected: 04/16/21 10:10

Matrix: Water

Date Received: 04/17/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	534267	04/29/21 13:43	TAW	TAL DEN
Total/NA	Prep	8011			35 mL	35 mL	533889	04/26/21 11:23	JSM	TAL DEN
Total/NA	Analysis	8011		1			533925	04/26/21 20:05	JSM	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	533806	04/28/21 08:38	MAB	TAL DEN
Dissolved	Analysis	6010B		1			534364	04/28/21 17:37	LMT	TAL DEN
Total/NA	Analysis	300.0		1			578101	04/27/21 21:29	IMZ	TAL BUF
Total/NA	Analysis	300.0		1			578589	04/30/21 00:50	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	534285	04/28/21 14:31	QJB	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	534909	05/04/21 17:56	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	535153	05/05/21 18:23	RAF	TAL DEN
Total/NA	Analysis	SM 1030E		1			535761	05/11/21 15:51	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			535761	05/11/21 15:51	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			533319	04/21/21 00:42	QJB	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	533623	04/23/21 09:40	JMH	TAL DEN

Client Sample ID: MW-15A

Lab Sample ID: 280-147597-6

Date Collected: 04/15/21 10:41

Matrix: Water

Date Received: 04/17/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	534087	04/28/21 00:52	RJS	TAL DEN
Total/NA	Prep	8011			35.2 mL	35 mL	533889	04/26/21 11:23	JSM	TAL DEN
Total/NA	Analysis	8011		1			533925	04/26/21 20:26	JSM	TAL DEN

Client Sample ID: MW-15A
Date Collected: 04/15/21 10:41
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147597-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			50 mL	50 mL	533806	04/28/21 08:38	MAB	TAL DEN
Dissolved	Analysis	6010B		1			534364	04/28/21 17:41	LMT	TAL DEN
Total/NA	Analysis	300.0		1			578101	04/27/21 21:47	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	534285	04/28/21 14:33	QJB	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	534909	05/04/21 17:58	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	535008	05/04/21 21:38	RAF	TAL DEN
Total/NA	Analysis	SM 1030E		1			535761	05/11/21 15:51	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			535761	05/11/21 15:51	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			533319	04/20/21 17:27	QJB	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	533539	04/22/21 16:27	JMH	TAL DEN
Total/NA	Analysis	Field Sampling		1			533841	04/15/21 11:41	A1S	TAL DEN

Client Sample ID: DUP3
Date Collected: 04/15/21 10:42
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147597-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	534087	04/28/21 01:15	RJS	TAL DEN
Total/NA	Prep	8011			35.2 mL	35 mL	533889	04/26/21 11:23	JSM	TAL DEN
Total/NA	Analysis	8011		1			533925	04/26/21 20:48	JSM	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	533806	04/28/21 08:38	MAB	TAL DEN
Dissolved	Analysis	6010B		1			534364	04/28/21 17:45	LMT	TAL DEN
Total/NA	Analysis	300.0		1			578101	04/27/21 22:05	IMZ	TAL BUF
Total/NA	Analysis	300.0		1			578589	04/30/21 01:08	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	534285	04/28/21 14:35	QJB	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	535096	05/05/21 22:18	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	535008	05/04/21 22:00	RAF	TAL DEN
Total/NA	Analysis	SM 1030E		1			535761	05/11/21 15:51	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			535761	05/11/21 15:51	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			533319	04/20/21 17:32	QJB	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	533539	04/22/21 16:27	JMH	TAL DEN

Client Sample ID: MW-15B
Date Collected: 04/15/21 12:49
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147597-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	534087	04/28/21 01:37	RJS	TAL DEN
Total/NA	Prep	8011			34.7 mL	35 mL	533889	04/26/21 11:23	JSM	TAL DEN
Total/NA	Analysis	8011		1			533925	04/26/21 21:09	JSM	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	533806	04/28/21 08:38	MAB	TAL DEN
Dissolved	Analysis	6010B		1			534364	04/28/21 18:02	LMT	TAL DEN
Total/NA	Analysis	300.0		1			578101	04/27/21 22:23	IMZ	TAL BUF

Lab Chronicle

Client: Waste Management
Job ID: 280-147597-1
Project/Site: 1003|Riverbend Landfill - Groundwater

Client Sample ID: MW-15B
Lab Sample ID: 280-147597-8

Date Collected: 04/15/21 12:49
Matrix: Water

Date Received: 04/17/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	350.1		1	10 mL	10 mL	534285	04/28/21 14:37	QJB	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	534909	05/04/21 18:14	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	535008	05/04/21 23:14	RAF	TAL DEN
Total/NA	Analysis	SM 1030E		1			535761	05/11/21 15:51	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			535761	05/11/21 15:51	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			533319	04/21/21 00:50	QJB	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	533539	04/22/21 16:27	JMH	TAL DEN
Total/NA	Analysis	Field Sampling		1			533841	04/15/21 13:49	A1S	TAL DEN

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL DEN = Eurofins TestAmerica, Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

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

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler	Lab PM	Carrier Tracking No(s)	COC No
Client Contact:	Chris Perron / I. Holtzclaw T	Sara, Betsy A		280-16511-866.1
	Phone: 503-716-6320	E-Mail: Betsy.Sara@Eurofinset.com		Page:
Company: Waste Management				Job #:
Address: 13469 SW Highway 18	Due Date Requested:			
City: McMinnville	TAT Requested (days):			
State, Zip: OR, 97128				
Phone:	PO #:			
Email:	WO #:			
Project Name: 1003|Riverbend Landfill SCS Engineers Event Desc: Semiannual Compliance Wells - Apr Oct	Project #: 28002786			
Site: Oregon	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	TDS/Alk	Dissolved Metals	Ammonia/TOC/NO3+NO2	8260B	8011	Cation/Anion Balance	Chloride/Sulfate (TA Buffalo)												Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	S	A	R		N														
TB2	4/15/2021	0700	G	W						X	X															4	
MW-12A	4/16/2021	0900	G	W	X		X	X	X	X	X	X	X													11	
FB4	4/16/2021	0805	G	W	X		X	X	X	X	X	X	X													11	
MW-12B	4/16/2021	1005	G	W	X		X	X	X	X	X	X	X													11	
DUP4	4/16/2021	1010	G	W	X		X	X	X	X	X	X	X													11	
MW-15A	4/15/2021	1041	G	W	X		X	X	X	X	X	X	X													11	
DUP3	4/15/2021	1042	G	W	X		X	X	X	X	X	X	X													11	
MW-15B	4/15/2021	1249	G	W	X		X	X	X	X	X	X	X													11	

280-147597 Chain of Custody

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by:	Date/Time: 4/16/2021 1630	Company: SCS	Received by: / Date/Time: 4/17/21 0945 / Company: EDEN
Relinquished by:	Date/Time:	Company:	Received by: / Date/Time: / Company:
Relinquished by:	Date/Time:	Company:	Received by: / Date/Time: / Company:

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 1.2, 1.7 IR9 CF 0.4

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-12A
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	(NE)	E	SE	S	SW	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN			?	**TEMPERATURE:**	(°F) 60.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
4/16/21	07:58	27.60	~~NIL~~.	14.37	.	13.23	X 1	2.15
/ /	:	.	.	.	.		X 3	6.45

Gal/ft = (dia./2)^2 x 0.163 | 1" = 0.041 | (2") = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	√
VOA Glass	4/16/21	09:00	F	3	~~40 ml~~	(HCl)	(YES)	(NO)		
VOA Glass	4/16/21	09:00	F	3	~~40 ml~~	~~$Na_2S_2O_3$~~	(YES)	(NO)		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/16/21	09:00	F	2	(250), 500, (1L)	(None)	(YES)	(NO)	NA	
Yellow Glass	4/16/21	09:00	F	2	(250) 500, 1L	(H_2SO_4)	(YES)	(NO)		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/16/21	09:00	F	1	250, (500), 1L	~~HNO_3~~	~~YES~~	(YES)		
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 | 11 | Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: 07:59 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O_2 (mg/l)	Water Quality
0	F(0800)	0.00	6.86	189.2	396.4	9.5	14.64	2.26	clear/colorless
1	F(0815)	2.15	5.17*	204.3	401.6	8.9	15.01	1.92	clear/colorless
2	F(0832)	4.30	6.93	196.1	400.6	8.9	15.13	1.79	clear/colorless
3	F(0848)	6.45	6.20	242.0	403.1	8.9	15.22	2.36	clear/colorless
4	F(0850)	6.70	6.23	244.9	402.6	9.0	15.22	2.71	clear/colorless
5	F(0852)	6.95	6.23	244.7	402.4	9.0	15.23	2.69	clear/colorless
6	F(0854)	7.20	6.21	246.6	403.3	8.9	15.23	2.67	clear/colorless

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

* checked pH calibration due to low pH reading. pH readings low vs 7.00 standard. Calibrated backup YSI (17J102717) and used 17J102717 for rest of purge.
Standard purge method (20/10/20psi) ~500 ml/min

SAMPLER: I. Hayquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** FB4
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	(NE)	E	SE	S	SW	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:** (F) 50 . 0 °C		

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
/ /	:	.	.	.	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)^2 x 0.163 | 1" = 0.041 | 2" = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other = Transfer

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	[√ if used] √
VOA Glass	4/16/21	08:05	G	3	~~40 ml~~	(HCl)	(YES) NO		
VOA Glass	4/16/21	08:05	G	3	~~40 ml~~	($Na_2S_2O_3$)	(YES) NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES NO		
White Poly	4/16/21	08:05	G	2	~~250~~, 500, 1L	(None)	(YES) NO	NA	
Yellow Glass	4/16/21	08:05	G	2	~~250~~, 500, 1L	~~H_2SO_4~~	(YES) NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	(YES) NO		
Red Diss. Poly	4/16/21	08:05	G	1	250, ~~500~~, 1L	(HNO_3)	YES YES		
White Poly	/ /	:			250, 500, 1L	None	YES YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES NO		

White no acid, Yellow H2SO4, Red HNO3 | 11 | Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	G (0805)	0.00	~	~	~	~	~	~	~
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Collected near MW-12A using Lab supplied DI water

SAMPLER: (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill
SITE ADDRESS: McMinnville , Oregon
WELL ID: MW-12-B
BLIND ID:
DUP ID: NA

WIND FROM: N (NE) E SE S SW W NW
WEATHER: (SUNNY) CLOUDY RAIN ?

(LIGHT) MEDIUM HEAVY

TEMPERATURE: °F 60.0 °C (Circle appropriate units)

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW	[Water Column x Gal/ft]	Volume (gal)
4/16/21	09:39	46.20	.	19.31	.	26.89	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)^2 x 0.163 | 1" = 0.041 | (2") 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	[√ if used]
VOA Glass	4/16/21	10:05	F	3	40 ml	(HCl)	(YES)	NO		√
VOA Glass	4/16/21	10:05	F	3	40 ml	($Na_2S_2O_3$)	(YES)	NO		√
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/16/21	10:05	F	2	(250) 500 (1L)	(None)	(YES)	NO	NA	√
Yellow Glass	4/16/21	10:05	F	2	(250) 500, 1L	(H_2SO_4)	(YES)	NO		√
Red Total Poly	/ /	:		1	125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/16/21	10:05	F	1	250, (500), 1L	(HNO_3)	(YES)	(YES)		√
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 | 11 | Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011)
AMBER - Glass	(8080) (8150) (TOX) OR [X] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO) (Silica, T.) (NO3) (BOD) OR [ ] WA [ ]
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA

Purge Start Time: 09:40

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Pump/Bailer Inlet Depth: Diss O_2 (mg/l)	Water Quality
0	F(0942)	0.00	7.05	151.0	834	11.3	19.36	6.96	Clear/colorless
1	F(0952)	0.75	6.82	-45.8	785	11.0	19.54	1.02	cloudy/light tan
2	F(0954)	0.85	6.83	-48.0	776	11.0	19.54	1.03	cloudy/light tan
3	F(0956)	0.95	6.85	-51.9	767	11.0	19.54	1.04	clear/colorless
4	F(0958)	1.05	6.87	-54.0	764	11.0	19.54	1.16	clear/colorless
5	F(1000)	1.15	6.87	-55.2	766	11.0	19.54	1.17	clear/colorless
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Low flow purge (20/10/20psi) ~ 200 ml/min

SAMPLER: I. Hultgvist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** DUP4

SITE ADDRESS: McMinnville , Oregon **BLIND ID:**

DUP ID: NA

WIND FROM:	N	(NE)	E	SE	S	SW	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(°F) 60.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		[Water Column x Gal/ft] Volume (gal)
/ /	:	.	.	.	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	(2") = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	√
VOA Glass	4/16/21	10 : 10	F	3	(40 ml)	HCl	YES	NO		
VOA Glass	4/16/21	10 : 10	F	3	(40 ml)	$Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/16/21	10 : 10	F	2	(250), 500, 1L	None	YES	NO	NA	
Yellow Glass	4/16/21	10 : 10	F	2	(250), 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/16/21	10 : 10	F	1	250, (500), 1L	HNO_3	YES	YES		
	/ /	:			250, 500, 1L		YES			

White no acid, Yellow H2SO4, Red HNO3 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3)
YELLOW - Glass	(COD) (TOC) (NH3) (NO_3/NO_2) (Tannin/Lignin)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Ke) (Mg) (Mn) (K) (Na)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	F (2010)	0.00	.	.	.	.	.	.	.
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Collected at MW-12B

SAMPLER: J. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill
SITE ADDRESS: McMinnville , Oregon
WELL ID: MW-15A
BLIND ID:
DUP ID: NA

WIND FROM: N | NE | (E) | SE | S | SW | W | NW
WEATHER: (SUNNY) | CLOUDY | RAIN | ?
(LIGHT) | MEDIUM | HEAVY

TEMPERATURE: (°F) 55. °C
[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW	[Water Column x Gal/ft]	Volume (gal)
4/15/21	09:38	24.00	—	9.59	—	14.41	X 1	2.35
/ /	:	.	.	.	.		X 3	7.05

Gal/ft = (dia./2)² x 0.163 | 1" = 0.041 | (2") = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	[√ if used]
VOA Glass	4/15/21	10:41	F	3 (40 ml)	(HCl)	(YES)	NO		√
VOA Glass	4/15/21	10:41	F	3 (40 ml)	($Na_2S_2O_3$)	(YES)	NO		√
Amber Glass	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/15/21	10:41	F	2 (250, 500, 1L)	(None)	(YES)	NO	NA	√
Yellow Glass	4/15/21	10:41	F	2 (250, 500, 1L)	(H_2SO_4)	(YES)	NO		√
Red Total Poly	/ /	:		125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/15/21	10:41	F	1 250, (500) 1L	(HNO_3)	(YES)	(YES)		√
White Poly	/ /	:		250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:		100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 | 11 | Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011)
AMBER - Glass	(8080) (8150) (TOX) OR [X] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD) OR [ ] WA [ ]
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA

Purge Start Time: 09:33

Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	F(09:34)	0.00	5.75	148.8	194.3	12.6	10.29	9.14	tan/cloudy
1	F(09:44)	1.32	5.89	166.6	195.0	12.0	15.08	9.32	light tan/cloudy
2	F(10:02)	4.10	5.97	175.4	191.9	12.1	16.56	8.73	light tan/cloudy
3	F(10:27)	7.05	6.00	180.8	174.7	12.7	18.31	7.60	light tan/cloudy
4	F(10:30)	7.45	5.97	186.6	176.3	12.6	BTOP	6.34	light tan/cloudy
5	F(10:33)	7.85	5.90	190.4	174.6	12.6	BTOP	6.21	light tan/cloudy
6	F(10:36	8.25	5.94	190.7	175.2	12.8	BTOP	6.46	light tan/cloudy

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Standard Purge Method 20/10/20 psi 250 ml/pulse

SAMPLER: Chris Perra (PRINTED NAME) Chris Perra (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** DUP3
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	(E)	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	(SUNNY)	CLOUDY		RAIN		?			**TEMPERATURE:**	°F 55.	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW	[Water Column x Gal/ft] Volume (gal)
/ /	:	.	.	.	.	.	X 1 .
/ /	:	.	.	.	.	.	X 3 .

Gal/ft = (dia./2)^2 x 0.163 | 1" = 0.041 | 2" = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	[√ if used] √
VOA Glass	9/15/21	10 :42	F	3	(40 ml)	(HCl)	(YES)	NO		✓
VOA Glass	9/15/21	10 :42	F	3	(40 ml)	($Na_2S_2O_3$)	(YES)	NO		✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	9/15/21	10 :42	F	2	(250) 500 (1L)	(None)	(YES)	NO	NA	✓
Yellow Glass	9/15/21	10 :42	F	2	(250) 500, 1L	(H_2SO_4)	(YES)	NO		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	(YES)	NO		
Red Diss. Poly	9/15/21	10 :42	F	1	250, (500) 1L	(HNO_3)	(YES)	(YES)		✓
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 | 11 | Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA

Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0		0.00	.			.	.	.	
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Collected at MW-15A

SAMPLER: Chris Perra (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill
SITE ADDRESS: McMinnville , Oregon
WELL ID: MW-15B
BLIND ID:
DUP ID: NA

WIND FROM:	N	NE	(E)	SE	S	SW	W	NW
WEATHER:	(SUNNY)	CLOUDY	RAIN					?

LIGHT	(MEDIUM)	HEAVY

TEMPERATURE: (F) 60 . °C
[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW	[Water Column x Gal/ft] Volume (gal)
4/15/21	12:13	45.95	—	17.33	—	—	X 1 —
/ /	:	.	.	.	.		X 3 —

Gal/ft = (dia./2)^2 x 0.163 | 1" = 0.041 | (2") = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) ~~Dedicated~~ Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) — Sample Depth:

Bottle Type	Date	Time	Method §	Amount	Volume	Preservative	Ice	Filter	pH	[√ if used]
VOA Glass	4/15/21	12:49	F	3	(40 ml)	(HCl)	(YES)	NO		√
VOA Glass	4/15/21	12:49	F	3	(40 ml)	($Na_2S_2O_3$)	(YES)	NO		√
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/15/21	12:49	F	2	(250) 500 (1L)	(None)	(YES)	NO	NA	√
Yellow Glass	4/15/21	12:49	F	2	(250), 500, 1L	(H_2SO_4)	(YES)	NO		√
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/15/21	12:49	F	1	250, (500) 1L	(HNO_3)	(YES)	(YES)		√
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — 11 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011)
AMBER - Glass	(8080) (8150) (TOX) OR [X] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD) OR [ ] WA [ ]
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA — Purge Start Time: 12 : 25 — Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (C)	DTW	Diss O_2 (mg/l)	Water Quality
0	F(1226)	0.00	7.01	191.4	760.0	14.9	18.54	4.56	Clear/colorless
1	F(1231)	0.33	6.55	80.9	560.0	13.4	18.55	0.62	Clear/colorless
2	F(1236)	0.66	6.63	37.2	610.3	13.5	18.55	0.51	Clear/colorless
3	F(1238)	0.86	6.69	21.1	633.1	13.4	1855	0.42	Clear/colorless
4	F(1240)	1.06	6.71	20.6	639.7	13.4	18.55	0.48	Clear/colorless
5	F(1242)	1.26	6.72	20.1	648.3	13.4	1855	0.44	Clear/colorless
6	F(1244)	1.46	6.71	19.8	642.3	13.4	1855	0.45	Clear/colorless

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Low Flow Purge Method: 20/10/20psi 250/pulse

SAMPLER: Chris Perra (PRINTED NAME) (SIGNATURE)

280-147597 Waybill

ORIGIN ID:SAVA (503) 534-3783
TIFFANY ANDREWS
SCS ENGINEERS
15940 SW 72ND AVE

PORTLAND, OR 97224
UNITED STATES US

SHIP DATE: 02APR21
ACTWGT: 15.00 LB MAN
CAD: 0886563/CAFE3409
DIMS: 24x15x15 IN

TO

EUROFINS TESTAMERICA DENVER
4955 YARROW STREET

ARVADA CO 800024517
(303) 736-0100
REF: S280 - 107585
RMA:

FedEx Express

FedEx
TRK# 0221 9508 8924 2486

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO LAAA

80002
CO-US DEN

Do Not Lift Using This Tag

ORIGIN ID:SAVA (503) 724-0112
TIFFANY ANDREWS
SCS ENGINEERS
15940 SW 72ND AVE

PORTLAND, OR 97224
UNITED STATES US

SHIP DATE: 02APR21
ACTWGT: 15.00 LB MAN
CAD: 0886563/CAFE3409
DIMS: 24x15x15 IN

TO

EUROFINS TESTAMERICA DENVER
4955 YARROW STREET

ARVADA CO 800024517
(303) 736-0100
REF: S280 - 107587
RMA:

FedEx Express

FedEx
TRK# 0221 9508 8924 2111

SATURDAY 12:00
PRIORITY OVERNIGHT

XO LAAA

8000
CO-US DE

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Sara, Betsy A	Carrier Tracking No(s):	COC No: 280-564256.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Betsy.Sara@Eurofinset.com	State of Origin: Oregon	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Oregon		Job #: 280-147597-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 5/6/2021			
City: Amherst	TAT Requested (days):			
State, Zip: NY, 14228-2298				
Phone: 716-691-2600(Tel) 716-691-7991(Fax)	PO #:			
Email:	WO #:			
Project Name: 1003|Riverbend Landfill SCS Engineers	Project #: 28002786			
Site: 1003|Riverbend Landfill	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300.0_28D/ 300.0, Sulfate and Chloride (TA Buffalo)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-12A (280-147597-2)	4/16/21	09:00 Pacific		Water			X	1	
FB4 (280-147597-3)	4/16/21	08:05 Pacific		Water			X	1	
MW-12B (280-147597-4)	4/16/21	10:05 Pacific		Water			X	1	
DUP4 (280-147597-5)	4/16/21	10:10 Pacific		Water			X	1	
MW-15A (280-147597-6)	4/15/21	10:41 Pacific		Water			X	1	
DUP3 (280-147597-7)	4/15/21	10:42 Pacific		Water			X	1	
MW-15B (280-147597-8)	4/15/21	12:49 Pacific		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	4/16/21 1520		[signature]	04/21/21 1600	TA
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.9 # ICE

Ver: 11/01/2020

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-147597-1

Login Number: 147597

List Source: Eurofins TestAmerica, Denver

List Number: 1

Creator: Rystrom, Joshua R

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	
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: 280-147597-1

Login Number: 147597
List Number: 2
Creator: Kolb, Chris M

List Source: Eurofins TestAmerica, Buffalo
List Creation: 04/22/21 02:57 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 IR GUN #1 ICE
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

Spring 2021

Detection Groundwater

Laboratory Analytical Reports

eurofins | Environment Testing America



ANALYTICAL REPORT

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

Laboratory Job ID: 280-147464-1
Client Project/Site: 1003|Riverbend Landfill - Groundwater
Sampling Event: Annual MW-20B - Apr

For:
Waste Management
13469 SW Highway 18
McMinnville, Oregon 97128

Attn: Mr. Jim Denson

Betsy Sara

Authorized for release by:
12/2/2021 8:52:55 AM

Betsy Sara, Project Manager II
(303)736-0189
Betsy.Sara@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

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Definitions/Glossary

Client: Waste Management
Job ID: 280-147464-1
Project/Site: 1003|Riverbend Landfill - Groundwater

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

Glossary

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

Job ID: 280-147464-1

Laboratory: Eurofins TestAmerica, Denver

Narrative

CASE NARRATIVE

Client: Waste Management

Project: 1003|Riverbend Landfill - Groundwater

Report Number: 280-147464-1

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

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

Sample Receiving

The samples were received on 04/15/2021; the samples arrived in good condition, properly preserved and on ice. The temperatures of the coolers at receipt were 0.9º C, 2.8º C, 3.2º C and 3.6º C.

Only one set of Trip Blanks was received for all events. The Trip Blank was logged with job 280-147466 "Semiannual Compliance Wells - Apr Oct".

Holding Times

All holding times were met.

Method Blanks

Dissolved Iron Method 6010B was detected in the Method Blank above the project established reporting limit, however, the requested reporting limit for Dissolved Iron is below TestAmerica Denver's standard reporting limit and, therefore, no corrective action has been taken for this anomaly. It must be noted that results reported below TestAmerica Denver's standard reporting limits may result in false positive/false negative results, less accurate quantitation and potential misidentification at the lower concentrations.

All other Method Blanks met method criteria.

Laboratory Control Samples (LCS)

All Laboratory Control Sample recoveries were within control limits.

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

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) for Method 8260B (batch 533748) and Method 8011, however, LCS/LCSD pairs were analyzed to demonstrate method precision and accuracy.

The Method 8260B MS/MSD performed on a sample from another client exhibited RPD results outside the RPD limits for multiple spike compounds. Because the corresponding Matrix Spike and Matrix Spike Duplicate recoveries, Laboratory Control Sample, and Method Blank sample were within control limits, this anomaly is considered to 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

Job ID: 280-147464-1 (Continued)

Laboratory: Eurofins TestAmerica, Denver (Continued)

limits for Dissolved Calcium, Dissolved Magnesium, and Dissolved Sodium Method 6010B because the sample concentration was greater than four times the spike amount. In addition, the RPD result was outside the RPD limit for Dissolved Sodium. Because the corresponding Laboratory Control Sample and the Method Blank sample were within control limits, no corrective action was taken.

The Matrix Spikes and Matrix Spike Duplicates performed on samples from other clients exhibited recoveries outside control limits for Dissolved Potassium Method 6010B and Nitrate/Nitrite Method 353.2. 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.

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

General Comments

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.

The analysis for Chloride and Sulfate Method 300.0 was performed by TestAmerica Buffalo. Their address and phone number are:
TestAmerica Buffalo
10 Hazelwood Drive, Suite 106
Amherst, NY 14228
Phone: 716-691-2600

Detection Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Groundwater

Job ID: 280-147464-1

Client Sample ID: MW-20B — Lab Sample ID: 280-147464-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	62000		500		ug/L	1		6010B	Dissolved
Magnesium	23000		200		ug/L	1		6010B	Dissolved
Manganese	230		3.0		ug/L	1		6010B	Dissolved
Sodium	29000		1000		ug/L	1		6010B	Dissolved
Chloride	64		0.50		mg/L	1		300.0	Total/NA
Sulfate	1.4		1.0		mg/L	1		300.0	Total/NA
Ammonia as N	0.13		0.030		mg/L	1		350.1	Total/NA
Total Anions	6.2				meq/L	1		SM 1030E	Total/NA
Total Cations	6.3				meq/L	1		SM 1030E	Total/NA
Percent Difference	0.22				%	1		SM 1030E	Total/NA
Calcium	62				mg/L	1		SM 1030E	Total/NA
Magnesium	23				mg/L	1		SM 1030E	Total/NA
Potassium	0.00				mg/L	1		SM 1030E	Total/NA
Sodium	29				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.13				mg/L	1		SM 1030E	Total/NA
Chloride	64				mg/L	1		SM 1030E	Total/NA
Sulfate	1.4				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	220				mg/L	1		SM 1030E	Total/NA
Alkalinity	220				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.00				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	0.22				%	1		SM 1030E	Total/NA
Calculated TDS	310				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.1				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	340				mg/L	1		SM 1030E	Total/NA
Iron	0.00				mg/L	1		SM 1030E	Total/NA
Calcium	3.1				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	1.9				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	1.3				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.0093				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	1.8				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.029				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	220				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	4.4				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	220		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	340		10		mg/L	1		SM 2540C	Total/NA
Field pH	7.32				SU	1		Field Sampling	Total/NA
Field Conductivity	632.1				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	11.2				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	0.48				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	105.2				millivolts	1		Field Sampling	Total/NA

Client Sample ID: FB1 — Lab Sample ID: 280-147464-3

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Total Anions	0.00				meq/L	1		SM 1030E	Total/NA
Total Cations	0.00				meq/L	1		SM 1030E	Total/NA
Percent Difference	NC				%	1		SM 1030E	Total/NA
Calcium	0.00				mg/L	1		SM 1030E	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Denver

Client Sample ID: FB1 (Continued)

Lab Sample ID: 280-147464-3

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Magnesium	0.00				mg/L	1		SM 1030E	Total/NA
Potassium	0.00				mg/L	1		SM 1030E	Total/NA
Sodium	0.00				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.00				mg/L	1		SM 1030E	Total/NA
Chloride	0.00				mg/L	1		SM 1030E	Total/NA
Sulfate	0.00				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	0.00				mg/L	1		SM 1030E	Total/NA
Alkalinity	0.00				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.00				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	NC				%	1		SM 1030E	Total/NA
Calculated TDS	0.00				mg/L	1		SM 1030E	Total/NA
TDS Ratio	NC				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	0.00				mg/L	1		SM 1030E	Total/NA
Iron	0.00				mg/L	1		SM 1030E	Total/NA
Calcium	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	0.00				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.00				meq/L	1		SM 1030E (meq)	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Waste Management
Job ID: 280-147464-1
Project/Site: 1003|Riverbend Landfill - Groundwater

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-147464-2	MW-20B	Water	04/13/21 08:50	04/15/21 10:00
280-147464-3	FB1	Water	04/13/21 09:05	04/15/21 10:00

Method Summary

Client: Waste Management
Job ID: 280-147464-1
Project/Site: 1003|Riverbend Landfill - Groundwater

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL DEN
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	TAL DEN
6010B	Metals (ICP)	SW846	TAL DEN
300.0	Anions, Ion Chromatography	MCAWW	TAL BUF
350.1	Nitrogen, Ammonia	MCAWW	TAL DEN
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	TAL DEN
9060	Organic Carbon, Total (TOC)	SW846	TAL DEN
SM 1030E	Cation Anion Balance	SM	TAL DEN
SM 1030E (meq)	Cation Anion Balance	SM	TAL DEN
SM 2320B	Alkalinity	SM	TAL DEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL DEN
Field Sampling	Field Sampling	EPA	TAL DEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL DEN
5030B	Purge and Trap	SW846	TAL DEN
8011	Microextraction	SW846	TAL DEN

Protocol 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.

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL DEN = Eurofins TestAmerica, Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Groundwater

Job ID: 280-147464-1

Client Sample ID: MW-20B
Date Collected: 04/13/21 08:50
Date Received: 04/15/21 10:00

Lab Sample ID: 280-147464-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/25/21 00:32	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/25/21 00:32	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/25/21 00:32	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/25/21 00:32	1
1,1-Dichloroethane	ND		1.0		ug/L			04/25/21 00:32	1
1,1-Dichloroethene	ND		1.0		ug/L			04/25/21 00:32	1
1,1-Dichloropropene	ND		1.0		ug/L			04/25/21 00:32	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/25/21 00:32	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/25/21 00:32	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/25/21 00:32	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/25/21 00:32	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/25/21 00:32	1
1,2-Dichloroethane	ND		1.0		ug/L			04/25/21 00:32	1
1,2-Dichloropropane	ND		1.0		ug/L			04/25/21 00:32	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/25/21 00:32	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/25/21 00:32	1
1,3-Dichloropropane	ND		1.0		ug/L			04/25/21 00:32	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/25/21 00:32	1
2,2-Dichloropropane	ND		5.0		ug/L			04/25/21 00:32	1
2-Butanone (MEK)	ND		6.0		ug/L			04/25/21 00:32	1
2-Chlorotoluene	ND		1.0		ug/L			04/25/21 00:32	1
2-Hexanone	ND		5.0		ug/L			04/25/21 00:32	1
4-Chlorotoluene	ND		1.0		ug/L			04/25/21 00:32	1
4-Isopropyltoluene	ND		1.0		ug/L			04/25/21 00:32	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/25/21 00:32	1
Acetone	ND		10		ug/L			04/25/21 00:32	1
Benzene	ND		1.0		ug/L			04/25/21 00:32	1
Bromobenzene	ND		1.0		ug/L			04/25/21 00:32	1
Bromochloromethane	ND		1.0		ug/L			04/25/21 00:32	1
Bromodichloromethane	ND		1.0		ug/L			04/25/21 00:32	1
Bromoform	ND		1.0		ug/L			04/25/21 00:32	1
Bromomethane	ND		2.0		ug/L			04/25/21 00:32	1
Carbon disulfide	ND		2.0		ug/L			04/25/21 00:32	1
Carbon tetrachloride	ND		1.0		ug/L			04/25/21 00:32	1
Chlorobenzene	ND		1.0		ug/L			04/25/21 00:32	1
Chloroethane	ND		2.0		ug/L			04/25/21 00:32	1
Chloroform	ND		1.0		ug/L			04/25/21 00:32	1
Chloromethane	ND		2.0		ug/L			04/25/21 00:32	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/25/21 00:32	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/25/21 00:32	1
Dibromochloromethane	ND		1.0		ug/L			04/25/21 00:32	1
Dibromomethane	ND		1.0		ug/L			04/25/21 00:32	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/25/21 00:32	1
Ethylbenzene	ND		1.0		ug/L			04/25/21 00:32	1
Hexachlorobutadiene	ND		1.0		ug/L			04/25/21 00:32	1
Isopropylbenzene	ND		1.0		ug/L			04/25/21 00:32	1
Methylene Chloride	ND		5.0		ug/L			04/25/21 00:32	1
Naphthalene	ND		1.0		ug/L			04/25/21 00:32	1
n-Butylbenzene	ND		1.0		ug/L			04/25/21 00:32	1

Client Sample ID: MW-20B

Date Collected: 04/13/21 08:50
Date Received: 04/15/21 10:00

Lab Sample ID: 280-147464-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		1.0		ug/L			04/25/21 00:32	1
sec-Butylbenzene	ND		1.0		ug/L			04/25/21 00:32	1
Styrene	ND		1.0		ug/L			04/25/21 00:32	1
tert-Butylbenzene	ND		1.0		ug/L			04/25/21 00:32	1
Tetrachloroethene	ND		1.0		ug/L			04/25/21 00:32	1
Toluene	ND		1.0		ug/L			04/25/21 00:32	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/25/21 00:32	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/25/21 00:32	1
Trichloroethene	ND		1.0		ug/L			04/25/21 00:32	1
Trichlorofluoromethane	ND		2.0		ug/L			04/25/21 00:32	1
Vinyl chloride	ND		1.0		ug/L			04/25/21 00:32	1
Xylenes (total)	ND		2.0		ug/L			04/25/21 00:32	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/25/21 00:32*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 127*		*04/25/21 00:32*	*1*
4-Bromofluorobenzene (Surr)	*94*		*78 - 120*		*04/25/21 00:32*	*1*
Dibromofluoromethane (Surr)	*104*		*77 - 120*		*04/25/21 00:32*	*1*
Toluene-d8 (Surr)	*95*		*80 - 125*		*04/25/21 00:32*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		04/23/21 10:55	04/23/21 17:25	1
1,2-Dibromoethane	ND		0.050		ug/L		04/23/21 10:55	04/23/21 17:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*113*		*70 - 130*	*04/23/21 10:55*	*04/23/21 17:25*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**62000**		500		ug/L		04/23/21 09:06	04/23/21 19:24	1
Iron	ND		30		ug/L		04/23/21 09:06	04/23/21 19:24	1
Magnesium	**23000**		200		ug/L		04/23/21 09:06	04/23/21 19:24	1
Manganese	**230**		3.0		ug/L		04/23/21 09:06	04/23/21 19:24	1
Potassium	ND		500		ug/L		04/23/21 09:06	04/23/21 19:24	1
Sodium	**29000**		1000		ug/L		04/23/21 09:06	04/23/21 19:24	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	**6.2**				meq/L			05/03/21 09:05	1
Total Cations	**6.3**				meq/L			05/03/21 09:05	1
Percent Difference	**0.22**				%			05/03/21 09:05	1
Calcium	**62**				mg/L			05/03/21 09:05	1
Magnesium	**23**				mg/L			05/03/21 09:05	1
Potassium	**0.00**				mg/L			05/03/21 09:05	1
Sodium	**29**				mg/L			05/03/21 09:05	1
Ammonia as N	**0.13**				mg/L			05/03/21 09:05	1
Chloride	**64**				mg/L			05/03/21 09:05	1
Sulfate	**1.4**				mg/L			05/03/21 09:05	1

Client Sample ID: MW-20B

Lab Sample ID: 280-147464-2

Date Collected: 04/13/21 08:50

Matrix: Water

Date Received: 04/15/21 10:00

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity	220				mg/L			05/03/21 09:05	1
Alkalinity	220				mg/L			05/03/21 09:05	1
Nitrate/Nitrite	0.00				mg/L			05/03/21 09:05	1
Anion/Cation Balance	0.22				%			05/03/21 09:05	1
Calculated TDS	310				mg/L			05/03/21 09:05	1
TDS Ratio	1.1				NONE			05/03/21 09:05	1
Total Dissolved Solids	340				mg/L			05/03/21 09:05	1
Iron	0.00				mg/L			05/03/21 09:05	1
Calcium	3.1				meq/L			05/03/21 09:05	1
Magnesium	1.9				meq/L			05/03/21 09:05	1
Potassium	0.00				meq/L			05/03/21 09:05	1
Sodium	1.3				meq/L			05/03/21 09:05	1
Ammonia as N	0.0093				meq/L			05/03/21 09:05	1
Chloride	1.8				meq/L			05/03/21 09:05	1
Sulfate	0.029				meq/L			05/03/21 09:05	1
Alkalinity	220				mg/L			05/03/21 09:05	1
Bicarbonate Alkalinity	4.4				meq/L			05/03/21 09:05	1
Nitrate/Nitrite	0.00				meq/L			05/03/21 09:05	1
Iron	0.00				meq/L			05/03/21 09:05	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	64		0.50		mg/L			04/28/21 00:29	1
Sulfate	1.4		1.0		mg/L			04/28/21 00:29	1
Ammonia as N	0.13		0.030		mg/L			04/26/21 17:53	1
Nitrate/Nitrite	ND		0.050		mg/L			04/27/21 17:26	1
Total Organic Carbon - Average	ND		1.0		mg/L			05/01/21 00:13	1
Bicarbonate Alkalinity	220		10		mg/L			04/16/21 22:35	1
Total Dissolved Solids	340		10		mg/L			04/17/21 12:50	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.32				SU			04/13/21 09:50	1
Field Conductivity	632.1				umhos/cm			04/13/21 09:50	1
Field Temperature	11.2				Degrees C			04/13/21 09:50	1
Field Dissolved Oxygen	0.48				mg/L			04/13/21 09:50	1
Field EH/ORP	105.2				millivolts			04/13/21 09:50	1

Client Sample ID: FB1

Lab Sample ID: 280-147464-3

Date Collected: 04/13/21 09:05

Matrix: Water

Date Received: 04/15/21 10:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/24/21 15:09	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/24/21 15:09	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/24/21 15:09	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/24/21 15:09	1
1,1-Dichloroethane	ND		1.0		ug/L			04/24/21 15:09	1
1,1-Dichloroethene	ND		1.0		ug/L			04/24/21 15:09	1
1,1-Dichloropropene	ND		1.0		ug/L			04/24/21 15:09	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/24/21 15:09	1

Client Sample ID: FB1
Date Collected: 04/13/21 09:05
Date Received: 04/15/21 10:00

Lab Sample ID: 280-147464-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		1.0		ug/L			04/24/21 15:09	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/24/21 15:09	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/24/21 15:09	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/24/21 15:09	1
1,2-Dichloroethane	ND		1.0		ug/L			04/24/21 15:09	1
1,2-Dichloropropane	ND		1.0		ug/L			04/24/21 15:09	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/24/21 15:09	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/24/21 15:09	1
1,3-Dichloropropane	ND		1.0		ug/L			04/24/21 15:09	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/24/21 15:09	1
2,2-Dichloropropane	ND		5.0		ug/L			04/24/21 15:09	1
2-Butanone (MEK)	ND		6.0		ug/L			04/24/21 15:09	1
2-Chlorotoluene	ND		1.0		ug/L			04/24/21 15:09	1
2-Hexanone	ND		5.0		ug/L			04/24/21 15:09	1
4-Chlorotoluene	ND		1.0		ug/L			04/24/21 15:09	1
4-Isopropyltoluene	ND		1.0		ug/L			04/24/21 15:09	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/24/21 15:09	1
Acetone	ND		10		ug/L			04/24/21 15:09	1
Benzene	ND		1.0		ug/L			04/24/21 15:09	1
Bromobenzene	ND		1.0		ug/L			04/24/21 15:09	1
Bromochloromethane	ND		1.0		ug/L			04/24/21 15:09	1
Bromodichloromethane	ND		1.0		ug/L			04/24/21 15:09	1
Bromoform	ND		1.0		ug/L			04/24/21 15:09	1
Bromomethane	ND		2.0		ug/L			04/24/21 15:09	1
Carbon disulfide	ND		2.0		ug/L			04/24/21 15:09	1
Carbon tetrachloride	ND		1.0		ug/L			04/24/21 15:09	1
Chlorobenzene	ND		1.0		ug/L			04/24/21 15:09	1
Chloroethane	ND		2.0		ug/L			04/24/21 15:09	1
Chloroform	ND		1.0		ug/L			04/24/21 15:09	1
Chloromethane	ND		2.0		ug/L			04/24/21 15:09	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/24/21 15:09	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/24/21 15:09	1
Dibromochloromethane	ND		1.0		ug/L			04/24/21 15:09	1
Dibromomethane	ND		1.0		ug/L			04/24/21 15:09	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/24/21 15:09	1
Ethylbenzene	ND		1.0		ug/L			04/24/21 15:09	1
Hexachlorobutadiene	ND		1.0		ug/L			04/24/21 15:09	1
Isopropylbenzene	ND		1.0		ug/L			04/24/21 15:09	1
Methylene Chloride	ND		5.0		ug/L			04/24/21 15:09	1
Naphthalene	ND		1.0		ug/L			04/24/21 15:09	1
n-Butylbenzene	ND		1.0		ug/L			04/24/21 15:09	1
N-Propylbenzene	ND		1.0		ug/L			04/24/21 15:09	1
sec-Butylbenzene	ND		1.0		ug/L			04/24/21 15:09	1
Styrene	ND		1.0		ug/L			04/24/21 15:09	1
tert-Butylbenzene	ND		1.0		ug/L			04/24/21 15:09	1
Tetrachloroethene	ND		1.0		ug/L			04/24/21 15:09	1
Toluene	ND		1.0		ug/L			04/24/21 15:09	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/24/21 15:09	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/24/21 15:09	1

Client Sample ID: FB1

Date Collected: 04/13/21 09:05
Date Received: 04/15/21 10:00

Lab Sample ID: 280-147464-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		1.0		ug/L			04/24/21 15:09	1
Trichlorofluoromethane	ND		2.0		ug/L			04/24/21 15:09	1
Vinyl chloride	ND		1.0		ug/L			04/24/21 15:09	1
Xylenes (total)	ND		2.0		ug/L			04/24/21 15:09	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/24/21 15:09*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 127*		*04/24/21 15:09*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*04/24/21 15:09*	*1*
Dibromofluoromethane (Surr)	*109*		*77 - 120*		*04/24/21 15:09*	*1*
Toluene-d8 (Surr)	*90*		*80 - 125*		*04/24/21 15:09*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		04/23/21 10:55	04/23/21 17:47	1
1,2-Dibromoethane	ND		0.050		ug/L		04/23/21 10:55	04/23/21 17:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*112*		*70 - 130*	*04/23/21 10:55*	*04/23/21 17:47*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		500		ug/L		04/23/21 09:06	04/23/21 19:27	1
Iron	ND		30		ug/L		04/23/21 09:06	04/23/21 19:27	1
Magnesium	ND		200		ug/L		04/23/21 09:06	04/23/21 19:27	1
Manganese	ND		3.0		ug/L		04/23/21 09:06	04/23/21 19:27	1
Potassium	ND		500		ug/L		04/23/21 09:06	04/23/21 19:27	1
Sodium	ND		1000		ug/L		04/23/21 09:06	04/23/21 19:27	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	**0.00**				meq/L			05/03/21 09:05	1
Total Cations	**0.00**				meq/L			05/03/21 09:05	1
Percent Difference	**NC**				%			05/03/21 09:05	1
Calcium	**0.00**				mg/L			05/03/21 09:05	1
Magnesium	**0.00**				mg/L			05/03/21 09:05	1
Potassium	**0.00**				mg/L			05/03/21 09:05	1
Sodium	**0.00**				mg/L			05/03/21 09:05	1
Ammonia as N	**0.00**				mg/L			05/03/21 09:05	1
Chloride	**0.00**				mg/L			05/03/21 09:05	1
Sulfate	**0.00**				mg/L			05/03/21 09:05	1
Bicarbonate Alkalinity	**0.00**				mg/L			05/03/21 09:05	1
Alkalinity	**0.00**				mg/L			05/03/21 09:05	1
Nitrate/Nitrite	**0.00**				mg/L			05/03/21 09:05	1
Anion/Cation Balance	**NC**				%			05/03/21 09:05	1
Calculated TDS	**0.00**				mg/L			05/03/21 09:05	1
TDS Ratio	**NC**				NONE			05/03/21 09:05	1
Total Dissolved Solids	**0.00**				mg/L			05/03/21 09:05	1
Iron	**0.00**				mg/L			05/03/21 09:05	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Groundwater

Job ID: 280-147464-1

Client Sample ID: FB1

Date Collected: 04/13/21 09:05
Date Received: 04/15/21 10:00

Lab Sample ID: 280-147464-3

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	0.00				meq/L			05/03/21 09:05	1
Magnesium	0.00				meq/L			05/03/21 09:05	1
Potassium	0.00				meq/L			05/03/21 09:05	1
Sodium	0.00				meq/L			05/03/21 09:05	1
Ammonia as N	0.00				meq/L			05/03/21 09:05	1
Chloride	0.00				meq/L			05/03/21 09:05	1
Sulfate	0.00				meq/L			05/03/21 09:05	1
Alkalinity	0.00				mg/L			05/03/21 09:05	1
Bicarbonate Alkalinity	0.00				meq/L			05/03/21 09:05	1
Nitrate/Nitrite	0.00				meq/L			05/03/21 09:05	1
Iron	0.00				meq/L			05/03/21 09:05	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			04/28/21 00:47	1
Sulfate	ND		1.0		mg/L			04/28/21 00:47	1
Ammonia as N	ND		0.030		mg/L			04/27/21 16:06	1
Nitrate/Nitrite	ND		0.050		mg/L			04/27/21 17:28	1
Total Organic Carbon - Average	ND		1.0		mg/L			05/01/21 01:03	1
Bicarbonate Alkalinity	ND		10		mg/L			04/16/21 22:41	1
Total Dissolved Solids	ND		10		mg/L			04/17/21 12:50	1

Surrogate Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Groundwater

Job ID: 280-147464-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-127)	(78-120)	(77-120)	(80-125)
280-147461-B-10 MS	Matrix Spike	100	93	103	96
280-147461-C-10 MSD	Matrix Spike Duplicate	99	96	102	96
280-147464-2	MW-20B	102	94	104	95
280-147464-3	FB1	106	96	109	90
LCS 280-533748/5	Lab Control Sample	102	96	107	92
LCS 280-533813/4	Lab Control Sample	97	94	98	95
LCSD 280-533748/6	Lab Control Sample Dup	101	96	106	91
LCSD 280-533813/5	Lab Control Sample Dup	97	94	102	97
MB 280-533748/10	Method Blank	103	96	107	90
MB 280-533813/9	Method Blank	99	95	106	97

Surrogate Legend

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

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		12DBP1
Lab Sample ID	Client Sample ID	(70-130)
280-147464-2	MW-20B	113
280-147464-3	FB1	112
LCS 280-533634/2-A	Lab Control Sample	109
LCSD 280-533634/3-A	Lab Control Sample Dup	112
MB 280-533634/1-A	Method Blank	115

Surrogate Legend

12DBP = 1,2-Dibromopropane

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

Lab Sample ID: MB 280-533748/10
Matrix: Water
Analysis Batch: 533748

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/24/21 13:13	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/24/21 13:13	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/24/21 13:13	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/24/21 13:13	1
1,1-Dichloroethane	ND		1.0		ug/L			04/24/21 13:13	1
1,1-Dichloroethene	ND		1.0		ug/L			04/24/21 13:13	1
1,1-Dichloropropene	ND		1.0		ug/L			04/24/21 13:13	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/24/21 13:13	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/24/21 13:13	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/24/21 13:13	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/24/21 13:13	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/24/21 13:13	1
1,2-Dichloroethane	ND		1.0		ug/L			04/24/21 13:13	1
1,2-Dichloropropane	ND		1.0		ug/L			04/24/21 13:13	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/24/21 13:13	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/24/21 13:13	1
1,3-Dichloropropane	ND		1.0		ug/L			04/24/21 13:13	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/24/21 13:13	1
2,2-Dichloropropane	ND		5.0		ug/L			04/24/21 13:13	1
2-Butanone (MEK)	ND		6.0		ug/L			04/24/21 13:13	1
2-Chlorotoluene	ND		1.0		ug/L			04/24/21 13:13	1
2-Hexanone	ND		5.0		ug/L			04/24/21 13:13	1
4-Chlorotoluene	ND		1.0		ug/L			04/24/21 13:13	1
4-Isopropyltoluene	ND		1.0		ug/L			04/24/21 13:13	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/24/21 13:13	1
Acetone	ND		10		ug/L			04/24/21 13:13	1
Benzene	ND		1.0		ug/L			04/24/21 13:13	1
Bromobenzene	ND		1.0		ug/L			04/24/21 13:13	1
Bromochloromethane	ND		1.0		ug/L			04/24/21 13:13	1
Bromodichloromethane	ND		1.0		ug/L			04/24/21 13:13	1
Bromoform	ND		1.0		ug/L			04/24/21 13:13	1
Bromomethane	ND		2.0		ug/L			04/24/21 13:13	1
Carbon disulfide	ND		2.0		ug/L			04/24/21 13:13	1
Carbon tetrachloride	ND		1.0		ug/L			04/24/21 13:13	1
Chlorobenzene	ND		1.0		ug/L			04/24/21 13:13	1
Chloroethane	ND		2.0		ug/L			04/24/21 13:13	1
Chloroform	ND		1.0		ug/L			04/24/21 13:13	1
Chloromethane	ND		2.0		ug/L			04/24/21 13:13	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/24/21 13:13	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/24/21 13:13	1
Dibromochloromethane	ND		1.0		ug/L			04/24/21 13:13	1
Dibromomethane	ND		1.0		ug/L			04/24/21 13:13	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/24/21 13:13	1
Ethylbenzene	ND		1.0		ug/L			04/24/21 13:13	1
Hexachlorobutadiene	ND		1.0		ug/L			04/24/21 13:13	1
Isopropylbenzene	ND		1.0		ug/L			04/24/21 13:13	1
Methylene Chloride	ND		5.0		ug/L			04/24/21 13:13	1
Naphthalene	ND		1.0		ug/L			04/24/21 13:13	1

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

Lab Sample ID: MB 280-533748/10
Matrix: Water
Analysis Batch: 533748

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		1.0		ug/L			04/24/21 13:13	1
N-Propylbenzene	ND		1.0		ug/L			04/24/21 13:13	1
sec-Butylbenzene	ND		1.0		ug/L			04/24/21 13:13	1
Styrene	ND		1.0		ug/L			04/24/21 13:13	1
tert-Butylbenzene	ND		1.0		ug/L			04/24/21 13:13	1
Tetrachloroethene	ND		1.0		ug/L			04/24/21 13:13	1
Toluene	ND		1.0		ug/L			04/24/21 13:13	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/24/21 13:13	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/24/21 13:13	1
Trichloroethene	ND		1.0		ug/L			04/24/21 13:13	1
Trichlorofluoromethane	ND		2.0		ug/L			04/24/21 13:13	1
Vinyl chloride	ND		1.0		ug/L			04/24/21 13:13	1
Xylenes (total)	ND		2.0		ug/L			04/24/21 13:13	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/24/21 13:13*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 127*		*04/24/21 13:13*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*04/24/21 13:13*	*1*
Dibromofluoromethane (Surr)	*107*		*77 - 120*		*04/24/21 13:13*	*1*
Toluene-d8 (Surr)	*90*		*80 - 125*		*04/24/21 13:13*	*1*

Lab Sample ID: LCS 280-533748/5
Matrix: Water
Analysis Batch: 533748

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	22.5		ug/L		90	65 - 135
1,1,1-Trichloroethane	25.0	26.7		ug/L		107	65 - 135
1,1,2,2-Tetrachloroethane	25.0	21.6		ug/L		86	58 - 135
1,1,2-Trichloroethane	25.0	27.5		ug/L		110	64 - 135
1,1-Dichloroethane	25.0	27.6		ug/L		110	65 - 135
1,1-Dichloroethene	25.0	25.2		ug/L		101	65 - 136
1,1-Dichloropropene	25.0	25.7		ug/L		103	65 - 135
1,2,3-Trichlorobenzene	25.0	21.4		ug/L		86	60 - 135
1,2,3-Trichloropropane	25.0	21.0		ug/L		84	65 - 135
1,2,4-Trichlorobenzene	25.0	20.6		ug/L		82	58 - 135
1,2,4-Trimethylbenzene	25.0	22.2		ug/L		89	65 - 135
1,2-Dichlorobenzene	25.0	21.4		ug/L		86	65 - 135
1,2-Dichloroethane	25.0	25.2		ug/L		101	65 - 135
1,2-Dichloropropane	25.0	27.7		ug/L		111	64 - 135
1,3,5-Trimethylbenzene	25.0	22.2		ug/L		89	65 - 135
1,3-Dichlorobenzene	25.0	21.5		ug/L		86	65 - 135
1,3-Dichloropropane	25.0	23.0		ug/L		92	64 - 135
1,4-Dichlorobenzene	25.0	21.0		ug/L		84	65 - 135
2,2-Dichloropropane	25.0	27.9		ug/L		112	65 - 135
2-Butanone (MEK)	100	97.7		ug/L		98	44 - 177

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

Lab Sample ID: LCS 280-533748/5
Matrix: Water
Analysis Batch: 533748

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chlorotoluene	25.0	22.0		ug/L		88	65 - 135
2-Hexanone	100	78.0		ug/L		78	57 - 139
4-Chlorotoluene	25.0	21.9		ug/L		87	65 - 135
4-Isopropyltoluene	25.0	22.2		ug/L		89	65 - 135
4-Methyl-2-pentanone	100	95.3		ug/L		95	60 - 150
Acetone	100	96.8		ug/L		97	39 - 156
Benzene	25.0	26.6		ug/L		107	65 - 135
Bromobenzene	25.0	21.5		ug/L		86	65 - 135
Bromochloromethane	25.0	30.2		ug/L		121	65 - 135
Bromodichloromethane	25.0	27.5		ug/L		110	65 - 135
Bromoform	25.0	20.3		ug/L		81	62 - 135
Bromomethane	25.0	31.4		ug/L		126	45 - 135
Carbon disulfide	25.0	25.8		ug/L		103	55 - 143
Carbon tetrachloride	25.0	26.4		ug/L		105	65 - 135
Chlorobenzene	25.0	22.7		ug/L		91	65 - 135
Chloroethane	25.0	26.9		ug/L		108	46 - 136
Chloroform	25.0	27.3		ug/L		109	65 - 135
Chloromethane	25.0	24.8		ug/L		99	34 - 145
cis-1,2-Dichloroethene	25.0	26.4		ug/L		106	65 - 135
cis-1,3-Dichloropropene	25.0	23.3		ug/L		93	65 - 135
Dibromochloromethane	25.0	23.7		ug/L		95	65 - 135
Dibromomethane	25.0	26.5		ug/L		106	65 - 135
Dichlorodifluoromethane	25.0	21.7		ug/L		87	43 - 142
Ethylbenzene	25.0	22.9		ug/L		92	65 - 135
Hexachlorobutadiene	25.0	22.4		ug/L		90	65 - 135
Isopropylbenzene	25.0	21.5		ug/L		86	65 - 135
Methylene Chloride	25.0	27.1		ug/L		108	54 - 141
Naphthalene	25.0	19.8		ug/L		79	42 - 135
n-Butylbenzene	25.0	21.6		ug/L		87	64 - 135
N-Propylbenzene	25.0	22.1		ug/L		88	65 - 135
sec-Butylbenzene	25.0	21.8		ug/L		87	64 - 135
Styrene	25.0	23.2		ug/L		93	65 - 135
tert-Butylbenzene	25.0	21.7		ug/L		87	65 - 135
Tetrachloroethene	25.0	22.9		ug/L		92	65 - 135
Toluene	25.0	26.8		ug/L		107	65 - 135
trans-1,2-Dichloroethene	25.0	25.7		ug/L		103	65 - 135
trans-1,3-Dichloropropene	25.0	27.9		ug/L		111	65 - 135
Trichloroethene	25.0	21.4		ug/L		86	65 - 135
Trichlorofluoromethane	25.0	25.4		ug/L		102	53 - 137
Vinyl chloride	25.0	23.7		ug/L		95	40 - 137

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 127*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*
Dibromofluoromethane (Surr)	*107*		*77 - 120*
Toluene-d8 (Surr)	*92*		*80 - 125*

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

Lab Sample ID: LCSD 280-533748/6
Matrix: Water
Analysis Batch: 533748

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane			25.0	22.8		ug/L		91	65 - 135	1	20
1,1,1-Trichloroethane			25.0	27.0		ug/L		108	65 - 135	1	20
1,1,2,2-Tetrachloroethane			25.0	21.6		ug/L		86	58 - 135	0	20
1,1,2-Trichloroethane			25.0	27.4		ug/L		110	64 - 135	0	27
1,1-Dichloroethane			25.0	28.0		ug/L		112	65 - 135	1	21
1,1-Dichloroethene			25.0	25.8		ug/L		103	65 - 136	3	20
1,1-Dichloropropene			25.0	26.6		ug/L		106	65 - 135	3	21
1,2,3-Trichlorobenzene			25.0	21.4		ug/L		86	60 - 135	0	36
1,2,3-Trichloropropane			25.0	20.7		ug/L		83	65 - 135	1	23
1,2,4-Trichlorobenzene			25.0	20.8		ug/L		83	58 - 135	1	25
1,2,4-Trimethylbenzene			25.0	22.7		ug/L		91	65 - 135	2	20
1,2-Dichlorobenzene			25.0	21.8		ug/L		87	65 - 135	2	20
1,2-Dichloroethane			25.0	25.3		ug/L		101	65 - 135	0	20
1,2-Dichloropropane			25.0	28.0		ug/L		112	64 - 135	1	20
1,3,5-Trimethylbenzene			25.0	22.4		ug/L		89	65 - 135	1	20
1,3-Dichlorobenzene			25.0	21.9		ug/L		87	65 - 135	1	20
1,3-Dichloropropane			25.0	23.1		ug/L		92	64 - 135	1	20
1,4-Dichlorobenzene			25.0	21.1		ug/L		85	65 - 135	1	23
2,2-Dichloropropane			25.0	28.4		ug/L		113	65 - 135	2	20
2-Butanone (MEK)			100	98.2		ug/L		98	44 - 177	0	32
2-Chlorotoluene			25.0	22.1		ug/L		88	65 - 135	0	20
2-Hexanone			100	77.2		ug/L		77	57 - 139	1	25
4-Chlorotoluene			25.0	21.6		ug/L		87	65 - 135	1	20
4-Isopropyltoluene			25.0	22.4		ug/L		90	65 - 135	1	20
4-Methyl-2-pentanone			100	95.0		ug/L		95	60 - 150	0	22
Acetone			100	97.5		ug/L		98	39 - 156	1	23
Benzene			25.0	27.2		ug/L		109	65 - 135	2	20
Bromobenzene			25.0	21.4		ug/L		86	65 - 135	0	26
Bromochloromethane			25.0	29.9		ug/L		120	65 - 135	1	29
Bromodichloromethane			25.0	28.0		ug/L		112	65 - 135	2	20
Bromoform			25.0	20.2		ug/L		81	62 - 135	0	27
Bromomethane			25.0	31.1		ug/L		124	45 - 135	1	33
Carbon disulfide			25.0	26.2		ug/L		105	55 - 143	2	20
Carbon tetrachloride			25.0	26.8		ug/L		107	65 - 135	2	21
Chlorobenzene			25.0	23.0		ug/L		92	65 - 135	1	20
Chloroethane			25.0	27.7		ug/L		111	46 - 136	3	25
Chloroform			25.0	27.6		ug/L		110	65 - 135	1	20
Chloromethane			25.0	24.9		ug/L		100	34 - 145	0	24
cis-1,2-Dichloroethene			25.0	27.0		ug/L		108	65 - 135	2	20
cis-1,3-Dichloropropene			25.0	23.5		ug/L		94	65 - 135	1	26
Dibromochloromethane			25.0	24.1		ug/L		96	65 - 135	1	20
Dibromomethane			25.0	26.4		ug/L		106	65 - 135	0	26
Dichlorodifluoromethane			25.0	21.9		ug/L		88	43 - 142	1	30
Ethylbenzene			25.0	23.1		ug/L		92	65 - 135	1	20
Hexachlorobutadiene			25.0	22.0		ug/L		88	65 - 135	2	25
Isopropylbenzene			25.0	21.9		ug/L		88	65 - 135	2	20
Methylene Chloride			25.0	27.4		ug/L		110	54 - 141	1	26
Naphthalene			25.0	19.9		ug/L		79	42 - 135	0	23

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

Lab Sample ID: LCSD 280-533748/6
Matrix: Water
Analysis Batch: 533748

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
n-Butylbenzene			25.0	22.2		ug/L		89	64 - 135	3	21
N-Propylbenzene			25.0	22.7		ug/L		91	65 - 135	3	20
sec-Butylbenzene			25.0	22.4		ug/L		90	64 - 135	3	21
Styrene			25.0	23.5		ug/L		94	65 - 135	1	26
tert-Butylbenzene			25.0	22.1		ug/L		88	65 - 135	2	21
Tetrachloroethene			25.0	23.1		ug/L		92	65 - 135	1	20
Toluene			25.0	27.3		ug/L		109	65 - 135	2	20
trans-1,2-Dichloroethene			25.0	26.3		ug/L		105	65 - 135	2	24
trans-1,3-Dichloropropene			25.0	27.9		ug/L		112	65 - 135	0	26
Trichloroethene			25.0	21.7		ug/L		87	65 - 135	1	20
Trichlorofluoromethane			25.0	25.7		ug/L		103	53 - 137	1	27
Vinyl chloride			25.0	23.9		ug/L		96	40 - 137	1	24

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 127*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*
Dibromofluoromethane (Surr)	*106*		*77 - 120*
Toluene-d8 (Surr)	*91*		*80 - 125*

Lab Sample ID: MB 280-533813/9
Matrix: Water
Analysis Batch: 533813

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/24/21 22:42	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/24/21 22:42	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/24/21 22:42	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/24/21 22:42	1
1,1-Dichloroethane	ND		1.0		ug/L			04/24/21 22:42	1
1,1-Dichloroethene	ND		1.0		ug/L			04/24/21 22:42	1
1,1-Dichloropropene	ND		1.0		ug/L			04/24/21 22:42	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/24/21 22:42	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/24/21 22:42	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/24/21 22:42	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/24/21 22:42	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/24/21 22:42	1
1,2-Dichloroethane	ND		1.0		ug/L			04/24/21 22:42	1
1,2-Dichloropropane	ND		1.0		ug/L			04/24/21 22:42	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/24/21 22:42	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/24/21 22:42	1
1,3-Dichloropropane	ND		1.0		ug/L			04/24/21 22:42	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/24/21 22:42	1
2,2-Dichloropropane	ND		5.0		ug/L			04/24/21 22:42	1
2-Butanone (MEK)	ND		6.0		ug/L			04/24/21 22:42	1
2-Chlorotoluene	ND		1.0		ug/L			04/24/21 22:42	1
2-Hexanone	ND		5.0		ug/L			04/24/21 22:42	1
4-Chlorotoluene	ND		1.0		ug/L			04/24/21 22:42	1
4-Isopropyltoluene	ND		1.0		ug/L			04/24/21 22:42	1

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

Lab Sample ID: MB 280-533813/9
Matrix: Water
Analysis Batch: 533813

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone	ND		5.0		ug/L			04/24/21 22:42	1
Acetone	ND		10		ug/L			04/24/21 22:42	1
Benzene	ND		1.0		ug/L			04/24/21 22:42	1
Bromobenzene	ND		1.0		ug/L			04/24/21 22:42	1
Bromochloromethane	ND		1.0		ug/L			04/24/21 22:42	1
Bromodichloromethane	ND		1.0		ug/L			04/24/21 22:42	1
Bromoform	ND		1.0		ug/L			04/24/21 22:42	1
Bromomethane	ND		2.0		ug/L			04/24/21 22:42	1
Carbon disulfide	ND		2.0		ug/L			04/24/21 22:42	1
Carbon tetrachloride	ND		1.0		ug/L			04/24/21 22:42	1
Chlorobenzene	ND		1.0		ug/L			04/24/21 22:42	1
Chloroethane	ND		2.0		ug/L			04/24/21 22:42	1
Chloroform	ND		1.0		ug/L			04/24/21 22:42	1
Chloromethane	ND		2.0		ug/L			04/24/21 22:42	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/24/21 22:42	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/24/21 22:42	1
Dibromochloromethane	ND		1.0		ug/L			04/24/21 22:42	1
Dibromomethane	ND		1.0		ug/L			04/24/21 22:42	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/24/21 22:42	1
Ethylbenzene	ND		1.0		ug/L			04/24/21 22:42	1
Hexachlorobutadiene	ND		1.0		ug/L			04/24/21 22:42	1
Isopropylbenzene	ND		1.0		ug/L			04/24/21 22:42	1
Methylene Chloride	ND		5.0		ug/L			04/24/21 22:42	1
Naphthalene	ND		1.0		ug/L			04/24/21 22:42	1
n-Butylbenzene	ND		1.0		ug/L			04/24/21 22:42	1
N-Propylbenzene	ND		1.0		ug/L			04/24/21 22:42	1
sec-Butylbenzene	ND		1.0		ug/L			04/24/21 22:42	1
Styrene	ND		1.0		ug/L			04/24/21 22:42	1
tert-Butylbenzene	ND		1.0		ug/L			04/24/21 22:42	1
Tetrachloroethene	ND		1.0		ug/L			04/24/21 22:42	1
Toluene	ND		1.0		ug/L			04/24/21 22:42	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/24/21 22:42	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/24/21 22:42	1
Trichloroethene	ND		1.0		ug/L			04/24/21 22:42	1
Trichlorofluoromethane	ND		2.0		ug/L			04/24/21 22:42	1
Vinyl chloride	ND		1.0		ug/L			04/24/21 22:42	1
Xylenes (total)	ND		2.0		ug/L			04/24/21 22:42	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/24/21 22:42*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 127*		*04/24/21 22:42*	*1*
4-Bromofluorobenzene (Surr)	*95*		*78 - 120*		*04/24/21 22:42*	*1*
Dibromofluoromethane (Surr)	*106*		*77 - 120*		*04/24/21 22:42*	*1*
Toluene-d8 (Surr)	*97*		*80 - 125*		*04/24/21 22:42*	*1*

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

Lab Sample ID: LCS 280-533813/4
Matrix: Water
Analysis Batch: 533813

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	22.1		ug/L		88	65 - 135
1,1,1-Trichloroethane	25.0	25.2		ug/L		101	65 - 135
1,1,2,2-Tetrachloroethane	25.0	22.5		ug/L		90	58 - 135
1,1,2-Trichloroethane	25.0	24.4		ug/L		97	64 - 135
1,1-Dichloroethane	25.0	24.0		ug/L		96	65 - 135
1,1-Dichloroethene	25.0	25.1		ug/L		100	65 - 136
1,1-Dichloropropene	25.0	25.5		ug/L		102	65 - 135
1,2,3-Trichlorobenzene	25.0	24.7		ug/L		99	60 - 135
1,2,3-Trichloropropane	25.0	22.5		ug/L		90	65 - 135
1,2,4-Trichlorobenzene	25.0	24.7		ug/L		99	58 - 135
1,2,4-Trimethylbenzene	25.0	23.9		ug/L		96	65 - 135
1,2-Dichlorobenzene	25.0	24.8		ug/L		99	65 - 135
1,2-Dichloroethane	25.0	23.3		ug/L		93	65 - 135
1,2-Dichloropropane	25.0	23.4		ug/L		93	64 - 135
1,3,5-Trimethylbenzene	25.0	24.1		ug/L		96	65 - 135
1,3-Dichlorobenzene	25.0	25.2		ug/L		101	65 - 135
1,3-Dichloropropane	25.0	23.5		ug/L		94	64 - 135
1,4-Dichlorobenzene	25.0	25.3		ug/L		101	65 - 135
2,2-Dichloropropane	25.0	24.8		ug/L		99	65 - 135
2-Butanone (MEK)	100	85.6		ug/L		86	44 - 177
2-Chlorotoluene	25.0	25.4		ug/L		102	65 - 135
2-Hexanone	100	86.5		ug/L		87	57 - 139
4-Chlorotoluene	25.0	26.3		ug/L		105	65 - 135
4-Isopropyltoluene	25.0	24.7		ug/L		99	65 - 135
4-Methyl-2-pentanone	100	86.1		ug/L		86	60 - 150
Acetone	100	80.8		ug/L		81	39 - 156
Benzene	25.0	24.8		ug/L		99	65 - 135
Bromobenzene	25.0	25.0		ug/L		100	65 - 135
Bromochloromethane	25.0	27.0		ug/L		108	65 - 135
Bromodichloromethane	25.0	22.2		ug/L		89	65 - 135
Bromoform	25.0	18.1		ug/L		72	62 - 135
Bromomethane	25.0	24.7		ug/L		99	45 - 135
Carbon disulfide	25.0	23.9		ug/L		96	55 - 143
Carbon tetrachloride	25.0	24.3		ug/L		97	65 - 135
Chlorobenzene	25.0	25.3		ug/L		101	65 - 135
Chloroethane	25.0	22.0		ug/L		88	46 - 136
Chloroform	25.0	24.1		ug/L		96	65 - 135
Chloromethane	25.0	21.5		ug/L		86	34 - 145
cis-1,2-Dichloroethene	25.0	25.4		ug/L		102	65 - 135
cis-1,3-Dichloropropene	25.0	22.1		ug/L		88	65 - 135
Dibromochloromethane	25.0	21.1		ug/L		84	65 - 135
Dibromomethane	25.0	24.6		ug/L		98	65 - 135
Dichlorodifluoromethane	25.0	24.5		ug/L		98	43 - 142
Ethylbenzene	25.0	24.9		ug/L		99	65 - 135
Hexachlorobutadiene	25.0	26.5		ug/L		106	65 - 135
Isopropylbenzene	25.0	24.5		ug/L		98	65 - 135
Methylene Chloride	25.0	25.4		ug/L		102	54 - 141
Naphthalene	25.0	21.9		ug/L		88	42 - 135

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

Lab Sample ID: LCS 280-533813/4
Matrix: Water
Analysis Batch: 533813

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
n-Butylbenzene			25.0	23.6		ug/L		94	64 - 135		
N-Propylbenzene			25.0	25.0		ug/L		100	65 - 135		
sec-Butylbenzene			25.0	26.5		ug/L		106	64 - 135		
Styrene			25.0	24.5		ug/L		98	65 - 135		
tert-Butylbenzene			25.0	25.4		ug/L		102	65 - 135		
Tetrachloroethene			25.0	26.8		ug/L		107	65 - 135		
Toluene			25.0	25.5		ug/L		102	65 - 135		
trans-1,2-Dichloroethene			25.0	26.1		ug/L		104	65 - 135		
trans-1,3-Dichloropropene			25.0	22.2		ug/L		89	65 - 135		
Trichloroethene			25.0	24.4		ug/L		98	65 - 135		
Trichlorofluoromethane			25.0	23.0		ug/L		92	53 - 137		
Vinyl chloride			25.0	22.1		ug/L		88	40 - 137		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 127*
4-Bromofluorobenzene (Surr)	*94*		*78 - 120*
Dibromofluoromethane (Surr)	*98*		*77 - 120*
Toluene-d8 (Surr)	*95*		*80 - 125*

Lab Sample ID: LCSD 280-533813/5
Matrix: Water
Analysis Batch: 533813

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane			25.0	22.8		ug/L		91	65 - 135	4	20
1,1,1-Trichloroethane			25.0	24.0		ug/L		96	65 - 135	5	20
1,1,2,2-Tetrachloroethane			25.0	22.7		ug/L		91	58 - 135	1	20
1,1,2-Trichloroethane			25.0	24.3		ug/L		97	64 - 135	0	27
1,1-Dichloroethane			25.0	23.8		ug/L		95	65 - 135	1	21
1,1-Dichloroethene			25.0	25.1		ug/L		100	65 - 136	0	20
1,1-Dichloropropene			25.0	25.3		ug/L		101	65 - 135	1	21
1,2,3-Trichlorobenzene			25.0	24.5		ug/L		98	60 - 135	1	36
1,2,3-Trichloropropane			25.0	23.9		ug/L		95	65 - 135	6	23
1,2,4-Trichlorobenzene			25.0	25.3		ug/L		101	58 - 135	2	25
1,2,4-Trimethylbenzene			25.0	23.8		ug/L		95	65 - 135	1	20
1,2-Dichlorobenzene			25.0	25.3		ug/L		101	65 - 135	2	20
1,2-Dichloroethane			25.0	23.3		ug/L		93	65 - 135	0	20
1,2-Dichloropropane			25.0	23.4		ug/L		94	64 - 135	0	20
1,3,5-Trimethylbenzene			25.0	23.8		ug/L		95	65 - 135	1	20
1,3-Dichlorobenzene			25.0	25.1		ug/L		100	65 - 135	1	20
1,3-Dichloropropane			25.0	22.8		ug/L		91	64 - 135	3	20
1,4-Dichlorobenzene			25.0	24.7		ug/L		99	65 - 135	3	23
2,2-Dichloropropane			25.0	24.7		ug/L		99	65 - 135	0	20
2-Butanone (MEK)			100	81.8		ug/L		82	44 - 177	5	32
2-Chlorotoluene			25.0	25.3		ug/L		101	65 - 135	0	20
2-Hexanone			100	82.5		ug/L		82	57 - 139	5	25
4-Chlorotoluene			25.0	25.9		ug/L		104	65 - 135	1	20
4-Isopropyltoluene			25.0	25.3		ug/L		101	65 - 135	2	20

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

Lab Sample ID: LCSD 280-533813/5
Matrix: Water
Analysis Batch: 533813

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Methyl-2-pentanone			100	87.8		ug/L		88	60 - 150	2	22
Acetone			100	78.8		ug/L		79	39 - 156	3	23
Benzene			25.0	24.9		ug/L		100	65 - 135	0	20
Bromobenzene			25.0	26.5		ug/L		106	65 - 135	6	26
Bromochloromethane			25.0	25.2		ug/L		101	65 - 135	7	29
Bromodichloromethane			25.0	21.7		ug/L		87	65 - 135	2	20
Bromoform			25.0	18.0		ug/L		72	62 - 135	1	27
Bromomethane			25.0	26.2		ug/L		105	45 - 135	6	33
Carbon disulfide			25.0	24.1		ug/L		96	55 - 143	1	20
Carbon tetrachloride			25.0	23.5		ug/L		94	65 - 135	3	21
Chlorobenzene			25.0	24.8		ug/L		99	65 - 135	2	20
Chloroethane			25.0	22.5		ug/L		90	46 - 136	2	25
Chloroform			25.0	24.8		ug/L		99	65 - 135	3	20
Chloromethane			25.0	21.0		ug/L		84	34 - 145	2	24
cis-1,2-Dichloroethene			25.0	25.0		ug/L		100	65 - 135	2	20
cis-1,3-Dichloropropene			25.0	21.6		ug/L		86	65 - 135	3	26
Dibromochloromethane			25.0	20.7		ug/L		83	65 - 135	2	20
Dibromomethane			25.0	25.0		ug/L		100	65 - 135	2	26
Dichlorodifluoromethane			25.0	23.8		ug/L		95	43 - 142	3	30
Ethylbenzene			25.0	24.2		ug/L		97	65 - 135	3	20
Hexachlorobutadiene			25.0	27.1		ug/L		108	65 - 135	2	25
Isopropylbenzene			25.0	24.4		ug/L		98	65 - 135	0	20
Methylene Chloride			25.0	25.5		ug/L		102	54 - 141	0	26
Naphthalene			25.0	21.6		ug/L		86	42 - 135	1	23
n-Butylbenzene			25.0	23.4		ug/L		94	64 - 135	1	21
N-Propylbenzene			25.0	25.5		ug/L		102	65 - 135	2	20
sec-Butylbenzene			25.0	25.2		ug/L		101	64 - 135	5	21
Styrene			25.0	23.8		ug/L		95	65 - 135	3	26
tert-Butylbenzene			25.0	25.5		ug/L		102	65 - 135	0	21
Tetrachloroethene			25.0	27.7		ug/L		111	65 - 135	3	20
Toluene			25.0	25.9		ug/L		104	65 - 135	2	20
trans-1,2-Dichloroethene			25.0	26.2		ug/L		105	65 - 135	1	24
trans-1,3-Dichloropropene			25.0	21.9		ug/L		88	65 - 135	1	26
Trichloroethene			25.0	23.3		ug/L		93	65 - 135	5	20
Trichlorofluoromethane			25.0	23.5		ug/L		94	53 - 137	2	27
Vinyl chloride			25.0	23.0		ug/L		92	40 - 137	4	24

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 127*
4-Bromofluorobenzene (Surr)	*94*		*78 - 120*
Dibromofluoromethane (Surr)	*102*		*77 - 120*
Toluene-d8 (Surr)	*97*		*80 - 125*

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

Lab Sample ID: 280-147461-B-10 MS
Matrix: Water
Analysis Batch: 533813

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	ND		25.0	24.8		ug/L		99	65 - 135
1,1,1-Trichloroethane	ND	F2	25.0	28.4		ug/L		114	65 - 135
1,1,2,2-Tetrachloroethane	ND		25.0	26.0		ug/L		104	58 - 135
1,1,2-Trichloroethane	ND		25.0	27.5		ug/L		110	64 - 135
1,1-Dichloroethane	ND		25.0	28.7		ug/L		115	65 - 135
1,1-Dichloroethene	ND		25.0	28.4		ug/L		114	65 - 136
1,1-Dichloropropene	ND		25.0	28.8		ug/L		115	65 - 135
1,2,3-Trichlorobenzene	ND		25.0	27.7		ug/L		111	60 - 135
1,2,3-Trichloropropane	ND		25.0	27.0		ug/L		108	65 - 135
1,2,4-Trichlorobenzene	ND		25.0	27.3		ug/L		109	58 - 135
1,2,4-Trimethylbenzene	ND		25.0	26.5		ug/L		106	65 - 135
1,2-Dichlorobenzene	ND		25.0	28.5		ug/L		114	65 - 135
1,2-Dichloroethane	ND		25.0	26.9		ug/L		108	65 - 135
1,2-Dichloropropane	ND	F2	25.0	27.2		ug/L		109	64 - 135
1,3,5-Trimethylbenzene	ND		25.0	26.0		ug/L		104	65 - 135
1,3-Dichlorobenzene	ND		25.0	27.4		ug/L		109	65 - 135
1,3-Dichloropropane	ND		25.0	26.9		ug/L		107	64 - 135
1,4-Dichlorobenzene	ND		25.0	28.1		ug/L		112	65 - 135
2,2-Dichloropropane	ND		25.0	23.9		ug/L		96	65 - 135
2-Butanone (MEK)	ND		100	99.3		ug/L		99	44 - 177
2-Chlorotoluene	ND		25.0	27.4		ug/L		109	65 - 135
2-Hexanone	ND		100	97.6		ug/L		98	57 - 139
4-Chlorotoluene	ND		25.0	29.6		ug/L		118	65 - 135
4-Isopropyltoluene	ND		25.0	27.3		ug/L		109	65 - 135
4-Methyl-2-pentanone	ND	F2	100	102		ug/L		102	60 - 150
Acetone	ND		100	102		ug/L		102	39 - 156
Benzene	ND		25.0	28.7		ug/L		115	65 - 135
Bromobenzene	ND		25.0	28.5		ug/L		114	65 - 135
Bromochloromethane	ND		25.0	30.0		ug/L		120	65 - 135
Bromodichloromethane	ND		25.0	25.6		ug/L		103	65 - 135
Bromoform	ND		25.0	20.2		ug/L		81	62 - 135
Bromomethane	ND		25.0	29.4		ug/L		118	45 - 135
Carbon disulfide	ND		25.0	26.7		ug/L		107	55 - 143
Carbon tetrachloride	ND		25.0	25.8		ug/L		103	65 - 135
Chlorobenzene	ND	F2	25.0	28.8		ug/L		115	65 - 135
Chloroethane	ND		25.0	27.0		ug/L		108	46 - 136
Chloroform	ND		25.0	28.8		ug/L		115	65 - 135
Chloromethane	ND		25.0	25.3		ug/L		101	34 - 145
cis-1,2-Dichloroethene	ND		25.0	28.4		ug/L		113	65 - 135
cis-1,3-Dichloropropene	ND		25.0	23.7		ug/L		95	65 - 135
Dibromochloromethane	ND	F2	25.0	23.5		ug/L		94	65 - 135
Dibromomethane	ND		25.0	28.9		ug/L		115	65 - 135
Dichlorodifluoromethane	ND		25.0	29.3		ug/L		117	43 - 142
Ethylbenzene	ND	F2	25.0	29.0		ug/L		116	65 - 135
Hexachlorobutadiene	ND		25.0	27.1		ug/L		108	65 - 135
Isopropylbenzene	ND		25.0	27.0		ug/L		107	65 - 135
Methylene Chloride	ND		25.0	30.3		ug/L		121	54 - 141
Naphthalene	ND		25.0	25.7		ug/L		103	42 - 135

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

Lab Sample ID: 280-147461-B-10 MS
Matrix: Water
Analysis Batch: 533813

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
n-Butylbenzene	ND		25.0	25.1		ug/L		100	64 - 135
N-Propylbenzene	ND	F2	25.0	28.0		ug/L		112	65 - 135
sec-Butylbenzene	ND		25.0	27.3		ug/L		109	64 - 135
Styrene	ND		25.0	27.8		ug/L		111	65 - 135
tert-Butylbenzene	ND		25.0	28.1		ug/L		113	65 - 135
Tetrachloroethene	ND		25.0	29.8		ug/L		119	65 - 135
Toluene	ND		25.0	28.8		ug/L		115	65 - 135
trans-1,2-Dichloroethene	ND		25.0	29.8		ug/L		119	65 - 135
trans-1,3-Dichloropropene	ND		25.0	23.6		ug/L		95	65 - 135
Trichloroethene	ND	F2	25.0	27.8		ug/L		111	65 - 135
Trichlorofluoromethane	ND		25.0	27.6		ug/L		111	53 - 137
Vinyl chloride	ND	F2	25.0	27.3		ug/L		109	40 - 137

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 127*
4-Bromofluorobenzene (Surr)	*93*		*78 - 120*
Dibromofluoromethane (Surr)	*103*		*77 - 120*
Toluene-d8 (Surr)	*96*		*80 - 125*

Lab Sample ID: 280-147461-C-10 MSD
Matrix: Water
Analysis Batch: 533813

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		25.0	20.2		ug/L		81	65 - 135	20	20
1,1,1-Trichloroethane	ND	F2	25.0	23.1	F2	ug/L		92	65 - 135	21	20
1,1,2,2-Tetrachloroethane	ND		25.0	21.6		ug/L		87	58 - 135	18	20
1,1,2-Trichloroethane	ND		25.0	22.6		ug/L		90	64 - 135	20	27
1,1-Dichloroethane	ND		25.0	23.2		ug/L		93	65 - 135	21	21
1,1-Dichloroethene	ND		25.0	23.6		ug/L		94	65 - 136	18	20
1,1-Dichloropropene	ND		25.0	23.3		ug/L		93	65 - 135	21	21
1,2,3-Trichlorobenzene	ND		25.0	23.3		ug/L		93	60 - 135	17	36
1,2,3-Trichloropropane	ND		25.0	21.4		ug/L		86	65 - 135	23	23
1,2,4-Trichlorobenzene	ND		25.0	22.6		ug/L		91	58 - 135	19	25
1,2,4-Trimethylbenzene	ND		25.0	22.7		ug/L		91	65 - 135	15	20
1,2-Dichlorobenzene	ND		25.0	23.9		ug/L		96	65 - 135	17	20
1,2-Dichloroethane	ND		25.0	22.1		ug/L		89	65 - 135	20	20
1,2-Dichloropropane	ND	F2	25.0	21.8	F2	ug/L		87	64 - 135	22	20
1,3,5-Trimethylbenzene	ND		25.0	22.2		ug/L		89	65 - 135	16	20
1,3-Dichlorobenzene	ND		25.0	23.6		ug/L		94	65 - 135	15	20
1,3-Dichloropropane	ND		25.0	21.9		ug/L		88	64 - 135	20	20
1,4-Dichlorobenzene	ND		25.0	23.7		ug/L		95	65 - 135	17	23
2,2-Dichloropropane	ND		25.0	19.8		ug/L		79	65 - 135	19	20
2-Butanone (MEK)	ND		100	74.5		ug/L		75	44 - 177	29	32
2-Chlorotoluene	ND		25.0	23.4		ug/L		94	65 - 135	15	20
2-Hexanone	ND		100	77.3		ug/L		77	57 - 139	23	25
4-Chlorotoluene	ND		25.0	24.4		ug/L		98	65 - 135	19	20
4-Isopropyltoluene	ND		25.0	22.5		ug/L		90	65 - 135	19	20

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

Lab Sample ID: 280-147461-C-10 MSD
Matrix: Water
Analysis Batch: 533813

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Methyl-2-pentanone	ND	F2	100	80.9	F2	ug/L		81	60 - 150	23	22
Acetone	ND		100	80.7		ug/L		81	39 - 156	23	23
Benzene	ND		25.0	23.7		ug/L		95	65 - 135	19	20
Bromobenzene	ND		25.0	24.3		ug/L		97	65 - 135	16	26
Bromochloromethane	ND		25.0	24.5		ug/L		98	65 - 135	20	29
Bromodichloromethane	ND		25.0	21.2		ug/L		85	65 - 135	19	20
Bromoform	ND		25.0	17.1		ug/L		69	62 - 135	17	27
Bromomethane	ND		25.0	23.3		ug/L		93	45 - 135	23	33
Carbon disulfide	ND		25.0	22.5		ug/L		90	55 - 143	17	20
Carbon tetrachloride	ND		25.0	21.5		ug/L		86	65 - 135	18	21
Chlorobenzene	ND	F2	25.0	23.2	F2	ug/L		93	65 - 135	22	20
Chloroethane	ND		25.0	21.5		ug/L		86	46 - 136	23	25
Chloroform	ND		25.0	23.7		ug/L		95	65 - 135	19	20
Chloromethane	ND		25.0	20.1		ug/L		80	34 - 145	23	24
cis-1,2-Dichloroethene	ND		25.0	23.7		ug/L		95	65 - 135	18	20
cis-1,3-Dichloropropene	ND		25.0	19.6		ug/L		78	65 - 135	19	26
Dibromochloromethane	ND	F2	25.0	18.5	F2	ug/L		74	65 - 135	24	20
Dibromomethane	ND		25.0	23.2		ug/L		93	65 - 135	22	26
Dichlorodifluoromethane	ND		25.0	23.2		ug/L		93	43 - 142	23	30
Ethylbenzene	ND	F2	25.0	23.0	F2	ug/L		92	65 - 135	23	20
Hexachlorobutadiene	ND		25.0	22.9		ug/L		92	65 - 135	17	25
Isopropylbenzene	ND		25.0	22.7		ug/L		90	65 - 135	17	20
Methylene Chloride	ND		25.0	25.0		ug/L		100	54 - 141	19	26
Naphthalene	ND		25.0	21.5		ug/L		86	42 - 135	18	23
n-Butylbenzene	ND		25.0	20.8		ug/L		83	64 - 135	19	21
N-Propylbenzene	ND	F2	25.0	22.8	F2	ug/L		91	65 - 135	21	20
sec-Butylbenzene	ND		25.0	23.6		ug/L		95	64 - 135	14	21
Styrene	ND		25.0	23.1		ug/L		92	65 - 135	19	26
tert-Butylbenzene	ND		25.0	23.0		ug/L		92	65 - 135	20	21
Tetrachloroethene	ND		25.0	25.8		ug/L		103	65 - 135	14	20
Toluene	ND		25.0	24.0		ug/L		96	65 - 135	18	20
trans-1,2-Dichloroethene	ND		25.0	24.5		ug/L		98	65 - 135	19	24
trans-1,3-Dichloropropene	ND		25.0	19.3		ug/L		77	65 - 135	20	26
Trichloroethene	ND	F2	25.0	22.2	F2	ug/L		89	65 - 135	22	20
Trichlorofluoromethane	ND		25.0	22.9		ug/L		91	53 - 137	19	27
Vinyl chloride	ND	F2	25.0	20.8	F2	ug/L		83	40 - 137	27	24

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 127*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*
Dibromofluoromethane (Surr)	*102*		*77 - 120*
Toluene-d8 (Surr)	*96*		*80 - 125*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Lab Sample ID: MB 280-533634/1-A
Matrix: Water
Analysis Batch: 533660

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 533634

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		04/23/21 10:55	04/23/21 16:21	1
1,2-Dibromoethane	ND		0.050		ug/L		04/23/21 10:55	04/23/21 16:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*115*		*70 - 130*	*04/23/21 10:55*	*04/23/21 16:21*	*1*

Lab Sample ID: LCS 280-533634/2-A
Matrix: Water
Analysis Batch: 533660

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 533634

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2-Dibromo-3-Chloropropane			0.250	0.248		ug/L		99	60 - 140		
1,2-Dibromoethane			0.250	0.268		ug/L		107	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dibromopropane	*109*		*70 - 130*

Lab Sample ID: LCSD 280-533634/3-A
Matrix: Water
Analysis Batch: 533660

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 533634

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.250	0.248		ug/L		99	60 - 140	0	10
1,2-Dibromoethane			0.250	0.291		ug/L		116	60 - 140	8	10

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dibromopropane	*112*		*70 - 130*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 280-533181/1-A
Matrix: Water
Analysis Batch: 533820

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 533181

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		500		ug/L		04/23/21 09:06	04/23/21 18:28	1
Iron	35.8		30		ug/L		04/23/21 09:06	04/23/21 18:28	1
Magnesium	ND		200		ug/L		04/23/21 09:06	04/23/21 18:28	1
Manganese	ND		3.0		ug/L		04/23/21 09:06	04/23/21 18:28	1
Potassium	ND		500		ug/L		04/23/21 09:06	04/23/21 18:28	1
Sodium	ND		1000		ug/L		04/23/21 09:06	04/23/21 18:28	1

Lab Sample ID: LCS 280-533181/2-A
Matrix: Water
Analysis Batch: 533820

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 533181

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Calcium			50000	49700		ug/L		99	90 - 111		

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 280-533181/2-A
Matrix: Water
Analysis Batch: 533820

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 533181

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	10000	10100		ug/L		101	89 - 115
Magnesium	50000	51300		ug/L		103	90 - 113
Manganese	1000	1020		ug/L		102	90 - 110
Potassium	50000	51100		ug/L		102	89 - 114
Sodium	50000	48400		ug/L		97	90 - 115

Lab Sample ID: 280-147388-A-4-E MS
Matrix: Water
Analysis Batch: 533820

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 533181

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	660000	F1	50000	659000	4	ug/L		7	48 - 153
Iron	ND		10000	10400		ug/L		104	52 - 155
Magnesium	210000	F1	50000	240000	4	ug/L		56	62 - 146
Manganese	11		1000	1050		ug/L		104	79 - 121
Potassium	40000	F1	50000	78400		ug/L		77	76 - 132
Sodium	260000	F1 F2	50000	238000	4	ug/L		-52	70 - 203

Lab Sample ID: 280-147388-A-4-F MSD
Matrix: Water
Analysis Batch: 533820

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 533181

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium	660000	F1	50000	635000	4	ug/L		-41	48 - 153	4	20
Iron	ND		10000	10800		ug/L		108	52 - 155	4	20
Magnesium	210000	F1	50000	217000	4	ug/L		12	62 - 146	10	20
Manganese	11		1000	1020		ug/L		101	79 - 121	3	20
Potassium	40000	F1	50000	67100	F1	ug/L		55	76 - 132	16	20
Sodium	260000	F1 F2	50000	150000	4 F2	ug/L		-228	70 - 203	45	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 480-578094/28
Matrix: Water
Analysis Batch: 578094

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			04/27/21 23:36	1
Sulfate	ND		1.0		mg/L			04/27/21 23:36	1

Lab Sample ID: LCS 480-578094/27
Matrix: Water
Analysis Batch: 578094

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	48.4		mg/L		97	90 - 110
Sulfate	50.0	48.6		mg/L		97	90 - 110

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 280-147466-E-3 MS
Matrix: Water
Analysis Batch: 578094

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	14		50.0	62.1		mg/L		96	81 - 120
Sulfate	3.2		50.0	51.7		mg/L		97	80 - 120

Lab Sample ID: 280-147466-E-3 MSD
Matrix: Water
Analysis Batch: 578094

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	14		50.0	62.4		mg/L		96	81 - 120	1	15
Sulfate	3.2		50.0	52.0		mg/L		98	80 - 120	1	15

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-533955/128
Matrix: Water
Analysis Batch: 533955

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.030		mg/L			04/26/21 16:19	1

Lab Sample ID: MB 280-533955/164
Matrix: Water
Analysis Batch: 533955

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.030		mg/L			04/26/21 17:31	1

Lab Sample ID: LCS 280-533955/126
Matrix: Water
Analysis Batch: 533955

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N	2.50	2.58		mg/L		103	90 - 110

Lab Sample ID: LCS 280-533955/162
Matrix: Water
Analysis Batch: 533955

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N	2.50	2.58		mg/L		103	90 - 110

Lab Sample ID: LCSD 280-533955/127
Matrix: Water
Analysis Batch: 533955

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N	2.50	2.66		mg/L		106	90 - 110	3	10

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: LCSD 280-533955/163
Matrix: Water
Analysis Batch: 533955

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N			2.50	2.58		mg/L		103	90 - 110	0	10

Lab Sample ID: 280-147432-G-6 MS
Matrix: Water
Analysis Batch: 533955

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N	ND		1.00	1.06		mg/L		106	90 - 110

Lab Sample ID: 280-147432-G-6 MSD
Matrix: Water
Analysis Batch: 533955

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N	ND		1.00	1.08		mg/L		108	90 - 110	2	10

Lab Sample ID: MB 280-534091/55
Matrix: Water
Analysis Batch: 534091

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.030		mg/L			04/27/21 15:22	1

Lab Sample ID: LCS 280-534091/53
Matrix: Water
Analysis Batch: 534091

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N			2.50	2.39		mg/L		96	90 - 110

Lab Sample ID: LCSD 280-534091/54
Matrix: Water
Analysis Batch: 534091

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N			2.50	2.35		mg/L		94	90 - 110	2	10

Lab Sample ID: 280-147470-B-1 MS
Matrix: Water
Analysis Batch: 534091

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N	ND		1.00	0.957		mg/L		96	90 - 110

Lab Sample ID: 280-147470-B-1 MSD
Matrix: Water
Analysis Batch: 534091

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N	ND		1.00	0.937		mg/L		94	90 - 110	2	10

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-534109/23
Matrix: Water
Analysis Batch: 534109

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate/Nitrite	ND		0.050		mg/L			04/27/21 16:40	1

Lab Sample ID: LCS 280-534109/21
Matrix: Water
Analysis Batch: 534109

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate/Nitrite			5.00	5.18		mg/L		104	90 - 110		

Lab Sample ID: LCSD 280-534109/22
Matrix: Water
Analysis Batch: 534109

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate/Nitrite			5.00	4.92		mg/L		98	90 - 110	5	10

Lab Sample ID: 280-146973-B-14 MS
Matrix: Water
Analysis Batch: 534109

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate/Nitrite	2.6	F1	4.00	5.81	F1	mg/L		80	90 - 110		

Lab Sample ID: 280-146973-B-14 MSD
Matrix: Water
Analysis Batch: 534109

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate/Nitrite	2.6	F1	4.00	6.03	F1	mg/L		86	90 - 110	4	10

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 280-534623/4
Matrix: Water
Analysis Batch: 534623

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Average	ND		1.0		mg/L			04/30/21 20:32	1

Lab Sample ID: LCS 280-534623/3
Matrix: Water
Analysis Batch: 534623

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon - Average			25.0	24.5		mg/L		98	88 - 112		

Method: 9060 - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: 280-147464-2 MS
Matrix: Water
Analysis Batch: 534623

Client Sample ID: MW-20B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon - Average	ND		25.0	25.2		mg/L		99	88 - 112		

Lab Sample ID: 280-147464-2 MSD
Matrix: Water
Analysis Batch: 534623

Client Sample ID: MW-20B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Average	ND		25.0	25.3		mg/L		99	88 - 112	0	15

Method: SM 1030E (meq) - Cation Anion Balance

Lab Sample ID: MB 280-534660/1
Matrix: Water
Analysis Batch: 534660

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

Analyte	MB Result	MB Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	0.000				meq/L			05/03/21 09:05	1
Magnesium	0.000				meq/L			05/03/21 09:05	1
Potassium	0.000				meq/L			05/03/21 09:05	1
Sodium	0.000				meq/L			05/03/21 09:05	1
Ammonia as N	0.000				meq/L			05/03/21 09:05	1
Chloride	0.000				meq/L			05/03/21 09:05	1
Sulfate	0.000				meq/L			05/03/21 09:05	1
Alkalinity	0.000				mg/L			05/03/21 09:05	1
Bicarbonate Alkalinity	0.000				meq/L			05/03/21 09:05	1
Nitrate/Nitrite	0.000				meq/L			05/03/21 09:05	1
Iron	0.000				meq/L			05/03/21 09:05	1

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-533008/33
Matrix: Water
Analysis Batch: 533008

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity	ND		10		mg/L			04/16/21 20:41	1

Lab Sample ID: MB 280-533008/6
Matrix: Water
Analysis Batch: 533008

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity	ND		10		mg/L			04/16/21 17:25	1

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

Lab Sample ID: MB 280-532915/1
Matrix: Water
Analysis Batch: 532915

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10		mg/L			04/17/21 12:50	1

Lab Sample ID: LCS 280-532915/2
Matrix: Water
Analysis Batch: 532915

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			501	490		mg/L		98	88 - 114		

Lab Sample ID: 280-147464-3 DU
Matrix: Water
Analysis Batch: 532915

Client Sample ID: FB1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	ND			ND		mg/L				NC	10

GC/MS VOA

Analysis Batch: 533748

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147464-3	FB1	Total/NA	Water	8260B	
MB 280-533748/10	Method Blank	Total/NA	Water	8260B	
LCS 280-533748/5	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-533748/6	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 533813

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147464-2	MW-20B	Total/NA	Water	8260B	
MB 280-533813/9	Method Blank	Total/NA	Water	8260B	
LCS 280-533813/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-533813/5	Lab Control Sample Dup	Total/NA	Water	8260B	
280-147461-B-10 MS	Matrix Spike	Total/NA	Water	8260B	
280-147461-C-10 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

GC Semi VOA

Prep Batch: 533634

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147464-2	MW-20B	Total/NA	Water	8011	
280-147464-3	FB1	Total/NA	Water	8011	
MB 280-533634/1-A	Method Blank	Total/NA	Water	8011	
LCS 280-533634/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 280-533634/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 533660

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147464-2	MW-20B	Total/NA	Water	8011	533634
280-147464-3	FB1	Total/NA	Water	8011	533634
MB 280-533634/1-A	Method Blank	Total/NA	Water	8011	533634
LCS 280-533634/2-A	Lab Control Sample	Total/NA	Water	8011	533634
LCSD 280-533634/3-A	Lab Control Sample Dup	Total/NA	Water	8011	533634

Metals

Prep Batch: 533181

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147464-2	MW-20B	Dissolved	Water	3005A	
280-147464-3	FB1	Dissolved	Water	3005A	
MB 280-533181/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-533181/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-147388-A-4-E MS	Matrix Spike	Dissolved	Water	3005A	
280-147388-A-4-F MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	

Analysis Batch: 533820

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147464-2	MW-20B	Dissolved	Water	6010B	533181
280-147464-3	FB1	Dissolved	Water	6010B	533181
MB 280-533181/1-A	Method Blank	Total Recoverable	Water	6010B	533181
LCS 280-533181/2-A	Lab Control Sample	Total Recoverable	Water	6010B	533181
280-147388-A-4-E MS	Matrix Spike	Dissolved	Water	6010B	533181
280-147388-A-4-F MSD	Matrix Spike Duplicate	Dissolved	Water	6010B	533181

General Chemistry

Analysis Batch: 532915

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147464-2	MW-20B	Total/NA	Water	SM 2540C	
280-147464-3	FB1	Total/NA	Water	SM 2540C	
MB 280-532915/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-532915/2	Lab Control Sample	Total/NA	Water	SM 2540C	
280-147464-3 DU	FB1	Total/NA	Water	SM 2540C	

Analysis Batch: 533008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147464-2	MW-20B	Total/NA	Water	SM 2320B	
280-147464-3	FB1	Total/NA	Water	SM 2320B	
MB 280-533008/33	Method Blank	Total/NA	Water	SM 2320B	
MB 280-533008/6	Method Blank	Total/NA	Water	SM 2320B	

Analysis Batch: 533955

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147464-2	MW-20B	Total/NA	Water	350.1	
MB 280-533955/128	Method Blank	Total/NA	Water	350.1	
MB 280-533955/164	Method Blank	Total/NA	Water	350.1	
LCS 280-533955/126	Lab Control Sample	Total/NA	Water	350.1	
LCS 280-533955/162	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-533955/127	Lab Control Sample Dup	Total/NA	Water	350.1	
LCSD 280-533955/163	Lab Control Sample Dup	Total/NA	Water	350.1	
280-147432-G-6 MS	Matrix Spike	Total/NA	Water	350.1	
280-147432-G-6 MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	

Analysis Batch: 534091

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147464-3	FB1	Total/NA	Water	350.1	
MB 280-534091/55	Method Blank	Total/NA	Water	350.1	
LCS 280-534091/53	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-534091/54	Lab Control Sample Dup	Total/NA	Water	350.1	
280-147470-B-1 MS	Matrix Spike	Total/NA	Water	350.1	
280-147470-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	

Analysis Batch: 534109

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147464-2	MW-20B	Total/NA	Water	353.2	
280-147464-3	FB1	Total/NA	Water	353.2	
MB 280-534109/23	Method Blank	Total/NA	Water	353.2	
LCS 280-534109/21	Lab Control Sample	Total/NA	Water	353.2	
LCSD 280-534109/22	Lab Control Sample Dup	Total/NA	Water	353.2	
280-146973-B-14 MS	Matrix Spike	Total/NA	Water	353.2	
280-146973-B-14 MSD	Matrix Spike Duplicate	Total/NA	Water	353.2	

Analysis Batch: 534623

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147464-2	MW-20B	Total/NA	Water	9060	
280-147464-3	FB1	Total/NA	Water	9060	
MB 280-534623/4	Method Blank	Total/NA	Water	9060	
LCS 280-534623/3	Lab Control Sample	Total/NA	Water	9060	
280-147464-2 MS	MW-20B	Total/NA	Water	9060	

General Chemistry (Continued)

Analysis Batch: 534623 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147464-2 MSD	MW-20B	Total/NA	Water	9060	

Analysis Batch: 534660

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147464-2	MW-20B	Total/NA	Water	SM 1030E	
280-147464-2	MW-20B	Total/NA	Water	SM 1030E (meq)	
280-147464-3	FB1	Total/NA	Water	SM 1030E	
280-147464-3	FB1	Total/NA	Water	SM 1030E (meq)	
MB 280-534660/1	Method Blank	Total/NA	Water	SM 1030E (meq)	

Analysis Batch: 578094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147464-2	MW-20B	Total/NA	Water	300.0	
280-147464-3	FB1	Total/NA	Water	300.0	
MB 480-578094/28	Method Blank	Total/NA	Water	300.0	
LCS 480-578094/27	Lab Control Sample	Total/NA	Water	300.0	
280-147466-E-3 MS	Matrix Spike	Total/NA	Water	300.0	
280-147466-E-3 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Field Service / Mobile Lab

Analysis Batch: 533839

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147464-2	MW-20B	Total/NA	Water	Field Sampling	

Lab Chronicle

Client: Waste Management
Job ID: 280-147464-1
Project/Site: 1003|Riverbend Landfill - Groundwater

Client Sample ID: MW-20B
Lab Sample ID: 280-147464-2
Date Collected: 04/13/21 08:50
Matrix: Water
Date Received: 04/15/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	533813	04/25/21 00:32	GO	TAL DEN
Total/NA	Prep	8011			35.2 mL	35 mL	533634	04/23/21 10:55	JSM	TAL DEN
Total/NA	Analysis	8011		1			533660	04/23/21 17:25	JSM	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	533181	04/23/21 09:06	MAB	TAL DEN
Dissolved	Analysis	6010B		1			533820	04/23/21 19:24	LMT	TAL DEN
Total/NA	Analysis	300.0		1			578094	04/28/21 00:29	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	533955	04/26/21 17:53	QJB	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	534109	04/27/21 17:26	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	534623	05/01/21 00:13	RAF	TAL DEN
Total/NA	Analysis	SM 1030E		1			534660	05/03/21 09:05	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			534660	05/03/21 09:05	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			533008	04/16/21 22:35	QJB	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	532915	04/17/21 12:50	JMH	TAL DEN
Total/NA	Analysis	Field Sampling		1			533839	04/13/21 09:50	C1A	TAL DEN

Client Sample ID: FB1
Lab Sample ID: 280-147464-3
Date Collected: 04/13/21 09:05
Matrix: Water
Date Received: 04/15/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	533748	04/24/21 15:09	RJS	TAL DEN
Total/NA	Prep	8011			35.2 mL	35 mL	533634	04/23/21 10:55	JSM	TAL DEN
Total/NA	Analysis	8011		1			533660	04/23/21 17:47	JSM	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	533181	04/23/21 09:06	MAB	TAL DEN
Dissolved	Analysis	6010B		1			533820	04/23/21 19:27	LMT	TAL DEN
Total/NA	Analysis	300.0		1			578094	04/28/21 00:47	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	534091	04/27/21 16:06	QJB	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	534109	04/27/21 17:28	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	534623	05/01/21 01:03	RAF	TAL DEN
Total/NA	Analysis	SM 1030E		1			534660	05/03/21 09:05	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			534660	05/03/21 09:05	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			533008	04/16/21 22:41	QJB	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	532915	04/17/21 12:50	JMH	TAL DEN

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL DEN = Eurofins TestAmerica, Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

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

Chain of Custody Record

eurofins Environment Testing TestAmerica

Client Information	Sampler: I. Hultquist	Lab PM: Sara, Betsy A	Carrier Tracking No(s):	COC No: 280-16517-870.1
Client Contact:	Phone: 503 716-6320	E-Mail: Betsy.Sara@Eurofinset.com		Page: Page 1 of 1
Company: Waste Management				Job #
Address: 13469 SW Highway 18	Due Date Requested:			
City: McMinnville	TAT Requested (days):			
State, Zip: OR, 97128				
Phone:	PO #:			
Email:	WO #:			
Project Name: 1003|Riverbend Landfill SCS Engineers Event Desc: Annual MW-20B - Apr	Project #: 28002786			
Site: Oregon	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	TDS/Alk	Dissolved Metals	Ammonia/TOC/NO3+NO2	8260B	8011	Chloride/Sulfate (TA Buffalo)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	S	A	R	N		
TB1	4/13/2021	0700	G	W						X	X		4	
MW-20B	4/13/2021	0850	G	W	X		X	X	X	X	X	X	10	
FB1	4/13/2021	0905	G	W	X		X	X	X	X	X	X	10	

280-147464 Chain of Custody

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 4/14/21 1630	Company: SCS	Received by:	Date/Time: 04/15/2021 10.00	Company: EIA DEN
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 0.5 / 2.8 / 3.2 / 2.4 CF: to.4, IR: 9

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-20B
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	(NE)	E	SE	S	SW	W	NW	LIGHT	(MEDIUM)	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN			?	**TEMPERATURE:**	(°F) 49.0 °C	

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW	[Water Column x Gal/ft] Volume (gal)
4/13/21	08:13	37.86	.	2.52	—	—	X 1 .
/ /	:	.	.	.	.		X 3 .

Gal/ft = (dia./2)^2 x 0.163 | 1" = 0.041 | (2") = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	[√ if used] √
VOA Glass	4/13/21	08:50	F	3	(40 ml)	(HCl)	(YES)	NO		
VOA Glass	4/13/21	08:50	F	3	(40 ml)	($Na_2S_2O_3$)	(YES)	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/13/21	08:50	F	2	(250, 500, 1L)	(None)	(YES)	NO	NA	
Yellow Glass	4/13/21	08:50	F	1	(250), 500, 1L	(H_2SO_4)	(YES)	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/13/21	08:50	F	1	250, (500) 1L	(HNO_3)	(YES)	(YES)		
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 | 10 | Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: 08:24 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O_2 (mg/l)	Water Quality
0	F(0824)	0.00	6.82	170.6	778	10.4	2.54	3.92	clear/colorless
1	F(0834)	0.75	7.28	118.0	634.6	11.1	2.56	0.60	clear/colorless
2	F(0836)	0.95	7.28	113.9	634.5	11.1	2.56	0.64	clear/colorless
3	F(0838)	(1.15)	7.30	110.2	633.4	11.1	2.56	0.46	clear/colorless
4	F(0840)	1.35	7.31	108.2	633.2	11.2	2.56	0.47	clear/colorless
5	F(0842)	1.55	7.32	105.2	632.1	11.2	2.56	0.48	clear/colorless
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Low flow purge method (20/10/20psi) ~ 400 ml/min

SAMPLER: T. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** FB1
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM: N | (NE) | E | SE | S | SW | W | NW
WEATHER: (SUNNY) | CLOUDY | RAIN | ?
LIGHT | (MEDIUM) | HEAVY
TEMPERATURE: (F) 44.0 °C
[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW	[Water Column x Gal/ft] Volume (gal)
/ /	:	.		.	.	.	X 1 .
/ /	:	.	.	.	.		X 3 .

Gal/ft = (dia./2)^2 x 0.163 | 1" = 0.041 | 2" = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other = Trans. fer

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	[√ if used]
VOA Glass	4/13/21	09:05	G	3	(40 ml)	(HCl)	(YES)	NO		√
VOA Glass	4/13/21	09:05	G	3	(40 ml)	($Na_2S_2O_3$)	(YES)	NO		√
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/13/21	09:05	G	2	(250, 500, 1L)	(None)	(YES)	NO	NA	√
Yellow Glass	4/13/21	09:05	G	1	250, (500), 1L	(H_2SO_4)	(YES)	NO		√
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/13/21	09:05	G	1	250, (500), 1L	(HNO_3)	(YES)	(YES)		√
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 | 10 | Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA

Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	(G)(0905)	0.00	—	—	—	— .	— .	—	—
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Collected near MW-203 using Lab-Supplied VOC free water

SAMPLER: TJHultgren (PRINTED NAME) (SIGNATURE)

eurofins

1401204

ORIGIN ID:SAVA (503) 534-3783
TIFFANY ANDREWS
SCS ENGINEERS
[redacted] SW 72ND AVENURE

PORTLAND, OR 97224
UNITED STATES US

SHIP DATE: 31MAR21
ACTWGT: 10.00 LB MAN
CAD: 0886563/CAFE3409

TO

EUROFINS TESTAMERICA DENVER
4955 YARROW STREET

ARVADA CO 800024517
(303) 736-0100
REF: S280 - 107586

RMA:

FedEx Express

TRK# 0221 9508 8923 9788

RETURNS MON-SAT
PRIORITY OVERNIGHT

80002

CO-US

280-147464 Waybill



eurofins | Environment Te... TestAmerica

1401203

ORIGIN ID:AVA (303) 534-3783
TIFFANY ANDREWS
SCS ENGINEERS
15940 SW 72ND AVENURE

PORTLAND, OR 97224
UNITED STATES US

SHIP DATE: 31MAR21
ACTWGT: 15.00 LB MAN
CAD: 0886563/CAFE3409
DIMS: 24x15x15 IN

TO

EUROFINS TESTAMERICA DENVER
4955 YARROW STREET

ARVADA CO 800024517
(303) 736-0100
REF: S280-107586

RMA:

FedEx Express

FedEx
TRK# 0221 9508 8923 9722

THU - 15 APR 10:30A
PRIORITY OVERNIGHT

XH LAAA

80002
CO-US DEN

0757462 04/14 56DJ2/5EF2/FE4A

ORIGIN ID:SAVA (503) 534-3783
TIFFANY ANDREWS
USPS MANAGEMENT
15940 SW 72ND AVE
PORTLAND, OR 97224
UNITED STATES US

SHIP DATE: 02APR21
ACTWGT: 15.00 LB MAN
CAD: 0886563/CAFE3409
DIMS: 24x15x15 IN

EUROFINS TESTAMERICA DENVER
4955 YARROW STREET
ARVADA CO 800024517

dEx Express

-SAT
NIGHT

0002

No

FedEx
TRK# 0221 9508 8924 2740

THU - 15 APR 10:30A
PRIORITY OVERNIGHT

XH LAAA

80002
CO-US DEN

0767462 04/14 66DJ2/5EF2/FE4A



Custody Sea

SIGNATURE

DATE 4/14/21

eurofins

Environment Testing

1401197 2.8

ORIGIN ID:SAVA (503) 534-3783
TIFFANY ANDREWS
WASTE MANAGEMENT
15940 SW 72ND AVE

PORTLAND, OR 97224
UNITED STATES US

SHIP DATE: 02APR21
ACTWGT: 15.00 LB MAN
CAD: 0886563/CAFE3409
DIMS: 24x15x15 IN

TO

EUROFINS TESTAMERICA, DENVER
4955 YARROW STREET

ARVADA CO 80002
(303) 736-0100
REF: 6280-107583

PMA:

FedEx Express

TRK# 0221 9508 8924 2751

RETURNS MON-SAT
PRIORITY OVERNIGHT

80002

CO-US

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

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Sara, Betsy A	Carrier Tracking No(s):	COC No: 280-563946.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Betsy.Sara@Eurofinset.com	State of Origin: Oregon	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Oregon		Job #: 280-147464-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 5/5/2021			
City: Amherst	TAT Requested (days):			
State, Zip: NY, 14228-2298				
Phone: 716-691-2600(Tel) 716-691-7991(Fax)	PO #:			
Email:	WO #:			
Project Name: 1003|Riverbend Landfill - Groundwater	Project #: 28002786			
Site: 1003|Riverbend Landfill	SSOW#:			

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - 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:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300.0_28D/ 300.0, Sulfate and Chloride (TA Buffalo)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-20B (280-147464-2)	4/13/21	08:50 Pacific		Water			X	1	
FB1 (280-147464-3)	4/13/21	09:05 Pacific		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:	
Relinquished by:	Date/Time: 4/16/21 1320	Company	Received by:		Date/Time: 4/17/21 1000	Company TA	
Relinquished by:	Date/Time:	Company	Received by:		Date/Time:	Company	
Relinquished by:	Date/Time:	Company	Received by:		Date/Time:	Company	
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 2.2 # ICE				

Ver: 11/01/2020

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-147464-1

Login Number: 147464
List Number: 1
Creator: Collins, Janice S

List Source: Eurofins TestAmerica, Denver

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	
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: 280-147464-1

Login Number: 147464
List Number: 2
Creator: Kolb, Chris M

List Source: Eurofins TestAmerica, Buffalo
List Creation: 04/19/21 03:43 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	2.2 IR GUN #1 ICE
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

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ANALYTICAL REPORT

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

Laboratory Job ID: 280-147469-1
Client Project/Site: 1003|Riverbend Landfill - Groundwater
Sampling Event: Semiannual Detection Wells - Apr Oct

For:
Waste Management
13469 SW Highway 18
McMinnville, Oregon 97128

Attn: Mr. Jim Denson

Betsy Sara

Authorized for release by:
12/2/2021 8:57:34 AM

Betsy Sara, Project Manager II
(303)736-0189
Betsy.Sara@Eurofinset.com

LINKS

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

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Definitions/Glossary

Client: Waste Management
Job ID: 280-147469-1
Project/Site: 1003|Riverbend Landfill - Groundwater

Qualifiers

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.

Glossary

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

Job ID: 280-147469-1

Laboratory: Eurofins TestAmerica, Denver

Narrative

CASE NARRATIVE

Client: Waste Management

Project: 1003|Riverbend Landfill - Groundwater

Report Number: 280-147469-1

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

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

Sample Receiving

The samples were received on 04/15/2021; the samples arrived in good condition, properly preserved and on ice. The temperatures of the coolers at receipt were 0.9º C, 2.8º C, 3.2º C and 3.6º C.

The Trip Blank associated with the samples in this submission was reported with the submission for 280-147466.

Holding Times

All holding times were met.

Method Blanks

Dissolved Iron Method 6010B was detected in the Method Blank above the project established reporting limit, however, the requested reporting limit for Dissolved Iron is below TestAmerica Denver's standard reporting limit and, therefore, no corrective action has been taken for this anomaly. It must be noted that results reported below TestAmerica Denver's standard reporting limits may result in false positive/false negative results, less accurate quantitation and potential misidentification at the lower concentrations.

All other Method Blanks met method criteria.

Laboratory Control Samples (LCS)

All Laboratory Control Sample recoveries were within control limits.

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

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) for Method 8260B and Method 8011, however, LCS/LCSD pairs were analyzed to demonstrate method precision and accuracy.

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

General Comments

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

Job ID: 280-147469-1 (Continued)

Laboratory: Eurofins TestAmerica, Denver (Continued)

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.

The analysis for Chloride and Sulfate Method 300.0 was performed by TestAmerica Buffalo. Their address and phone number are:
TestAmerica Buffalo
10 Hazelwood Drive, Suite 106
Amherst, NY 14228
Phone: 716-691-2600

Detection Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Groundwater

Job ID: 280-147469-1

Client Sample ID: MW-20A — Lab Sample ID: 280-147469-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	90000		500		ug/L	1		6010B	Dissolved
Iron	930	B	30		ug/L	1		6010B	Dissolved
Magnesium	34000		200		ug/L	1		6010B	Dissolved
Manganese	2600		3.0		ug/L	1		6010B	Dissolved
Potassium	640		500		ug/L	1		6010B	Dissolved
Sodium	32000		1000		ug/L	1		6010B	Dissolved
Chloride	170		0.50		mg/L	1		300.0	Total/NA
Sulfate	7.2		1.0		mg/L	1		300.0	Total/NA
Ammonia as N	0.11		0.030		mg/L	1		350.1	Total/NA
Total Organic Carbon - Average	1.4		1.0		mg/L	1		9060	Total/NA
Total Anions	8.7				meq/L	1		SM 1030E	Total/NA
Total Cations	8.8				meq/L	1		SM 1030E	Total/NA
Percent Difference	0.077				%	1		SM 1030E	Total/NA
Calcium	90				mg/L	1		SM 1030E	Total/NA
Magnesium	34				mg/L	1		SM 1030E	Total/NA
Potassium	0.64				mg/L	1		SM 1030E	Total/NA
Sodium	32				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.11				mg/L	1		SM 1030E	Total/NA
Chloride	170				mg/L	1		SM 1030E	Total/NA
Sulfate	7.2				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	190				mg/L	1		SM 1030E	Total/NA
Alkalinity	190				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.00				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	0.077				%	1		SM 1030E	Total/NA
Calculated TDS	440				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.1				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	490				mg/L	1		SM 1030E	Total/NA
Iron	0.93				mg/L	1		SM 1030E	Total/NA
Calcium	4.5				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	2.8				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.016				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	1.4				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.0079				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	4.8				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.15				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	190				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	3.8				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.050				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	190		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	490		10		mg/L	1		SM 2540C	Total/NA
Field pH	6.76				SU	1		Field Sampling	Total/NA
Field Conductivity	982				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	10.4				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	0.31				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	-11.2				millivolts	1		Field Sampling	Total/NA

Client Sample ID: DUP1 — Lab Sample ID: 280-147469-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	87000		500		ug/L	1		6010B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: DUP1 (Continued)
Lab Sample ID: 280-147469-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	900	B	30		ug/L	1		6010B	Dissolved
Magnesium	33000		200		ug/L	1		6010B	Dissolved
Manganese	2500		3.0		ug/L	1		6010B	Dissolved
Potassium	540		500		ug/L	1		6010B	Dissolved
Sodium	31000		1000		ug/L	1		6010B	Dissolved
Chloride	170		0.50		mg/L	1		300.0	Total/NA
Sulfate	7.2		1.0		mg/L	1		300.0	Total/NA
Ammonia as N	0.18		0.030		mg/L	1		350.1	Total/NA
Total Organic Carbon - Average	1.4		1.0		mg/L	1		9060	Total/NA
Total Anions	8.7				meq/L	1		SM 1030E	Total/NA
Total Cations	8.5				meq/L	1		SM 1030E	Total/NA
Percent Difference	-1.5				%	1		SM 1030E	Total/NA
Calcium	87				mg/L	1		SM 1030E	Total/NA
Magnesium	33				mg/L	1		SM 1030E	Total/NA
Potassium	0.54				mg/L	1		SM 1030E	Total/NA
Sodium	31				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.18				mg/L	1		SM 1030E	Total/NA
Chloride	170				mg/L	1		SM 1030E	Total/NA
Sulfate	7.2				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	190				mg/L	1		SM 1030E	Total/NA
Alkalinity	190				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.00				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	-1.5				%	1		SM 1030E	Total/NA
Calculated TDS	440				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.1				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	500				mg/L	1		SM 1030E	Total/NA
Iron	0.90				mg/L	1		SM 1030E	Total/NA
Calcium	4.3				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	2.7				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.014				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	1.3				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.013				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	4.8				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.15				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	190				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	3.8				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.048				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	190		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	500		10		mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Waste Management
Job ID: 280-147469-1
Project/Site: 1003|Riverbend Landfill - Groundwater

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-147469-2	MW-20A	Water	04/13/21 10:25	04/15/21 10:00
280-147469-3	DUP1	Water	04/13/21 10:30	04/15/21 10:00

Method Summary

Client: Waste Management
Job ID: 280-147469-1
Project/Site: 1003|Riverbend Landfill - Groundwater

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL DEN
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	TAL DEN
6010B	Metals (ICP)	SW846	TAL DEN
300.0	Anions, Ion Chromatography	MCAWW	TAL BUF
350.1	Nitrogen, Ammonia	MCAWW	TAL DEN
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	TAL DEN
9060	Organic Carbon, Total (TOC)	SW846	TAL DEN
SM 1030E	Cation Anion Balance	SM	TAL DEN
SM 1030E (meq)	Cation Anion Balance	SM	TAL DEN
SM 2320B	Alkalinity	SM	TAL DEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL DEN
Field Sampling	Field Sampling	EPA	TAL DEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL DEN
5030B	Purge and Trap	SW846	TAL DEN
8011	Microextraction	SW846	TAL DEN

Protocol 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.

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL DEN = Eurofins TestAmerica, Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Groundwater

Job ID: 280-147469-1

Client Sample ID: MW-20A

Date Collected: 04/13/21 10:25
Date Received: 04/15/21 10:00

Lab Sample ID: 280-147469-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/25/21 04:57	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/25/21 04:57	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/25/21 04:57	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/25/21 04:57	1
1,1-Dichloroethane	ND		1.0		ug/L			04/25/21 04:57	1
1,1-Dichloroethene	ND		1.0		ug/L			04/25/21 04:57	1
1,1-Dichloropropene	ND		1.0		ug/L			04/25/21 04:57	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/25/21 04:57	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/25/21 04:57	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/25/21 04:57	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/25/21 04:57	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/25/21 04:57	1
1,2-Dichloroethane	ND		1.0		ug/L			04/25/21 04:57	1
1,2-Dichloropropane	ND		1.0		ug/L			04/25/21 04:57	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/25/21 04:57	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/25/21 04:57	1
1,3-Dichloropropane	ND		1.0		ug/L			04/25/21 04:57	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/25/21 04:57	1
2,2-Dichloropropane	ND		5.0		ug/L			04/25/21 04:57	1
2-Butanone (MEK)	ND		6.0		ug/L			04/25/21 04:57	1
2-Chlorotoluene	ND		1.0		ug/L			04/25/21 04:57	1
2-Hexanone	ND		5.0		ug/L			04/25/21 04:57	1
4-Chlorotoluene	ND		1.0		ug/L			04/25/21 04:57	1
4-Isopropyltoluene	ND		1.0		ug/L			04/25/21 04:57	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/25/21 04:57	1
Acetone	ND		10		ug/L			04/25/21 04:57	1
Benzene	ND		1.0		ug/L			04/25/21 04:57	1
Bromobenzene	ND		1.0		ug/L			04/25/21 04:57	1
Bromochloromethane	ND		1.0		ug/L			04/25/21 04:57	1
Bromodichloromethane	ND		1.0		ug/L			04/25/21 04:57	1
Bromoform	ND		1.0		ug/L			04/25/21 04:57	1
Bromomethane	ND		2.0		ug/L			04/25/21 04:57	1
Carbon disulfide	ND		2.0		ug/L			04/25/21 04:57	1
Carbon tetrachloride	ND		1.0		ug/L			04/25/21 04:57	1
Chlorobenzene	ND		1.0		ug/L			04/25/21 04:57	1
Chloroethane	ND		2.0		ug/L			04/25/21 04:57	1
Chloroform	ND		1.0		ug/L			04/25/21 04:57	1
Chloromethane	ND		2.0		ug/L			04/25/21 04:57	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/25/21 04:57	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/25/21 04:57	1
Dibromochloromethane	ND		1.0		ug/L			04/25/21 04:57	1
Dibromomethane	ND		1.0		ug/L			04/25/21 04:57	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/25/21 04:57	1
Ethylbenzene	ND		1.0		ug/L			04/25/21 04:57	1
Hexachlorobutadiene	ND		1.0		ug/L			04/25/21 04:57	1
Isopropylbenzene	ND		1.0		ug/L			04/25/21 04:57	1
Methylene Chloride	ND		5.0		ug/L			04/25/21 04:57	1
Naphthalene	ND		1.0		ug/L			04/25/21 04:57	1
n-Butylbenzene	ND		1.0		ug/L			04/25/21 04:57	1

Client Sample ID: MW-20A

Date Collected: 04/13/21 10:25
Date Received: 04/15/21 10:00

Lab Sample ID: 280-147469-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		1.0		ug/L			04/25/21 04:57	1
sec-Butylbenzene	ND		1.0		ug/L			04/25/21 04:57	1
Styrene	ND		1.0		ug/L			04/25/21 04:57	1
tert-Butylbenzene	ND		1.0		ug/L			04/25/21 04:57	1
Tetrachloroethene	ND		1.0		ug/L			04/25/21 04:57	1
Toluene	ND		1.0		ug/L			04/25/21 04:57	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/25/21 04:57	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/25/21 04:57	1
Trichloroethene	ND		1.0		ug/L			04/25/21 04:57	1
Trichlorofluoromethane	ND		2.0		ug/L			04/25/21 04:57	1
Vinyl chloride	ND		1.0		ug/L			04/25/21 04:57	1
Xylenes (total)	ND		2.0		ug/L			04/25/21 04:57	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/25/21 04:57*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 127*		*04/25/21 04:57*	*1*
4-Bromofluorobenzene (Surr)	*94*		*78 - 120*		*04/25/21 04:57*	*1*
Dibromofluoromethane (Surr)	*105*		*77 - 120*		*04/25/21 04:57*	*1*
Toluene-d8 (Surr)	*98*		*80 - 125*		*04/25/21 04:57*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		04/23/21 10:55	04/23/21 21:43	1
1,2-Dibromoethane	ND		0.050		ug/L		04/23/21 10:55	04/23/21 21:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*112*		*70 - 130*	*04/23/21 10:55*	*04/23/21 21:43*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**90000**		500		ug/L		04/27/21 09:06	04/27/21 21:03	1
Iron	**930**	**B**	30		ug/L		04/27/21 09:06	04/27/21 21:03	1
Magnesium	**34000**		200		ug/L		04/27/21 09:06	04/27/21 21:03	1
Manganese	**2600**		3.0		ug/L		04/27/21 09:06	04/27/21 21:03	1
Potassium	**640**		500		ug/L		04/27/21 09:06	04/27/21 21:03	1
Sodium	**32000**		1000		ug/L		04/27/21 09:06	04/27/21 21:03	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	**8.7**				meq/L			05/03/21 09:05	1
Total Cations	**8.8**				meq/L			05/03/21 09:05	1
Percent Difference	**0.077**				%			05/03/21 09:05	1
Calcium	**90**				mg/L			05/03/21 09:05	1
Magnesium	**34**				mg/L			05/03/21 09:05	1
Potassium	**0.64**				mg/L			05/03/21 09:05	1
Sodium	**32**				mg/L			05/03/21 09:05	1
Ammonia as N	**0.11**				mg/L			05/03/21 09:05	1
Chloride	**170**				mg/L			05/03/21 09:05	1
Sulfate	**7.2**				mg/L			05/03/21 09:05	1

Client Sample ID: MW-20A
Lab Sample ID: 280-147469-2
Date Collected: 04/13/21 10:25
Matrix: Water
Date Received: 04/15/21 10:00

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity	190				mg/L			05/03/21 09:05	1
Alkalinity	190				mg/L			05/03/21 09:05	1
Nitrate/Nitrite	0.00				mg/L			05/03/21 09:05	1
Anion/Cation Balance	0.077				%			05/03/21 09:05	1
Calculated TDS	440				mg/L			05/03/21 09:05	1
TDS Ratio	1.1				NONE			05/03/21 09:05	1
Total Dissolved Solids	490				mg/L			05/03/21 09:05	1
Iron	0.93				mg/L			05/03/21 09:05	1
Calcium	4.5				meq/L			05/03/21 09:05	1
Magnesium	2.8				meq/L			05/03/21 09:05	1
Potassium	0.016				meq/L			05/03/21 09:05	1
Sodium	1.4				meq/L			05/03/21 09:05	1
Ammonia as N	0.0079				meq/L			05/03/21 09:05	1
Chloride	4.8				meq/L			05/03/21 09:05	1
Sulfate	0.15				meq/L			05/03/21 09:05	1
Alkalinity	190				mg/L			05/03/21 09:05	1
Bicarbonate Alkalinity	3.8				meq/L			05/03/21 09:05	1
Nitrate/Nitrite	0.00				meq/L			05/03/21 09:05	1
Iron	0.050				meq/L			05/03/21 09:05	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	170		0.50		mg/L			04/27/21 17:36	1
Sulfate	7.2		1.0		mg/L			04/27/21 17:36	1
Ammonia as N	0.11		0.030		mg/L			04/26/21 18:22	1
Nitrate/Nitrite	ND		0.050		mg/L			04/28/21 20:08	1
Total Organic Carbon - Average	1.4		1.0		mg/L			05/02/21 06:37	1
Bicarbonate Alkalinity	190		10		mg/L			04/17/21 01:43	1
Total Dissolved Solids	490		10		mg/L			04/19/21 13:23	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.76				SU			04/13/21 11:25	1
Field Conductivity	982				umhos/cm			04/13/21 11:25	1
Field Temperature	10.4				Degrees C			04/13/21 11:25	1
Field Dissolved Oxygen	0.31				mg/L			04/13/21 11:25	1
Field EH/ORP	-11.2				millivolts			04/13/21 11:25	1

Client Sample ID: DUP1
Lab Sample ID: 280-147469-3
Date Collected: 04/13/21 10:30
Matrix: Water
Date Received: 04/15/21 10:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/22/21 06:02	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/22/21 06:02	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/22/21 06:02	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/22/21 06:02	1
1,1-Dichloroethane	ND		1.0		ug/L			04/22/21 06:02	1
1,1-Dichloroethene	ND		1.0		ug/L			04/22/21 06:02	1
1,1-Dichloropropene	ND		1.0		ug/L			04/22/21 06:02	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/22/21 06:02	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Groundwater

Job ID: 280-147469-1

Client Sample ID: DUP1
Date Collected: 04/13/21 10:30
Date Received: 04/15/21 10:00

Lab Sample ID: 280-147469-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		1.0		ug/L			04/22/21 06:02	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/22/21 06:02	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/22/21 06:02	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/22/21 06:02	1
1,2-Dichloroethane	ND		1.0		ug/L			04/22/21 06:02	1
1,2-Dichloropropane	ND		1.0		ug/L			04/22/21 06:02	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/22/21 06:02	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/22/21 06:02	1
1,3-Dichloropropane	ND		1.0		ug/L			04/22/21 06:02	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/22/21 06:02	1
2,2-Dichloropropane	ND		5.0		ug/L			04/22/21 06:02	1
2-Butanone (MEK)	ND		6.0		ug/L			04/22/21 06:02	1
2-Chlorotoluene	ND		1.0		ug/L			04/22/21 06:02	1
2-Hexanone	ND		5.0		ug/L			04/22/21 06:02	1
4-Chlorotoluene	ND		1.0		ug/L			04/22/21 06:02	1
4-Isopropyltoluene	ND		1.0		ug/L			04/22/21 06:02	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/22/21 06:02	1
Acetone	ND		10		ug/L			04/22/21 06:02	1
Benzene	ND		1.0		ug/L			04/22/21 06:02	1
Bromobenzene	ND		1.0		ug/L			04/22/21 06:02	1
Bromochloromethane	ND		1.0		ug/L			04/22/21 06:02	1
Bromodichloromethane	ND		1.0		ug/L			04/22/21 06:02	1
Bromoform	ND		1.0		ug/L			04/22/21 06:02	1
Bromomethane	ND		2.0		ug/L			04/22/21 06:02	1
Carbon disulfide	ND		2.0		ug/L			04/22/21 06:02	1
Carbon tetrachloride	ND		1.0		ug/L			04/22/21 06:02	1
Chlorobenzene	ND		1.0		ug/L			04/22/21 06:02	1
Chloroethane	ND		2.0		ug/L			04/22/21 06:02	1
Chloroform	ND		1.0		ug/L			04/22/21 06:02	1
Chloromethane	ND		2.0		ug/L			04/22/21 06:02	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/22/21 06:02	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/22/21 06:02	1
Dibromochloromethane	ND		1.0		ug/L			04/22/21 06:02	1
Dibromomethane	ND		1.0		ug/L			04/22/21 06:02	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/22/21 06:02	1
Ethylbenzene	ND		1.0		ug/L			04/22/21 06:02	1
Hexachlorobutadiene	ND		1.0		ug/L			04/22/21 06:02	1
Isopropylbenzene	ND		1.0		ug/L			04/22/21 06:02	1
Methylene Chloride	ND		5.0		ug/L			04/22/21 06:02	1
Naphthalene	ND		1.0		ug/L			04/22/21 06:02	1
n-Butylbenzene	ND		1.0		ug/L			04/22/21 06:02	1
N-Propylbenzene	ND		1.0		ug/L			04/22/21 06:02	1
sec-Butylbenzene	ND		1.0		ug/L			04/22/21 06:02	1
Styrene	ND		1.0		ug/L			04/22/21 06:02	1
tert-Butylbenzene	ND		1.0		ug/L			04/22/21 06:02	1
Tetrachloroethene	ND		1.0		ug/L			04/22/21 06:02	1
Toluene	ND		1.0		ug/L			04/22/21 06:02	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/22/21 06:02	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/22/21 06:02	1

Client Sample ID: DUP1

Date Collected: 04/13/21 10:30
Date Received: 04/15/21 10:00

Lab Sample ID: 280-147469-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		1.0		ug/L			04/22/21 06:02	1
Trichlorofluoromethane	ND		2.0		ug/L			04/22/21 06:02	1
Vinyl chloride	ND		1.0		ug/L			04/22/21 06:02	1
Xylenes (total)	ND		2.0		ug/L			04/22/21 06:02	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/22/21 06:02*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 127*		*04/22/21 06:02*	*1*
4-Bromofluorobenzene (Surr)	*100*		*78 - 120*		*04/22/21 06:02*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 120*		*04/22/21 06:02*	*1*
Toluene-d8 (Surr)	*99*		*80 - 125*		*04/22/21 06:02*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		04/23/21 10:55	04/23/21 22:05	1
1,2-Dibromoethane	ND		0.050		ug/L		04/23/21 10:55	04/23/21 22:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*111*		*70 - 130*	*04/23/21 10:55*	*04/23/21 22:05*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**87000**		500		ug/L		04/27/21 09:06	04/27/21 21:17	1
Iron	**900**	**B**	30		ug/L		04/27/21 09:06	04/27/21 21:17	1
Magnesium	**33000**		200		ug/L		04/27/21 09:06	04/27/21 21:17	1
Manganese	**2500**		3.0		ug/L		04/27/21 09:06	04/27/21 21:17	1
Potassium	**540**		500		ug/L		04/27/21 09:06	04/27/21 21:17	1
Sodium	**31000**		1000		ug/L		04/27/21 09:06	04/27/21 21:17	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	**8.7**				meq/L			05/03/21 09:05	1
Total Cations	**8.5**				meq/L			05/03/21 09:05	1
Percent Difference	**-1.5**				%			05/03/21 09:05	1
Calcium	**87**				mg/L			05/03/21 09:05	1
Magnesium	**33**				mg/L			05/03/21 09:05	1
Potassium	**0.54**				mg/L			05/03/21 09:05	1
Sodium	**31**				mg/L			05/03/21 09:05	1
Ammonia as N	**0.18**				mg/L			05/03/21 09:05	1
Chloride	**170**				mg/L			05/03/21 09:05	1
Sulfate	**7.2**				mg/L			05/03/21 09:05	1
Bicarbonate Alkalinity	**190**				mg/L			05/03/21 09:05	1
Alkalinity	**190**				mg/L			05/03/21 09:05	1
Nitrate/Nitrite	**0.00**				mg/L			05/03/21 09:05	1
Anion/Cation Balance	**-1.5**				%			05/03/21 09:05	1
Calculated TDS	**440**				mg/L			05/03/21 09:05	1
TDS Ratio	**1.1**				NONE			05/03/21 09:05	1
Total Dissolved Solids	**500**				mg/L			05/03/21 09:05	1
Iron	**0.90**				mg/L			05/03/21 09:05	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Groundwater

Job ID: 280-147469-1

Client Sample ID: DUP1

Date Collected: 04/13/21 10:30
Date Received: 04/15/21 10:00

Lab Sample ID: 280-147469-3

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	4.3				meq/L			05/03/21 09:05	1
Magnesium	2.7				meq/L			05/03/21 09:05	1
Potassium	0.014				meq/L			05/03/21 09:05	1
Sodium	1.3				meq/L			05/03/21 09:05	1
Ammonia as N	0.013				meq/L			05/03/21 09:05	1
Chloride	4.8				meq/L			05/03/21 09:05	1
Sulfate	0.15				meq/L			05/03/21 09:05	1
Alkalinity	190				mg/L			05/03/21 09:05	1
Bicarbonate Alkalinity	3.8				meq/L			05/03/21 09:05	1
Nitrate/Nitrite	0.00				meq/L			05/03/21 09:05	1
Iron	0.048				meq/L			05/03/21 09:05	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	170		0.50		mg/L			04/27/21 17:54	1
Sulfate	7.2		1.0		mg/L			04/27/21 17:54	1
Ammonia as N	0.18		0.030		mg/L			04/27/21 15:32	1
Nitrate/Nitrite	ND		0.050		mg/L			04/28/21 20:14	1
Total Organic Carbon - Average	1.4		1.0		mg/L			05/03/21 16:34	1
Bicarbonate Alkalinity	190		10		mg/L			04/17/21 01:50	1
Total Dissolved Solids	500		10		mg/L			04/19/21 13:23	1

Surrogate Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Groundwater

Job ID: 280-147469-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-127)	(78-120)	(77-120)	(80-125)
280-147469-2	MW-20A	101	94	105	98
280-147469-3	DUP1	101	100	100	99
LCS 280-533411/4	Lab Control Sample	101	101	103	100
LCS 280-533813/4	Lab Control Sample	97	94	98	95
LCSD 280-533411/5	Lab Control Sample Dup	101	100	103	101
LCSD 280-533813/5	Lab Control Sample Dup	97	94	102	97
MB 280-533411/8	Method Blank	100	99	100	100
MB 280-533813/9	Method Blank	99	95	106	97

Surrogate Legend

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

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		12DBP1
Lab Sample ID	Client Sample ID	(70-130)
280-147469-2	MW-20A	112
280-147469-3	DUP1	111
LCS 280-533634/2-A	Lab Control Sample	109
LCSD 280-533634/3-A	Lab Control Sample Dup	112
MB 280-533634/1-A	Method Blank	115

Surrogate Legend

12DBP = 1,2-Dibromopropane

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

Lab Sample ID: MB 280-533411/8
Matrix: Water
Analysis Batch: 533411

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/21/21 22:27	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/21/21 22:27	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/21/21 22:27	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/21/21 22:27	1
1,1-Dichloroethane	ND		1.0		ug/L			04/21/21 22:27	1
1,1-Dichloroethene	ND		1.0		ug/L			04/21/21 22:27	1
1,1-Dichloropropene	ND		1.0		ug/L			04/21/21 22:27	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/21/21 22:27	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/21/21 22:27	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/21/21 22:27	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/21/21 22:27	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/21/21 22:27	1
1,2-Dichloroethane	ND		1.0		ug/L			04/21/21 22:27	1
1,2-Dichloropropane	ND		1.0		ug/L			04/21/21 22:27	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/21/21 22:27	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/21/21 22:27	1
1,3-Dichloropropane	ND		1.0		ug/L			04/21/21 22:27	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/21/21 22:27	1
2,2-Dichloropropane	ND		5.0		ug/L			04/21/21 22:27	1
2-Butanone (MEK)	ND		6.0		ug/L			04/21/21 22:27	1
2-Chlorotoluene	ND		1.0		ug/L			04/21/21 22:27	1
2-Hexanone	ND		5.0		ug/L			04/21/21 22:27	1
4-Chlorotoluene	ND		1.0		ug/L			04/21/21 22:27	1
4-Isopropyltoluene	ND		1.0		ug/L			04/21/21 22:27	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/21/21 22:27	1
Acetone	ND		10		ug/L			04/21/21 22:27	1
Benzene	ND		1.0		ug/L			04/21/21 22:27	1
Bromobenzene	ND		1.0		ug/L			04/21/21 22:27	1
Bromochloromethane	ND		1.0		ug/L			04/21/21 22:27	1
Bromodichloromethane	ND		1.0		ug/L			04/21/21 22:27	1
Bromoform	ND		1.0		ug/L			04/21/21 22:27	1
Bromomethane	ND		2.0		ug/L			04/21/21 22:27	1
Carbon disulfide	ND		2.0		ug/L			04/21/21 22:27	1
Carbon tetrachloride	ND		1.0		ug/L			04/21/21 22:27	1
Chlorobenzene	ND		1.0		ug/L			04/21/21 22:27	1
Chloroethane	ND		2.0		ug/L			04/21/21 22:27	1
Chloroform	ND		1.0		ug/L			04/21/21 22:27	1
Chloromethane	ND		2.0		ug/L			04/21/21 22:27	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/21/21 22:27	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/21/21 22:27	1
Dibromochloromethane	ND		1.0		ug/L			04/21/21 22:27	1
Dibromomethane	ND		1.0		ug/L			04/21/21 22:27	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/21/21 22:27	1
Ethylbenzene	ND		1.0		ug/L			04/21/21 22:27	1
Hexachlorobutadiene	ND		1.0		ug/L			04/21/21 22:27	1
Isopropylbenzene	ND		1.0		ug/L			04/21/21 22:27	1
Methylene Chloride	ND		5.0		ug/L			04/21/21 22:27	1
Naphthalene	ND		1.0		ug/L			04/21/21 22:27	1

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

Lab Sample ID: MB 280-533411/8
Matrix: Water
Analysis Batch: 533411

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		1.0		ug/L			04/21/21 22:27	1
N-Propylbenzene	ND		1.0		ug/L			04/21/21 22:27	1
sec-Butylbenzene	ND		1.0		ug/L			04/21/21 22:27	1
Styrene	ND		1.0		ug/L			04/21/21 22:27	1
tert-Butylbenzene	ND		1.0		ug/L			04/21/21 22:27	1
Tetrachloroethene	ND		1.0		ug/L			04/21/21 22:27	1
Toluene	ND		1.0		ug/L			04/21/21 22:27	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/21/21 22:27	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/21/21 22:27	1
Trichloroethene	ND		1.0		ug/L			04/21/21 22:27	1
Trichlorofluoromethane	ND		2.0		ug/L			04/21/21 22:27	1
Vinyl chloride	ND		1.0		ug/L			04/21/21 22:27	1
Xylenes (total)	ND		2.0		ug/L			04/21/21 22:27	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/21/21 22:27*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 127*		*04/21/21 22:27*	*1*
4-Bromofluorobenzene (Surr)	*99*		*78 - 120*		*04/21/21 22:27*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 120*		*04/21/21 22:27*	*1*
Toluene-d8 (Surr)	*100*		*80 - 125*		*04/21/21 22:27*	*1*

Lab Sample ID: LCS 280-533411/4
Matrix: Water
Analysis Batch: 533411

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	24.7		ug/L		99	65 - 135
1,1,1-Trichloroethane	25.0	23.0		ug/L		92	65 - 135
1,1,2,2-Tetrachloroethane	25.0	24.3		ug/L		97	58 - 135
1,1,2-Trichloroethane	25.0	23.6		ug/L		94	64 - 135
1,1-Dichloroethane	25.0	23.6		ug/L		94	65 - 135
1,1-Dichloroethene	25.0	23.3		ug/L		93	65 - 136
1,1-Dichloropropene	25.0	22.8		ug/L		91	65 - 135
1,2,3-Trichlorobenzene	25.0	23.5		ug/L		94	60 - 135
1,2,3-Trichloropropane	25.0	24.9		ug/L		100	65 - 135
1,2,4-Trichlorobenzene	25.0	22.9		ug/L		92	58 - 135
1,2,4-Trimethylbenzene	25.0	23.3		ug/L		93	65 - 135
1,2-Dichlorobenzene	25.0	24.7		ug/L		99	65 - 135
1,2-Dichloroethane	25.0	25.2		ug/L		101	65 - 135
1,2-Dichloropropane	25.0	23.8		ug/L		95	64 - 135
1,3,5-Trimethylbenzene	25.0	23.1		ug/L		92	65 - 135
1,3-Dichlorobenzene	25.0	24.3		ug/L		97	65 - 135
1,3-Dichloropropane	25.0	23.5		ug/L		94	64 - 135
1,4-Dichlorobenzene	25.0	24.5		ug/L		98	65 - 135
2,2-Dichloropropane	25.0	24.1		ug/L		96	65 - 135
2-Butanone (MEK)	100	96.1		ug/L		96	44 - 177

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

Lab Sample ID: LCS 280-533411/4
Matrix: Water
Analysis Batch: 533411

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chlorotoluene	25.0	23.0		ug/L		92	65 - 135
2-Hexanone	100	102		ug/L		102	57 - 139
4-Chlorotoluene	25.0	22.7		ug/L		91	65 - 135
4-Isopropyltoluene	25.0	23.1		ug/L		92	65 - 135
4-Methyl-2-pentanone	100	103		ug/L		103	60 - 150
Acetone	100	99.0		ug/L		99	39 - 156
Benzene	25.0	23.4		ug/L		94	65 - 135
Bromobenzene	25.0	22.2		ug/L		89	65 - 135
Bromochloromethane	25.0	23.1		ug/L		93	65 - 135
Bromodichloromethane	25.0	24.4		ug/L		98	65 - 135
Bromoform	25.0	24.5		ug/L		98	62 - 135
Bromomethane	25.0	32.4		ug/L		129	45 - 135
Carbon disulfide	25.0	21.8		ug/L		87	55 - 143
Carbon tetrachloride	25.0	23.7		ug/L		95	65 - 135
Chlorobenzene	25.0	23.4		ug/L		94	65 - 135
Chloroethane	25.0	33.8		ug/L		135	46 - 136
Chloroform	25.0	23.5		ug/L		94	65 - 135
Chloromethane	25.0	29.1		ug/L		116	34 - 145
cis-1,2-Dichloroethene	25.0	23.5		ug/L		94	65 - 135
cis-1,3-Dichloropropene	25.0	24.1		ug/L		96	65 - 135
Dibromochloromethane	25.0	25.1		ug/L		100	65 - 135
Dibromomethane	25.0	23.0		ug/L		92	65 - 135
Dichlorodifluoromethane	25.0	27.9		ug/L		112	43 - 142
Ethylbenzene	25.0	22.9		ug/L		92	65 - 135
Hexachlorobutadiene	25.0	22.2		ug/L		89	65 - 135
Isopropylbenzene	25.0	22.7		ug/L		91	65 - 135
Methylene Chloride	25.0	25.2		ug/L		101	54 - 141
Naphthalene	25.0	22.3		ug/L		89	42 - 135
n-Butylbenzene	25.0	23.0		ug/L		92	64 - 135
N-Propylbenzene	25.0	23.1		ug/L		92	65 - 135
sec-Butylbenzene	25.0	22.6		ug/L		91	64 - 135
Styrene	25.0	23.6		ug/L		94	65 - 135
tert-Butylbenzene	25.0	22.6		ug/L		90	65 - 135
Tetrachloroethene	25.0	22.7		ug/L		91	65 - 135
Toluene	25.0	24.6		ug/L		98	65 - 135
trans-1,2-Dichloroethene	25.0	22.3		ug/L		89	65 - 135
trans-1,3-Dichloropropene	25.0	23.9		ug/L		96	65 - 135
Trichloroethene	25.0	22.7		ug/L		91	65 - 135
Trichlorofluoromethane	25.0	25.6		ug/L		102	53 - 137
Vinyl chloride	25.0	28.6		ug/L		114	40 - 137

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 127*
4-Bromofluorobenzene (Surr)	*101*		*78 - 120*
Dibromofluoromethane (Surr)	*103*		*77 - 120*
Toluene-d8 (Surr)	*100*		*80 - 125*

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

Lab Sample ID: LCSD 280-533411/5
Matrix: Water
Analysis Batch: 533411

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane			25.0	25.1		ug/L		100	65 - 135	2	20
1,1,1-Trichloroethane			25.0	23.2		ug/L		93	65 - 135	1	20
1,1,2,2-Tetrachloroethane			25.0	24.1		ug/L		96	58 - 135	1	20
1,1,2-Trichloroethane			25.0	23.9		ug/L		95	64 - 135	1	27
1,1-Dichloroethane			25.0	23.6		ug/L		94	65 - 135	0	21
1,1-Dichloroethene			25.0	23.3		ug/L		93	65 - 136	0	20
1,1-Dichloropropene			25.0	22.9		ug/L		92	65 - 135	0	21
1,2,3-Trichlorobenzene			25.0	24.6		ug/L		99	60 - 135	5	36
1,2,3-Trichloropropane			25.0	24.9		ug/L		100	65 - 135	0	23
1,2,4-Trichlorobenzene			25.0	23.6		ug/L		95	58 - 135	3	25
1,2,4-Trimethylbenzene			25.0	23.3		ug/L		93	65 - 135	0	20
1,2-Dichlorobenzene			25.0	24.7		ug/L		99	65 - 135	0	20
1,2-Dichloroethane			25.0	25.1		ug/L		100	65 - 135	0	20
1,2-Dichloropropane			25.0	23.7		ug/L		95	64 - 135	0	20
1,3,5-Trimethylbenzene			25.0	23.0		ug/L		92	65 - 135	0	20
1,3-Dichlorobenzene			25.0	24.4		ug/L		97	65 - 135	0	20
1,3-Dichloropropane			25.0	23.9		ug/L		95	64 - 135	1	20
1,4-Dichlorobenzene			25.0	24.3		ug/L		97	65 - 135	0	23
2,2-Dichloropropane			25.0	23.5		ug/L		94	65 - 135	2	20
2-Butanone (MEK)			100	94.2		ug/L		94	44 - 177	2	32
2-Chlorotoluene			25.0	22.9		ug/L		92	65 - 135	0	20
2-Hexanone			100	101		ug/L		101	57 - 139	1	25
4-Chlorotoluene			25.0	22.9		ug/L		91	65 - 135	1	20
4-Isopropyltoluene			25.0	23.1		ug/L		92	65 - 135	0	20
4-Methyl-2-pentanone			100	102		ug/L		102	60 - 150	2	22
Acetone			100	96.2		ug/L		96	39 - 156	3	23
Benzene			25.0	23.8		ug/L		95	65 - 135	1	20
Bromobenzene			25.0	22.6		ug/L		90	65 - 135	1	26
Bromochloromethane			25.0	23.7		ug/L		95	65 - 135	3	29
Bromodichloromethane			25.0	24.5		ug/L		98	65 - 135	0	20
Bromoform			25.0	24.9		ug/L		100	62 - 135	2	27
Bromomethane			25.0	29.8		ug/L		119	45 - 135	8	33
Carbon disulfide			25.0	21.8		ug/L		87	55 - 143	0	20
Carbon tetrachloride			25.0	23.5		ug/L		94	65 - 135	1	21
Chlorobenzene			25.0	23.7		ug/L		95	65 - 135	1	20
Chloroethane			25.0	29.8		ug/L		119	46 - 136	13	25
Chloroform			25.0	23.8		ug/L		95	65 - 135	1	20
Chloromethane			25.0	28.9		ug/L		115	34 - 145	1	24
cis-1,2-Dichloroethene			25.0	23.4		ug/L		93	65 - 135	1	20
cis-1,3-Dichloropropene			25.0	24.3		ug/L		97	65 - 135	1	26
Dibromochloromethane			25.0	25.2		ug/L		101	65 - 135	0	20
Dibromomethane			25.0	23.3		ug/L		93	65 - 135	1	26
Dichlorodifluoromethane			25.0	27.2		ug/L		109	43 - 142	2	30
Ethylbenzene			25.0	23.3		ug/L		93	65 - 135	2	20
Hexachlorobutadiene			25.0	22.7		ug/L		91	65 - 135	2	25
Isopropylbenzene			25.0	22.7		ug/L		91	65 - 135	0	20
Methylene Chloride			25.0	25.4		ug/L		102	54 - 141	1	26
Naphthalene			25.0	23.7		ug/L		95	42 - 135	6	23

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

Lab Sample ID: LCSD 280-533411/5
Matrix: Water
Analysis Batch: 533411

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
n-Butylbenzene			25.0	23.0		ug/L		92	64 - 135	0	21
N-Propylbenzene			25.0	23.0		ug/L		92	65 - 135	0	20
sec-Butylbenzene			25.0	22.9		ug/L		92	64 - 135	1	21
Styrene			25.0	23.7		ug/L		95	65 - 135	0	26
tert-Butylbenzene			25.0	22.8		ug/L		91	65 - 135	1	21
Tetrachloroethene			25.0	22.9		ug/L		92	65 - 135	1	20
Toluene			25.0	24.8		ug/L		99	65 - 135	1	20
trans-1,2-Dichloroethene			25.0	22.6		ug/L		91	65 - 135	2	24
trans-1,3-Dichloropropene			25.0	24.0		ug/L		96	65 - 135	1	26
Trichloroethene			25.0	23.2		ug/L		93	65 - 135	2	20
Trichlorofluoromethane			25.0	25.1		ug/L		100	53 - 137	2	27
Vinyl chloride			25.0	28.7		ug/L		115	40 - 137	1	24

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 127*
4-Bromofluorobenzene (Surr)	*100*		*78 - 120*
Dibromofluoromethane (Surr)	*103*		*77 - 120*
Toluene-d8 (Surr)	*101*		*80 - 125*

Lab Sample ID: MB 280-533813/9
Matrix: Water
Analysis Batch: 533813

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/24/21 22:42	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/24/21 22:42	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/24/21 22:42	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/24/21 22:42	1
1,1-Dichloroethane	ND		1.0		ug/L			04/24/21 22:42	1
1,1-Dichloroethene	ND		1.0		ug/L			04/24/21 22:42	1
1,1-Dichloropropene	ND		1.0		ug/L			04/24/21 22:42	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/24/21 22:42	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/24/21 22:42	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/24/21 22:42	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/24/21 22:42	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/24/21 22:42	1
1,2-Dichloroethane	ND		1.0		ug/L			04/24/21 22:42	1
1,2-Dichloropropane	ND		1.0		ug/L			04/24/21 22:42	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/24/21 22:42	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/24/21 22:42	1
1,3-Dichloropropane	ND		1.0		ug/L			04/24/21 22:42	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/24/21 22:42	1
2,2-Dichloropropane	ND		5.0		ug/L			04/24/21 22:42	1
2-Butanone (MEK)	ND		6.0		ug/L			04/24/21 22:42	1
2-Chlorotoluene	ND		1.0		ug/L			04/24/21 22:42	1
2-Hexanone	ND		5.0		ug/L			04/24/21 22:42	1
4-Chlorotoluene	ND		1.0		ug/L			04/24/21 22:42	1
4-Isopropyltoluene	ND		1.0		ug/L			04/24/21 22:42	1

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

Lab Sample ID: MB 280-533813/9
Matrix: Water
Analysis Batch: 533813

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone	ND		5.0		ug/L			04/24/21 22:42	1
Acetone	ND		10		ug/L			04/24/21 22:42	1
Benzene	ND		1.0		ug/L			04/24/21 22:42	1
Bromobenzene	ND		1.0		ug/L			04/24/21 22:42	1
Bromochloromethane	ND		1.0		ug/L			04/24/21 22:42	1
Bromodichloromethane	ND		1.0		ug/L			04/24/21 22:42	1
Bromoform	ND		1.0		ug/L			04/24/21 22:42	1
Bromomethane	ND		2.0		ug/L			04/24/21 22:42	1
Carbon disulfide	ND		2.0		ug/L			04/24/21 22:42	1
Carbon tetrachloride	ND		1.0		ug/L			04/24/21 22:42	1
Chlorobenzene	ND		1.0		ug/L			04/24/21 22:42	1
Chloroethane	ND		2.0		ug/L			04/24/21 22:42	1
Chloroform	ND		1.0		ug/L			04/24/21 22:42	1
Chloromethane	ND		2.0		ug/L			04/24/21 22:42	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/24/21 22:42	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/24/21 22:42	1
Dibromochloromethane	ND		1.0		ug/L			04/24/21 22:42	1
Dibromomethane	ND		1.0		ug/L			04/24/21 22:42	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/24/21 22:42	1
Ethylbenzene	ND		1.0		ug/L			04/24/21 22:42	1
Hexachlorobutadiene	ND		1.0		ug/L			04/24/21 22:42	1
Isopropylbenzene	ND		1.0		ug/L			04/24/21 22:42	1
Methylene Chloride	ND		5.0		ug/L			04/24/21 22:42	1
Naphthalene	ND		1.0		ug/L			04/24/21 22:42	1
n-Butylbenzene	ND		1.0		ug/L			04/24/21 22:42	1
N-Propylbenzene	ND		1.0		ug/L			04/24/21 22:42	1
sec-Butylbenzene	ND		1.0		ug/L			04/24/21 22:42	1
Styrene	ND		1.0		ug/L			04/24/21 22:42	1
tert-Butylbenzene	ND		1.0		ug/L			04/24/21 22:42	1
Tetrachloroethene	ND		1.0		ug/L			04/24/21 22:42	1
Toluene	ND		1.0		ug/L			04/24/21 22:42	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/24/21 22:42	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/24/21 22:42	1
Trichloroethene	ND		1.0		ug/L			04/24/21 22:42	1
Trichlorofluoromethane	ND		2.0		ug/L			04/24/21 22:42	1
Vinyl chloride	ND		1.0		ug/L			04/24/21 22:42	1
Xylenes (total)	ND		2.0		ug/L			04/24/21 22:42	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/24/21 22:42*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 127*		*04/24/21 22:42*	*1*
4-Bromofluorobenzene (Surr)	*95*		*78 - 120*		*04/24/21 22:42*	*1*
Dibromofluoromethane (Surr)	*106*		*77 - 120*		*04/24/21 22:42*	*1*
Toluene-d8 (Surr)	*97*		*80 - 125*		*04/24/21 22:42*	*1*

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

Lab Sample ID: LCS 280-533813/4
Matrix: Water
Analysis Batch: 533813

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	22.1		ug/L		88	65 - 135
1,1,1-Trichloroethane	25.0	25.2		ug/L		101	65 - 135
1,1,2,2-Tetrachloroethane	25.0	22.5		ug/L		90	58 - 135
1,1,2-Trichloroethane	25.0	24.4		ug/L		97	64 - 135
1,1-Dichloroethane	25.0	24.0		ug/L		96	65 - 135
1,1-Dichloroethene	25.0	25.1		ug/L		100	65 - 136
1,1-Dichloropropene	25.0	25.5		ug/L		102	65 - 135
1,2,3-Trichlorobenzene	25.0	24.7		ug/L		99	60 - 135
1,2,3-Trichloropropane	25.0	22.5		ug/L		90	65 - 135
1,2,4-Trichlorobenzene	25.0	24.7		ug/L		99	58 - 135
1,2,4-Trimethylbenzene	25.0	23.9		ug/L		96	65 - 135
1,2-Dichlorobenzene	25.0	24.8		ug/L		99	65 - 135
1,2-Dichloroethane	25.0	23.3		ug/L		93	65 - 135
1,2-Dichloropropane	25.0	23.4		ug/L		93	64 - 135
1,3,5-Trimethylbenzene	25.0	24.1		ug/L		96	65 - 135
1,3-Dichlorobenzene	25.0	25.2		ug/L		101	65 - 135
1,3-Dichloropropane	25.0	23.5		ug/L		94	64 - 135
1,4-Dichlorobenzene	25.0	25.3		ug/L		101	65 - 135
2,2-Dichloropropane	25.0	24.8		ug/L		99	65 - 135
2-Butanone (MEK)	100	85.6		ug/L		86	44 - 177
2-Chlorotoluene	25.0	25.4		ug/L		102	65 - 135
2-Hexanone	100	86.5		ug/L		87	57 - 139
4-Chlorotoluene	25.0	26.3		ug/L		105	65 - 135
4-Isopropyltoluene	25.0	24.7		ug/L		99	65 - 135
4-Methyl-2-pentanone	100	86.1		ug/L		86	60 - 150
Acetone	100	80.8		ug/L		81	39 - 156
Benzene	25.0	24.8		ug/L		99	65 - 135
Bromobenzene	25.0	25.0		ug/L		100	65 - 135
Bromochloromethane	25.0	27.0		ug/L		108	65 - 135
Bromodichloromethane	25.0	22.2		ug/L		89	65 - 135
Bromoform	25.0	18.1		ug/L		72	62 - 135
Bromomethane	25.0	24.7		ug/L		99	45 - 135
Carbon disulfide	25.0	23.9		ug/L		96	55 - 143
Carbon tetrachloride	25.0	24.3		ug/L		97	65 - 135
Chlorobenzene	25.0	25.3		ug/L		101	65 - 135
Chloroethane	25.0	22.0		ug/L		88	46 - 136
Chloroform	25.0	24.1		ug/L		96	65 - 135
Chloromethane	25.0	21.5		ug/L		86	34 - 145
cis-1,2-Dichloroethene	25.0	25.4		ug/L		102	65 - 135
cis-1,3-Dichloropropene	25.0	22.1		ug/L		88	65 - 135
Dibromochloromethane	25.0	21.1		ug/L		84	65 - 135
Dibromomethane	25.0	24.6		ug/L		98	65 - 135
Dichlorodifluoromethane	25.0	24.5		ug/L		98	43 - 142
Ethylbenzene	25.0	24.9		ug/L		99	65 - 135
Hexachlorobutadiene	25.0	26.5		ug/L		106	65 - 135
Isopropylbenzene	25.0	24.5		ug/L		98	65 - 135
Methylene Chloride	25.0	25.4		ug/L		102	54 - 141
Naphthalene	25.0	21.9		ug/L		88	42 - 135

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

Lab Sample ID: LCS 280-533813/4
Matrix: Water
Analysis Batch: 533813

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
n-Butylbenzene			25.0	23.6		ug/L		94	64 - 135		
N-Propylbenzene			25.0	25.0		ug/L		100	65 - 135		
sec-Butylbenzene			25.0	26.5		ug/L		106	64 - 135		
Styrene			25.0	24.5		ug/L		98	65 - 135		
tert-Butylbenzene			25.0	25.4		ug/L		102	65 - 135		
Tetrachloroethene			25.0	26.8		ug/L		107	65 - 135		
Toluene			25.0	25.5		ug/L		102	65 - 135		
trans-1,2-Dichloroethene			25.0	26.1		ug/L		104	65 - 135		
trans-1,3-Dichloropropene			25.0	22.2		ug/L		89	65 - 135		
Trichloroethene			25.0	24.4		ug/L		98	65 - 135		
Trichlorofluoromethane			25.0	23.0		ug/L		92	53 - 137		
Vinyl chloride			25.0	22.1		ug/L		88	40 - 137		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 127*
4-Bromofluorobenzene (Surr)	*94*		*78 - 120*
Dibromofluoromethane (Surr)	*98*		*77 - 120*
Toluene-d8 (Surr)	*95*		*80 - 125*

Lab Sample ID: LCSD 280-533813/5
Matrix: Water
Analysis Batch: 533813

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane			25.0	22.8		ug/L		91	65 - 135	4	20
1,1,1-Trichloroethane			25.0	24.0		ug/L		96	65 - 135	5	20
1,1,2,2-Tetrachloroethane			25.0	22.7		ug/L		91	58 - 135	1	20
1,1,2-Trichloroethane			25.0	24.3		ug/L		97	64 - 135	0	27
1,1-Dichloroethane			25.0	23.8		ug/L		95	65 - 135	1	21
1,1-Dichloroethene			25.0	25.1		ug/L		100	65 - 136	0	20
1,1-Dichloropropene			25.0	25.3		ug/L		101	65 - 135	1	21
1,2,3-Trichlorobenzene			25.0	24.5		ug/L		98	60 - 135	1	36
1,2,3-Trichloropropane			25.0	23.9		ug/L		95	65 - 135	6	23
1,2,4-Trichlorobenzene			25.0	25.3		ug/L		101	58 - 135	2	25
1,2,4-Trimethylbenzene			25.0	23.8		ug/L		95	65 - 135	1	20
1,2-Dichlorobenzene			25.0	25.3		ug/L		101	65 - 135	2	20
1,2-Dichloroethane			25.0	23.3		ug/L		93	65 - 135	0	20
1,2-Dichloropropane			25.0	23.4		ug/L		94	64 - 135	0	20
1,3,5-Trimethylbenzene			25.0	23.8		ug/L		95	65 - 135	1	20
1,3-Dichlorobenzene			25.0	25.1		ug/L		100	65 - 135	1	20
1,3-Dichloropropane			25.0	22.8		ug/L		91	64 - 135	3	20
1,4-Dichlorobenzene			25.0	24.7		ug/L		99	65 - 135	3	23
2,2-Dichloropropane			25.0	24.7		ug/L		99	65 - 135	0	20
2-Butanone (MEK)			100	81.8		ug/L		82	44 - 177	5	32
2-Chlorotoluene			25.0	25.3		ug/L		101	65 - 135	0	20
2-Hexanone			100	82.5		ug/L		82	57 - 139	5	25
4-Chlorotoluene			25.0	25.9		ug/L		104	65 - 135	1	20
4-Isopropyltoluene			25.0	25.3		ug/L		101	65 - 135	2	20

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

Lab Sample ID: LCSD 280-533813/5
Matrix: Water
Analysis Batch: 533813

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Methyl-2-pentanone			100	87.8		ug/L		88	60 - 150	2	22
Acetone			100	78.8		ug/L		79	39 - 156	3	23
Benzene			25.0	24.9		ug/L		100	65 - 135	0	20
Bromobenzene			25.0	26.5		ug/L		106	65 - 135	6	26
Bromochloromethane			25.0	25.2		ug/L		101	65 - 135	7	29
Bromodichloromethane			25.0	21.7		ug/L		87	65 - 135	2	20
Bromoform			25.0	18.0		ug/L		72	62 - 135	1	27
Bromomethane			25.0	26.2		ug/L		105	45 - 135	6	33
Carbon disulfide			25.0	24.1		ug/L		96	55 - 143	1	20
Carbon tetrachloride			25.0	23.5		ug/L		94	65 - 135	3	21
Chlorobenzene			25.0	24.8		ug/L		99	65 - 135	2	20
Chloroethane			25.0	22.5		ug/L		90	46 - 136	2	25
Chloroform			25.0	24.8		ug/L		99	65 - 135	3	20
Chloromethane			25.0	21.0		ug/L		84	34 - 145	2	24
cis-1,2-Dichloroethene			25.0	25.0		ug/L		100	65 - 135	2	20
cis-1,3-Dichloropropene			25.0	21.6		ug/L		86	65 - 135	3	26
Dibromochloromethane			25.0	20.7		ug/L		83	65 - 135	2	20
Dibromomethane			25.0	25.0		ug/L		100	65 - 135	2	26
Dichlorodifluoromethane			25.0	23.8		ug/L		95	43 - 142	3	30
Ethylbenzene			25.0	24.2		ug/L		97	65 - 135	3	20
Hexachlorobutadiene			25.0	27.1		ug/L		108	65 - 135	2	25
Isopropylbenzene			25.0	24.4		ug/L		98	65 - 135	0	20
Methylene Chloride			25.0	25.5		ug/L		102	54 - 141	0	26
Naphthalene			25.0	21.6		ug/L		86	42 - 135	1	23
n-Butylbenzene			25.0	23.4		ug/L		94	64 - 135	1	21
N-Propylbenzene			25.0	25.5		ug/L		102	65 - 135	2	20
sec-Butylbenzene			25.0	25.2		ug/L		101	64 - 135	5	21
Styrene			25.0	23.8		ug/L		95	65 - 135	3	26
tert-Butylbenzene			25.0	25.5		ug/L		102	65 - 135	0	21
Tetrachloroethene			25.0	27.7		ug/L		111	65 - 135	3	20
Toluene			25.0	25.9		ug/L		104	65 - 135	2	20
trans-1,2-Dichloroethene			25.0	26.2		ug/L		105	65 - 135	1	24
trans-1,3-Dichloropropene			25.0	21.9		ug/L		88	65 - 135	1	26
Trichloroethene			25.0	23.3		ug/L		93	65 - 135	5	20
Trichlorofluoromethane			25.0	23.5		ug/L		94	53 - 137	2	27
Vinyl chloride			25.0	23.0		ug/L		92	40 - 137	4	24

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 127*
4-Bromofluorobenzene (Surr)	*94*		*78 - 120*
Dibromofluoromethane (Surr)	*102*		*77 - 120*
Toluene-d8 (Surr)	*97*		*80 - 125*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Lab Sample ID: MB 280-533634/1-A
Matrix: Water
Analysis Batch: 533660

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 533634

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		04/23/21 10:55	04/23/21 16:21	1
1,2-Dibromoethane	ND		0.050		ug/L		04/23/21 10:55	04/23/21 16:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*115*		*70 - 130*	*04/23/21 10:55*	*04/23/21 16:21*	*1*

Lab Sample ID: LCS 280-533634/2-A
Matrix: Water
Analysis Batch: 533660

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 533634

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2-Dibromo-3-Chloropropane			0.250	0.248		ug/L		99	60 - 140		
1,2-Dibromoethane			0.250	0.268		ug/L		107	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dibromopropane	*109*		*70 - 130*

Lab Sample ID: LCSD 280-533634/3-A
Matrix: Water
Analysis Batch: 533660

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 533634

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.250	0.248		ug/L		99	60 - 140	0	10
1,2-Dibromoethane			0.250	0.291		ug/L		116	60 - 140	8	10

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dibromopropane	*112*		*70 - 130*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 280-533573/1-A
Matrix: Water
Analysis Batch: 534126

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 533573

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		500		ug/L		04/27/21 09:06	04/27/21 20:56	1
Iron	39.5		30		ug/L		04/27/21 09:06	04/27/21 20:56	1
Magnesium	ND		200		ug/L		04/27/21 09:06	04/27/21 20:56	1
Manganese	ND		3.0		ug/L		04/27/21 09:06	04/27/21 20:56	1
Potassium	ND		500		ug/L		04/27/21 09:06	04/27/21 20:56	1
Sodium	ND		1000		ug/L		04/27/21 09:06	04/27/21 20:56	1

Lab Sample ID: LCS 280-533573/2-A
Matrix: Water
Analysis Batch: 534126

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 533573

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Calcium			50000	47800		ug/L		96	90 - 111		

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 280-533573/2-A
Matrix: Water
Analysis Batch: 534126

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 533573

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	10000	9630		ug/L		96	89 - 115
Magnesium	50000	48300		ug/L		97	90 - 113
Manganese	1000	974		ug/L		97	90 - 110
Potassium	50000	49300		ug/L		99	89 - 114
Sodium	50000	46300		ug/L		93	90 - 115

Lab Sample ID: 280-147469-2 MS
Matrix: Water
Analysis Batch: 534126

Client Sample ID: MW-20A
Prep Type: Dissolved
Prep Batch: 533573

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	90000		50000	135000		ug/L		91	48 - 153
Iron	930	B	10000	10600		ug/L		97	52 - 155
Magnesium	34000		50000	82700		ug/L		97	62 - 146
Manganese	2600		1000	3460		ug/L		89	79 - 121
Potassium	640		50000	51300		ug/L		101	76 - 132
Sodium	32000		50000	77600		ug/L		91	70 - 203

Lab Sample ID: 280-147469-2 MSD
Matrix: Water
Analysis Batch: 534126

Client Sample ID: MW-20A
Prep Type: Dissolved
Prep Batch: 533573

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium	90000		50000	135000		ug/L		91	48 - 153	0	20
Iron	930	B	10000	10800		ug/L		99	52 - 155	2	20
Magnesium	34000		50000	82800		ug/L		97	62 - 146	0	20
Manganese	2600		1000	3480		ug/L		92	79 - 121	1	20
Potassium	640		50000	51300		ug/L		101	76 - 132	0	20
Sodium	32000		50000	77500		ug/L		91	70 - 203	0	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 480-578101/4
Matrix: Water
Analysis Batch: 578101

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			04/27/21 17:18	1
Sulfate	ND		1.0		mg/L			04/27/21 17:18	1

Lab Sample ID: LCS 480-578101/3
Matrix: Water
Analysis Batch: 578101

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	48.6		mg/L		97	90 - 110
Sulfate	50.0	48.6		mg/L		97	90 - 110

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 280-147596-D-2 MS
Matrix: Water
Analysis Batch: 578101

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	24		50.0	71.7		mg/L		95	81 - 120
Sulfate	6.2		50.0	54.6		mg/L		97	80 - 120

Lab Sample ID: 280-147596-D-2 MSD
Matrix: Water
Analysis Batch: 578101

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	24		50.0	71.8		mg/L		95	81 - 120	0	15
Sulfate	6.2		50.0	54.7		mg/L		97	80 - 120	0	15

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-533955/128
Matrix: Water
Analysis Batch: 533955

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.030		mg/L			04/26/21 16:19	1

Lab Sample ID: MB 280-533955/164
Matrix: Water
Analysis Batch: 533955

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.030		mg/L			04/26/21 17:31	1

Lab Sample ID: LCS 280-533955/126
Matrix: Water
Analysis Batch: 533955

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N	2.50	2.58		mg/L		103	90 - 110

Lab Sample ID: LCS 280-533955/162
Matrix: Water
Analysis Batch: 533955

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N	2.50	2.58		mg/L		103	90 - 110

Lab Sample ID: LCSD 280-533955/127
Matrix: Water
Analysis Batch: 533955

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N	2.50	2.66		mg/L		106	90 - 110	3	10

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: LCSD 280-533955/163
Matrix: Water
Analysis Batch: 533955

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N			2.50	2.58		mg/L		103	90 - 110	0	10

Lab Sample ID: 280-147432-G-6 MS
Matrix: Water
Analysis Batch: 533955

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia as N	ND		1.00	1.06		mg/L		106	90 - 110		

Lab Sample ID: 280-147432-G-6 MSD
Matrix: Water
Analysis Batch: 533955

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N	ND		1.00	1.08		mg/L		108	90 - 110	2	10

Lab Sample ID: MB 280-534091/55
Matrix: Water
Analysis Batch: 534091

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.030		mg/L			04/27/21 15:22	1

Lab Sample ID: LCS 280-534091/53
Matrix: Water
Analysis Batch: 534091

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia as N			2.50	2.39		mg/L		96	90 - 110		

Lab Sample ID: LCSD 280-534091/54
Matrix: Water
Analysis Batch: 534091

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N			2.50	2.35		mg/L		94	90 - 110	2	10

Lab Sample ID: 280-147447-C-6 MS
Matrix: Water
Analysis Batch: 534091

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia as N	ND		1.00	0.950		mg/L		95	90 - 110		

Lab Sample ID: 280-147447-C-6 MSD
Matrix: Water
Analysis Batch: 534091

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N	ND		1.00	1.00		mg/L		100	90 - 110	5	10

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-534257/60
Matrix: Water
Analysis Batch: 534257

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate/Nitrite	ND		0.050		mg/L			04/28/21 20:06	1

Lab Sample ID: LCS 280-534257/59
Matrix: Water
Analysis Batch: 534257

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate/Nitrite			5.00	5.14		mg/L		103	90 - 110		

Lab Sample ID: 280-147469-2 MS
Matrix: Water
Analysis Batch: 534257

Client Sample ID: MW-20A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate/Nitrite	ND		4.00	4.09		mg/L		102	90 - 110		

Lab Sample ID: 280-147469-2 MSD
Matrix: Water
Analysis Batch: 534257

Client Sample ID: MW-20A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate/Nitrite	ND		4.00	3.82		mg/L		96	90 - 110	7	10

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 280-534659/4
Matrix: Water
Analysis Batch: 534659

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Average	ND		1.0		mg/L			05/02/21 01:26	1

Lab Sample ID: LCS 280-534659/3
Matrix: Water
Analysis Batch: 534659

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon - Average			25.0	24.7		mg/L		99	88 - 112		

Lab Sample ID: 280-147467-H-4 MS
Matrix: Water
Analysis Batch: 534659

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon - Average	1.2		25.0	26.3		mg/L		100	88 - 112		

Method: 9060 - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: 280-147467-H-4 MSD
Matrix: Water
Analysis Batch: 534659

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Average	1.2		25.0	26.1		mg/L		100	88 - 112	1	15

Lab Sample ID: MB 280-534804/4
Matrix: Water
Analysis Batch: 534804

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Average	ND		1.0		mg/L			05/03/21 16:02	1

Lab Sample ID: LCS 280-534804/3
Matrix: Water
Analysis Batch: 534804

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Average	25.0	25.0		mg/L		100	88 - 112

Lab Sample ID: 280-147469-3 MS
Matrix: Water
Analysis Batch: 534804

Client Sample ID: DUP1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Average	1.4		25.0	26.9		mg/L		102	88 - 112

Lab Sample ID: 280-147469-3 MSD
Matrix: Water
Analysis Batch: 534804

Client Sample ID: DUP1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Average	1.4		25.0	26.9		mg/L		102	88 - 112	0	15

Method: SM 1030E (meq) - Cation Anion Balance

Lab Sample ID: MB 280-534660/1
Matrix: Water
Analysis Batch: 534660

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

Analyte	MB Result	MB Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	0.000				meq/L			05/03/21 09:05	1
Magnesium	0.000				meq/L			05/03/21 09:05	1
Potassium	0.000				meq/L			05/03/21 09:05	1
Sodium	0.000				meq/L			05/03/21 09:05	1
Ammonia as N	0.000				meq/L			05/03/21 09:05	1
Chloride	0.000				meq/L			05/03/21 09:05	1
Sulfate	0.000				meq/L			05/03/21 09:05	1
Alkalinity	0.000				mg/L			05/03/21 09:05	1
Bicarbonate Alkalinity	0.000				meq/L			05/03/21 09:05	1
Nitrate/Nitrite	0.000				meq/L			05/03/21 09:05	1
Iron	0.000				meq/L			05/03/21 09:05	1

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-533008/60
Matrix: Water
Analysis Batch: 533008

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity	ND		10		mg/L			04/17/21 00:02	1

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

Lab Sample ID: MB 280-533049/1
Matrix: Water
Analysis Batch: 533049

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10		mg/L			04/19/21 13:23	1

Lab Sample ID: LCS 280-533049/2
Matrix: Water
Analysis Batch: 533049

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			501	489		mg/L		98	88 - 114		

Lab Sample ID: 280-147469-2 DU
Matrix: Water
Analysis Batch: 533049

Client Sample ID: MW-20A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	490			524		mg/L				7	10

QC Association Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Groundwater

Job ID: 280-147469-1

GC/MS VOA

Analysis Batch: 533411

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147469-3	DUP1	Total/NA	Water	8260B	
MB 280-533411/8	Method Blank	Total/NA	Water	8260B	
LCS 280-533411/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-533411/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 533813

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147469-2	MW-20A	Total/NA	Water	8260B	
MB 280-533813/9	Method Blank	Total/NA	Water	8260B	
LCS 280-533813/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-533813/5	Lab Control Sample Dup	Total/NA	Water	8260B	

GC Semi VOA

Prep Batch: 533634

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147469-2	MW-20A	Total/NA	Water	8011	
280-147469-3	DUP1	Total/NA	Water	8011	
MB 280-533634/1-A	Method Blank	Total/NA	Water	8011	
LCS 280-533634/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 280-533634/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 533660

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147469-2	MW-20A	Total/NA	Water	8011	533634
280-147469-3	DUP1	Total/NA	Water	8011	533634
MB 280-533634/1-A	Method Blank	Total/NA	Water	8011	533634
LCS 280-533634/2-A	Lab Control Sample	Total/NA	Water	8011	533634
LCSD 280-533634/3-A	Lab Control Sample Dup	Total/NA	Water	8011	533634

Metals

Prep Batch: 533573

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147469-2	MW-20A	Dissolved	Water	3005A	
280-147469-3	DUP1	Dissolved	Water	3005A	
MB 280-533573/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-533573/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-147469-2 MS	MW-20A	Dissolved	Water	3005A	
280-147469-2 MSD	MW-20A	Dissolved	Water	3005A	

Analysis Batch: 534126

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147469-2	MW-20A	Dissolved	Water	6010B	533573
280-147469-3	DUP1	Dissolved	Water	6010B	533573
MB 280-533573/1-A	Method Blank	Total Recoverable	Water	6010B	533573
LCS 280-533573/2-A	Lab Control Sample	Total Recoverable	Water	6010B	533573
280-147469-2 MS	MW-20A	Dissolved	Water	6010B	533573
280-147469-2 MSD	MW-20A	Dissolved	Water	6010B	533573

General Chemistry

Analysis Batch: 533008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147469-2	MW-20A	Total/NA	Water	SM 2320B	
280-147469-3	DUP1	Total/NA	Water	SM 2320B	
MB 280-533008/60	Method Blank	Total/NA	Water	SM 2320B	

Analysis Batch: 533049

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147469-2	MW-20A	Total/NA	Water	SM 2540C	
280-147469-3	DUP1	Total/NA	Water	SM 2540C	
MB 280-533049/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-533049/2	Lab Control Sample	Total/NA	Water	SM 2540C	
280-147469-2 DU	MW-20A	Total/NA	Water	SM 2540C	

Analysis Batch: 533955

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147469-2	MW-20A	Total/NA	Water	350.1	
MB 280-533955/128	Method Blank	Total/NA	Water	350.1	
MB 280-533955/164	Method Blank	Total/NA	Water	350.1	
LCS 280-533955/126	Lab Control Sample	Total/NA	Water	350.1	
LCS 280-533955/162	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-533955/127	Lab Control Sample Dup	Total/NA	Water	350.1	
LCSD 280-533955/163	Lab Control Sample Dup	Total/NA	Water	350.1	
280-147432-G-6 MS	Matrix Spike	Total/NA	Water	350.1	
280-147432-G-6 MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	

Analysis Batch: 534091

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147469-3	DUP1	Total/NA	Water	350.1	
MB 280-534091/55	Method Blank	Total/NA	Water	350.1	
LCS 280-534091/53	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-534091/54	Lab Control Sample Dup	Total/NA	Water	350.1	
280-147447-C-6 MS	Matrix Spike	Total/NA	Water	350.1	
280-147447-C-6 MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	

Analysis Batch: 534257

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147469-2	MW-20A	Total/NA	Water	353.2	
280-147469-3	DUP1	Total/NA	Water	353.2	
MB 280-534257/60	Method Blank	Total/NA	Water	353.2	
LCS 280-534257/59	Lab Control Sample	Total/NA	Water	353.2	
280-147469-2 MS	MW-20A	Total/NA	Water	353.2	
280-147469-2 MSD	MW-20A	Total/NA	Water	353.2	

Analysis Batch: 534659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147469-2	MW-20A	Total/NA	Water	9060	
MB 280-534659/4	Method Blank	Total/NA	Water	9060	
LCS 280-534659/3	Lab Control Sample	Total/NA	Water	9060	
280-147467-H-4 MS	Matrix Spike	Total/NA	Water	9060	
280-147467-H-4 MSD	Matrix Spike Duplicate	Total/NA	Water	9060	

QC Association Summary

Client: Waste Management
Job ID: 280-147469-1
Project/Site: 1003|Riverbend Landfill - Groundwater

General Chemistry

Analysis Batch: 534660

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147469-2	MW-20A	Total/NA	Water	SM 1030E	
280-147469-2	MW-20A	Total/NA	Water	SM 1030E (meq)	
280-147469-3	DUP1	Total/NA	Water	SM 1030E	
280-147469-3	DUP1	Total/NA	Water	SM 1030E (meq)	
MB 280-534660/1	Method Blank	Total/NA	Water	SM 1030E (meq)	

Analysis Batch: 534804

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147469-3	DUP1	Total/NA	Water	9060	
MB 280-534804/4	Method Blank	Total/NA	Water	9060	
LCS 280-534804/3	Lab Control Sample	Total/NA	Water	9060	
280-147469-3 MS	DUP1	Total/NA	Water	9060	
280-147469-3 MSD	DUP1	Total/NA	Water	9060	

Analysis Batch: 578101

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147469-2	MW-20A	Total/NA	Water	300.0	
280-147469-3	DUP1	Total/NA	Water	300.0	
MB 480-578101/4	Method Blank	Total/NA	Water	300.0	
LCS 480-578101/3	Lab Control Sample	Total/NA	Water	300.0	
280-147596-D-2 MS	Matrix Spike	Total/NA	Water	300.0	
280-147596-D-2 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Field Service / Mobile Lab

Analysis Batch: 533839

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147469-2	MW-20A	Total/NA	Water	Field Sampling	

Lab Chronicle

Client: Waste Management
Job ID: 280-147469-1
Project/Site: 1003|Riverbend Landfill - Groundwater

Client Sample ID: MW-20A
Lab Sample ID: 280-147469-2
Date Collected: 04/13/21 10:25
Matrix: Water
Date Received: 04/15/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	533813	04/25/21 04:57	GO	TAL DEN
Total/NA	Prep	8011			34.7 mL	35 mL	533634	04/23/21 10:55	JSM	TAL DEN
Total/NA	Analysis	8011		1			533660	04/23/21 21:43	JSM	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	533573	04/27/21 09:06	MAB	TAL DEN
Dissolved	Analysis	6010B		1			534126	04/27/21 21:03	LMT	TAL DEN
Total/NA	Analysis	300.0		1			578101	04/27/21 17:36	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	533955	04/26/21 18:22	QJB	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	534257	04/28/21 20:08	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	534659	05/02/21 06:37	RAF	TAL DEN
Total/NA	Analysis	SM 1030E		1			534660	05/03/21 09:05	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			534660	05/03/21 09:05	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			533008	04/17/21 01:43	QJB	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	533049	04/19/21 13:23	JMH	TAL DEN
Total/NA	Analysis	Field Sampling		1			533839	04/13/21 11:25	C1A	TAL DEN

Client Sample ID: DUP1
Lab Sample ID: 280-147469-3
Date Collected: 04/13/21 10:30
Matrix: Water
Date Received: 04/15/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	533411	04/22/21 06:02	RJS	TAL DEN
Total/NA	Prep	8011			34.8 mL	35 mL	533634	04/23/21 10:55	JSM	TAL DEN
Total/NA	Analysis	8011		1			533660	04/23/21 22:05	JSM	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	533573	04/27/21 09:06	MAB	TAL DEN
Dissolved	Analysis	6010B		1			534126	04/27/21 21:17	LMT	TAL DEN
Total/NA	Analysis	300.0		1			578101	04/27/21 17:54	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	534091	04/27/21 15:32	QJB	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	534257	04/28/21 20:14	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	534804	05/03/21 16:34	RAF	TAL DEN
Total/NA	Analysis	SM 1030E		1			534660	05/03/21 09:05	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			534660	05/03/21 09:05	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			533008	04/17/21 01:50	QJB	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	533049	04/19/21 13:23	JMH	TAL DEN

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL DEN = Eurofins TestAmerica, Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

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

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: I. Hultgquist	Lab PM: Sara, Betsy A	Carrier Tracking No(s):	COC No: 280-16508-865 1
Client Contact:	Phone: 503 716 6320	E-Mail: Betsy.Sara@Eurofinset.com		Page: Page 1 of 1
Company: Waste Management				Job #:
Address: 13469 SW Highway 18	Due Date Requested:			
City: McMinnville	TAT Requested (days):			
State, Zip: OR, 97128				
Phone:	PO #:			
Email:	WO #:			
Project Name: 1003|Riverbend Landfill SCS Engineers Event Desc: Semiannual Detection Wells - Apr Oct	Project #: 28002786			
Site: Oregon	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	TDS/Alk	Dissolved Metals	Ammonia/TOC/NO3+NO2	8260B	8011	Cation/Anion Balance	Chloride/Sulfate (TA Buffalo)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	S	A	R		N		
TBI	4/13/2021	0700	G	W						X	X			4	
MW-20A	4/13/2021	1025	G	W	X		X	X	X	X	X	X	X	10	
DUP1	4/13/2021	1030	G	W	X		X	X	X	X	X	X	X	10	

280-147469 Chain of Custody

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

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

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

Special Instructions/QC Requirements:

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		4/14/2021 1630	SCS		4/15/21 100	ETADEN
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 0.5, 2.8, 3.2, 2.4 CF+0.4 IR9

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill
SITE ADDRESS: McMinnville , Oregon
WELL ID: MW-20A
BLIND ID:
DUP ID: NA

WIND FROM: N (NE) E SE S SW W NW
WEATHER: (SUNNY) CLOUDY RAIN ?
LIGHT (MEDIUM) HEAVY
TEMPERATURE: °F (45.0) °C [Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW	[Water Column x Gal/ft]	Volume (gal)
4/13/21	09:33	23.60	.	4.07	.	19.53	X 1	3.18
/ /	:	.	.	.	.		X 3	9.54

Gal/ft = (dia./2)² x 0.163 | 1" = 0.041 | (2") = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	[√ if used] √
VOA Glass	4/13/21	10:25	F	3	(40 ml)	(HCl)	(YES)	NO		
VOA Glass	4/13/21	10:25	F	3	(40 ml)	($Na_2S_2O_3$)	(YES)	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/13/21	10:25	F	2	(250, 500) 1L	(None)	(YES)	NO	NA	
Yellow Glass	4/13/21	10:25	F	1	250, (500) 1L	(H_2SO_4)	(YES)	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/13/21	10:25	F	1	250, (500) 1L	(HNO_3)	(YES)	(YES)		
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 | 10 | Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011)
AMBER - Glass	(8080) (8150) (TOX) OR [X] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD) OR [ ] WA [ ]
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA

Purge Start Time: 09:39

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Pump/Bailer Inlet Depth: Diss O_2 (mg/l)	Water Quality
0	F(0939)	0.00	7.27	108.8	954	10.8	5.01	9.68	clear/colorless
1	F(0950)	3.20	6.74	13.2	974	10.4	10.18	~~23.4~~ 9.38	clear/pale tan
2	F(1000)	6.40	6.75	-1.2	979	10.4	10.99	3.70	clear/colorless
3	F(1010)	9.60	6.76	-6.1	982	10.4	11.95	2.46	clear/colorless
4	F(1014)	10.6	6.74	-8.9	983	10.4	12.02	0.31	clear/colorless
5	F(1016)	11.1	6.75	-10.4	982	10.4	12.19	0.29	clear/colorless
6	F(1018)	11.6	6.76	-11.2	982	10.4	12.21	0.31	clear/colorless

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Standard purge (11/9/20psi) ~1 L/min

SAMPLER: K. Kingen (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** DUP1
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		**TEMPERATURE:**	°F 45 .	° C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		[Water Column x Gal/ft] Volume (gal)
/ /	:	.	.	.	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)^2 x 0.163 | 1" = 0.041 | 2" = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	√
VOA Glass	4/13/21	10 :30	F	3	40 ml	HCl	YES	NO		✓
VOA Glass	4/13/21	10 :30	F	3	40 ml	$Na_2S_2O_3$	YES	NO		✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/13/21	10 :30	F	2	250, 500, 1L	None	YES	NO	NA	✓
Yellow Glass	4/13/21	10 :30	F	1	250, 500, 1L	H_2SO_4	YES	NO		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/13/21	10 : 36	F	1	250, 500, 1L	HNO_3	YES	YES		✓
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 | 10 | Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA

Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	F(1030)	0.00							
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Collected @ MW-20A

SAMPLER: K. Kingen (PRINTED NAME) (SIGNATURE)


eurofins

1401204

ORIGIN ID:SAVA (503) 534-3783
TIFFANY ANDREWS
SCS ENGINEERS
[redacted] SW 72ND AVENURE

PORTLAND, OR 97224
UNITED STATES US

SHIP DATE: 31MAR21
ACTWGT: 10.00 LB MAN
CAD: 0886563/CAFE3409

280-147469 Waybill

TO

EUROFINS TESTAMERICA DENVER
4955 YARROW STREET

ARVADA CO 800024517
(303) 736-0100
REF: S280-107586

RMA:

FedEx Express

RETURNS MON-SAT
PRIORITY OVERNIGHT

TRK# 0221 9508 8923 9788

80002

CO-US


eurofins
1401203
ORIGIN ID:AVA (303) 534-3783
TIFFANY ANDREWS
SCS
15940 SW 72ND AVENURE
PORTLAND, OR 97224
UNITED STATES US
SHIP DATE: 31MAR21
ACTWGT: 15.00 LB MAN
CAD: 0886563/CAFE3409
DIMS: 24x15x15 IN
TO
EUROFINS TESTAMERICA DENVER
4955 YARROW STREET
ARVADA CO 800024517
(303) 736-0100
REF: S280-107586
RMA:
FedEx Express
FedEx
TRK# 0221 9508 8923 9722
THU - 15 APR 10:30A
PRIORITY OVERNIGHT
XH LAAA
80002
CO-US DEN
0757462 04/14 56DJ2/5EF2/FE4A

ORIGIN ID:SAVA (503) 534-3783
TIFFANY ANDREWS
WASTE MANAGEMENT
15940 SW 72ND AVE
PORTLAND, OR 97224
UNITED STATES US

SHIP DATE: 02APR21
ACTWGT: 15.00 LB MAN
CAD: 0886563/CAFE3409
DIMS: 24x15x15 IN

EUROFINS TESTAMERICA DENVER
4955 YARROW STREET
ARVADA CO 800024517

0.5

FedEx Express

-SAT
NIGHT

0002

FedEx
TRK# 0221 9508 8924 2740

THU - 15 APR 10:30A
PRIORITY OVERNIGHT

XH LAAA

80002
CO-US DEN

#757462 04/14 56DJ2/5EF2/FE4A



Custody Sea
SIGNATURE
DATE 4/14/21
eurofins
1401197
2.8

ORIGIN ID:SAVA (503) 534-3783
TIFFANY ANDREWS
WASTE MANAGEMENT
15940 SW 72ND AVE

PORTLAND, OR 97224
UNITED STATES US

SHIP DATE: 02APR21
ACTWGT: 15.00 LB MAN
CAD: 0886563/CAFE3409
DIMS: 24x15x15 IN

TO
EUROFINS TESTAMERICA, DENVER
4955 YARROW STREET

ARVADA CO 80002451?
(303) 736-0100
REF: 6280 - 107583

INV:
PMA:

FedEx Express

RETURNS MON-SAT
PRIORITY OVERNIGHT

TRK# 0221 9508 8924 2751

80002
CO-US

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Sara, Betsy A	Carrier Tracking No(s):	COC No: 280-563957.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Betsy.Sara@Eurofinset.com	State of Origin: Oregon	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Oregon		Job #: 280-147469-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 5/6/2021			
City: Amherst	TAT Requested (days):			
State, Zip: NY, 14228-2298				
Phone: 716-691-2600(Tel) 716-691-7991(Fax)	PO #:			
Email:	WO #:			
Project Name: 1003|Riverbend Landfill - Groundwater	Project #: 28002786			
Site: 1003|Riverbend Landfill	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300.0_28D/ 300.0, Sulfate and Chloride (TA Buffalo)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-20A (280-147469-2)	4/13/21	10:25 Pacific		Water			X	1	
FB1 (280-147469-3)	4/13/21	10:30 Pacific		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		4/16/21 1320			4/17/21 1000	TA
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.2 # IR GUN

Ver: 11/01/2020

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-147469-1

Login Number: 147469
List Number: 1
Creator: Collins, Janice S

List Source: Eurofins TestAmerica, Denver

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	
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: 280-147469-1

Login Number: 147469
List Number: 2
Creator: Kolb, Chris M

List Source: Eurofins TestAmerica, Buffalo
List Creation: 04/19/21 03:40 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	2.2 IR GUN #1 ICE
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

eurofins | Environment Testing America



ANALYTICAL REPORT

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

Laboratory Job ID: 280-147470-1
Client Project/Site: 1003|Riverbend Landfill - P-05A/P-06A/P-07A
Sampling Event: Annual P-05A/P-06A/P-07A - April

For:
Waste Management
13469 SW Highway 18
McMinnville, Oregon 97128

Attn: Mr. Jim Denson

Betsy Sara

Authorized for release by:
12/2/2021 9:00:22 AM

Betsy Sara, Project Manager II
(303)736-0189
Betsy.Sara@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

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Definitions/Glossary

Client: Waste Management
Job ID: 280-147470-1
Project/Site: 1003|Riverbend Landfill - P-05A/P-06A/P-07A

Qualifiers

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.

Glossary

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

Job ID: 280-147470-1

Laboratory: Eurofins TestAmerica, Denver

Narrative

CASE NARRATIVE

Client: Waste Management

Project: 1003|Riverbend Landfill - P-05A/P-06A/P-07A

Report Number: 280-147470-1

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

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

Sample Receiving

The samples were received on 04/15/2021; the samples arrived in good condition, properly preserved and on ice. The temperatures of the coolers at receipt were 0.9º C, 2.8º C, 3.2º C and 3.6º C.

Holding Times

All holding times were met.

Method Blanks

Dissolved Iron Method 6010B was detected in the Method Blank above the project established reporting limit, however, the requested reporting limit for Dissolved Iron is below TestAmerica Denver's standard reporting limit and, therefore, no corrective action has been taken for this anomaly. It must be noted that results reported below TestAmerica Denver's standard reporting limits may result in false positive/false negative results, less accurate quantitation and potential misidentification at the lower concentrations.

All other Method Blanks met method criteria.

Laboratory Control Samples (LCS)

All Laboratory Control Sample recoveries were within control limits.

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

All MS and MSD results were within established control limits.

General Comments

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.

The analysis for Chloride and Sulfate Method 300.0 was performed by TestAmerica Buffalo. Their address and phone number are:
TestAmerica Buffalo

Job ID: 280-147470-1 (Continued)

Laboratory: Eurofins TestAmerica, Denver (Continued)

10 Hazelwood Drive, Suite 106
Amherst, NY 14228
Phone: 716-691-2600

Detection Summary

Client: Waste Management
Job ID: 280-147470-1
Project/Site: 1003|Riverbend Landfill - P-05A/P-06A/P-07A

Client Sample ID: P-05A — Lab Sample ID: 280-147470-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	87000		500		ug/L	1		6010B	Dissolved
Iron	140	B	30		ug/L	1		6010B	Dissolved
Magnesium	34000		200		ug/L	1		6010B	Dissolved
Manganese	54		3.0		ug/L	1		6010B	Dissolved
Potassium	820		500		ug/L	1		6010B	Dissolved
Sodium	26000		1000		ug/L	1		6010B	Dissolved
Chloride	140		0.56		mg/L	2		300.0	Total/NA
Sulfate	12		1.0		mg/L	2		300.0	Total/NA
Bicarbonate Alkalinity	200		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	480		10		mg/L	1		SM 2540C	Total/NA
Field pH	6.42				SU	1		Field Sampling	Total/NA
Field Conductivity	865				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	11.1				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	0.58				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	25.0				millivolts	1		Field Sampling	Total/NA

Client Sample ID: P-06A — Lab Sample ID: 280-147470-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	88000		500		ug/L	1		6010B	Dissolved
Iron	1500	B	30		ug/L	1		6010B	Dissolved
Magnesium	34000		200		ug/L	1		6010B	Dissolved
Manganese	540		3.0		ug/L	1		6010B	Dissolved
Potassium	630		500		ug/L	1		6010B	Dissolved
Sodium	43000		1000		ug/L	1		6010B	Dissolved
Chloride	84		0.50		mg/L	1		300.0	Total/NA
Sulfate	2.9		1.0		mg/L	1		300.0	Total/NA
Ammonia as N	0.98		0.040		mg/L	1		350.1	Total/NA
Total Organic Carbon - Average	1.5		1.0		mg/L	1		9060	Total/NA
Bicarbonate Alkalinity	350		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	510		10		mg/L	1		SM 2540C	Total/NA
Field pH	6.82				SU	1		Field Sampling	Total/NA
Field Conductivity	944				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	11.7				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	1.60				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	11.6				millivolts	1		Field Sampling	Total/NA

Client Sample ID: P-07A — Lab Sample ID: 280-147470-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	20000		500		ug/L	1		6010B	Dissolved
Iron	45	B	30		ug/L	1		6010B	Dissolved
Magnesium	6100		200		ug/L	1		6010B	Dissolved
Potassium	1200		500		ug/L	1		6010B	Dissolved
Sodium	10000		1000		ug/L	1		6010B	Dissolved
Chloride	6.7		0.50		mg/L	1		300.0	Total/NA
Sulfate	4.8		1.0		mg/L	1		300.0	Total/NA
Nitrate/Nitrite	2.5		0.050		mg/L	1		353.2	Total/NA
Bicarbonate Alkalinity	73		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	140		10		mg/L	1		SM 2540C	Total/NA
Field pH	5.82				SU	1		Field Sampling	Total/NA
Field Conductivity	195.1				umhos/cm	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Waste Management
Job ID: 280-147470-1
Project/Site: 1003|Riverbend Landfill - P-05A/P-06A/P-07A

Client Sample ID: P-07A (Continued)
Lab Sample ID: 280-147470-3

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Field Temperature	12.3				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	2.02				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	133.6				millivolts	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Waste Management
Job ID: 280-147470-1
Project/Site: 1003|Riverbend Landfill - P-05A/P-06A/P-07A

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-147470-1	P-05A	Water	04/13/21 11:40	04/15/21 10:00
280-147470-2	P-06A	Water	04/14/21 08:50	04/15/21 10:00
280-147470-3	P-07A	Water	04/13/21 13:35	04/15/21 10:00

Method Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - P-05A/P-06A/P-07A

Job ID: 280-147470-1

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL DEN
300.0	Anions, Ion Chromatography	MCAWW	TAL BUF
350.1	Nitrogen, Ammonia	MCAWW	TAL DEN
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	TAL DEN
9060	Organic Carbon, Total (TOC)	SW846	TAL DEN
SM 2320B	Alkalinity	SM	TAL DEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL DEN
Field Sampling	Field Sampling	EPA	TAL DEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL DEN

Protocol 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.

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL DEN = Eurofins TestAmerica, Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Client Sample ID: P-05A
Lab Sample ID: 280-147470-1

Date Collected: 04/13/21 11:40
Matrix: Water
Date Received: 04/15/21 10:00

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	87000		500		ug/L		04/27/21 09:06	04/27/21 21:21	1
Iron	140	B	30		ug/L		04/27/21 09:06	04/27/21 21:21	1
Magnesium	34000		200		ug/L		04/27/21 09:06	04/27/21 21:21	1
Manganese	54		3.0		ug/L		04/27/21 09:06	04/27/21 21:21	1
Potassium	820		500		ug/L		04/27/21 09:06	04/27/21 21:21	1
Sodium	26000		1000		ug/L		04/27/21 09:06	04/27/21 21:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	140		0.56		mg/L			04/27/21 18:12	2
Sulfate	12		1.0		mg/L			04/27/21 18:12	2
Ammonia as N	ND		0.040		mg/L			04/27/21 15:34	1
Nitrate/Nitrite	ND		0.050		mg/L			04/28/21 19:58	1
Total Organic Carbon - Average	ND		1.0		mg/L			05/03/21 18:14	1
Bicarbonate Alkalinity	200		10		mg/L			04/17/21 01:57	1
Total Dissolved Solids	480		10		mg/L			04/19/21 13:23	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.42				SU			04/13/21 12:40	1
Field Conductivity	865				umhos/cm			04/13/21 12:40	1
Field Temperature	11.1				Degrees C			04/13/21 12:40	1
Field Dissolved Oxygen	0.58				mg/L			04/13/21 12:40	1
Field EH/ORP	25.0				millivolts			04/13/21 12:40	1

Client Sample ID: P-06A
Lab Sample ID: 280-147470-2

Date Collected: 04/14/21 08:50
Matrix: Water
Date Received: 04/15/21 10:00

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	88000		500		ug/L		04/27/21 09:06	04/27/21 21:24	1
Iron	1500	B	30		ug/L		04/27/21 09:06	04/27/21 21:24	1
Magnesium	34000		200		ug/L		04/27/21 09:06	04/27/21 21:24	1
Manganese	540		3.0		ug/L		04/27/21 09:06	04/27/21 21:24	1
Potassium	630		500		ug/L		04/27/21 09:06	04/27/21 21:24	1
Sodium	43000		1000		ug/L		04/27/21 09:06	04/27/21 21:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	84		0.50		mg/L			04/27/21 18:30	1
Sulfate	2.9		1.0		mg/L			04/27/21 18:30	1
Ammonia as N	0.98		0.040		mg/L			04/27/21 15:40	1
Nitrate/Nitrite	ND		0.050		mg/L			04/28/21 20:00	1
Total Organic Carbon - Average	1.5		1.0		mg/L			05/03/21 18:33	1
Bicarbonate Alkalinity	350		10		mg/L			04/17/21 02:05	1
Total Dissolved Solids	510		10		mg/L			04/20/21 16:38	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.82				SU			04/14/21 09:50	1

Client Sample ID: P-06A
Lab Sample ID: 280-147470-2
Date Collected: 04/14/21 08:50
Matrix: Water
Date Received: 04/15/21 10:00

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field Conductivity	944				umhos/cm			04/14/21 09:50	1
Field Temperature	11.7				Degrees C			04/14/21 09:50	1
Field Dissolved Oxygen	1.60				mg/L			04/14/21 09:50	1
Field EH/ORP	11.6				millivolts			04/14/21 09:50	1

Client Sample ID: P-07A
Lab Sample ID: 280-147470-3
Date Collected: 04/13/21 13:35
Matrix: Water
Date Received: 04/15/21 10:00

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	20000		500		ug/L		04/27/21 09:06	04/27/21 21:28	1
Iron	45	B	30		ug/L		04/27/21 09:06	04/27/21 21:28	1
Magnesium	6100		200		ug/L		04/27/21 09:06	04/27/21 21:28	1
Manganese	ND		3.0		ug/L		04/27/21 09:06	04/27/21 21:28	1
Potassium	1200		500		ug/L		04/27/21 09:06	04/27/21 21:28	1
Sodium	10000		1000		ug/L		04/27/21 09:06	04/27/21 21:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.7		0.50		mg/L			04/27/21 18:48	1
Sulfate	4.8		1.0		mg/L			04/27/21 18:48	1
Ammonia as N	ND		0.040		mg/L			04/27/21 15:42	1
Nitrate/Nitrite	2.5		0.050		mg/L			04/28/21 20:02	1
Total Organic Carbon - Average	ND		1.0		mg/L			05/03/21 18:49	1
Bicarbonate Alkalinity	73		10		mg/L			04/17/21 02:10	1
Total Dissolved Solids	140		10		mg/L			04/19/21 13:23	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.82				SU			04/13/21 14:35	1
Field Conductivity	195.1				umhos/cm			04/13/21 14:35	1
Field Temperature	12.3				Degrees C			04/13/21 14:35	1
Field Dissolved Oxygen	2.02				mg/L			04/13/21 14:35	1
Field EH/ORP	133.6				millivolts			04/13/21 14:35	1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 280-533573/1-A
Matrix: Water
Analysis Batch: 534126

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 533573

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		500		ug/L		04/27/21 09:06	04/27/21 20:56	1
Iron	39.5		30		ug/L		04/27/21 09:06	04/27/21 20:56	1
Magnesium	ND		200		ug/L		04/27/21 09:06	04/27/21 20:56	1
Manganese	ND		3.0		ug/L		04/27/21 09:06	04/27/21 20:56	1
Potassium	ND		500		ug/L		04/27/21 09:06	04/27/21 20:56	1
Sodium	ND		1000		ug/L		04/27/21 09:06	04/27/21 20:56	1

Lab Sample ID: LCS 280-533573/2-A
Matrix: Water
Analysis Batch: 534126

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 533573

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	50000	47800		ug/L		96	90 - 111
Iron	10000	9630		ug/L		96	89 - 115
Magnesium	50000	48300		ug/L		97	90 - 113
Manganese	1000	974		ug/L		97	90 - 110
Potassium	50000	49300		ug/L		99	89 - 114
Sodium	50000	46300		ug/L		93	90 - 115

Lab Sample ID: 280-147469-C-2-B MS
Matrix: Water
Analysis Batch: 534126

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 533573

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	90000		50000	135000		ug/L		91	48 - 153
Iron	930	B	10000	10600		ug/L		97	52 - 155
Magnesium	34000		50000	82700		ug/L		97	62 - 146
Manganese	2600		1000	3460		ug/L		89	79 - 121
Potassium	640		50000	51300		ug/L		101	76 - 132
Sodium	32000		50000	77600		ug/L		91	70 - 203

Lab Sample ID: 280-147469-C-2-C MSD
Matrix: Water
Analysis Batch: 534126

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 533573

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium	90000		50000	135000		ug/L		91	48 - 153	0	20
Iron	930	B	10000	10800		ug/L		99	52 - 155	2	20
Magnesium	34000		50000	82800		ug/L		97	62 - 146	0	20
Manganese	2600		1000	3480		ug/L		92	79 - 121	1	20
Potassium	640		50000	51300		ug/L		101	76 - 132	0	20
Sodium	32000		50000	77500		ug/L		91	70 - 203	0	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 480-578101/4
Matrix: Water
Analysis Batch: 578101

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			04/27/21 17:18	1
Sulfate	ND		1.0		mg/L			04/27/21 17:18	1

Lab Sample ID: LCS 480-578101/3
Matrix: Water
Analysis Batch: 578101

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			50.0	48.6		mg/L		97	90 - 110		
Sulfate			50.0	48.6		mg/L		97	90 - 110		

Lab Sample ID: 280-147596-D-2 MS
Matrix: Water
Analysis Batch: 578101

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	24		50.0	71.7		mg/L		95	81 - 120		
Sulfate	6.2		50.0	54.6		mg/L		97	80 - 120		

Lab Sample ID: 280-147596-D-2 MSD
Matrix: Water
Analysis Batch: 578101

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	24		50.0	71.8		mg/L		95	81 - 120	0	15
Sulfate	6.2		50.0	54.7		mg/L		97	80 - 120	0	15

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-534091/55
Matrix: Water
Analysis Batch: 534091

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.040		mg/L			04/27/21 15:22	1

Lab Sample ID: LCS 280-534091/53
Matrix: Water
Analysis Batch: 534091

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia as N			2.50	2.39		mg/L		96	90 - 110		

Lab Sample ID: LCSD 280-534091/54
Matrix: Water
Analysis Batch: 534091

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N			2.50	2.35		mg/L		94	90 - 110	2	10

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: 280-147470-1 MS
Matrix: Water
Analysis Batch: 534091

Client Sample ID: P-05A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia as N	ND		1.00	0.957		mg/L		96	90 - 110		

Lab Sample ID: 280-147470-1 MSD
Matrix: Water
Analysis Batch: 534091

Client Sample ID: P-05A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N	ND		1.00	0.937		mg/L		94	90 - 110	2	10

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-534257/22
Matrix: Water
Analysis Batch: 534257

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate/Nitrite	ND		0.050		mg/L			04/28/21 18:50	1

Lab Sample ID: LCS 280-534257/21
Matrix: Water
Analysis Batch: 534257

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate/Nitrite			5.00	5.07		mg/L		101	90 - 110		

Lab Sample ID: 280-147467-H-4 MS
Matrix: Water
Analysis Batch: 534257

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate/Nitrite	0.39		4.00	4.24		mg/L		96	90 - 110		

Lab Sample ID: 280-147467-H-4 MSD
Matrix: Water
Analysis Batch: 534257

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate/Nitrite	0.39		4.00	4.32		mg/L		98	90 - 110	2	10

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 280-534804/4
Matrix: Water
Analysis Batch: 534804

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Average	ND		1.0		mg/L			05/03/21 16:02	1

Method: 9060 - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: LCS 280-534804/3
Matrix: Water
Analysis Batch: 534804

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon - Average			25.0	25.0		mg/L		100	88 - 112		

Lab Sample ID: 280-147469-B-3 MS
Matrix: Water
Analysis Batch: 534804

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon - Average	1.4		25.0	26.9		mg/L		102	88 - 112		

Lab Sample ID: 280-147469-B-3 MSD
Matrix: Water
Analysis Batch: 534804

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Average	1.4		25.0	26.9		mg/L		102	88 - 112	0	15

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-533008/60
Matrix: Water
Analysis Batch: 533008

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity	ND		10		mg/L			04/17/21 00:02	1

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

Lab Sample ID: MB 280-533049/1
Matrix: Water
Analysis Batch: 533049

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10		mg/L			04/19/21 13:23	1

Lab Sample ID: LCS 280-533049/2
Matrix: Water
Analysis Batch: 533049

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			501	489		mg/L		98	88 - 114		

Lab Sample ID: 280-147469-A-2 DU
Matrix: Water
Analysis Batch: 533049

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	490			524		mg/L				7	10

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

Lab Sample ID: MB 280-533242/1
Matrix: Water
Analysis Batch: 533242

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10		mg/L			04/20/21 16:38	1

Lab Sample ID: LCS 280-533242/2
Matrix: Water
Analysis Batch: 533242

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			501	486		mg/L		97	88 - 114		

Lab Sample ID: LCSD 280-533242/3
Matrix: Water
Analysis Batch: 533242

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Dissolved Solids			501	494		mg/L		99	88 - 114	2	20

Lab Sample ID: 280-147470-2 DU
Matrix: Water
Analysis Batch: 533242

Client Sample ID: P-06A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	510			538		mg/L				6	10

Metals

Prep Batch: 533573

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147470-1	P-05A	Dissolved	Water	3005A	
280-147470-2	P-06A	Dissolved	Water	3005A	
280-147470-3	P-07A	Dissolved	Water	3005A	
MB 280-533573/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-533573/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-147469-C-2-B MS	Matrix Spike	Dissolved	Water	3005A	
280-147469-C-2-C MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	

Analysis Batch: 534126

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147470-1	P-05A	Dissolved	Water	6010B	533573
280-147470-2	P-06A	Dissolved	Water	6010B	533573
280-147470-3	P-07A	Dissolved	Water	6010B	533573
MB 280-533573/1-A	Method Blank	Total Recoverable	Water	6010B	533573
LCS 280-533573/2-A	Lab Control Sample	Total Recoverable	Water	6010B	533573
280-147469-C-2-B MS	Matrix Spike	Dissolved	Water	6010B	533573
280-147469-C-2-C MSD	Matrix Spike Duplicate	Dissolved	Water	6010B	533573

General Chemistry

Analysis Batch: 533008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147470-1	P-05A	Total/NA	Water	SM 2320B	
280-147470-2	P-06A	Total/NA	Water	SM 2320B	
280-147470-3	P-07A	Total/NA	Water	SM 2320B	
MB 280-533008/60	Method Blank	Total/NA	Water	SM 2320B	

Analysis Batch: 533049

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147470-1	P-05A	Total/NA	Water	SM 2540C	
280-147470-3	P-07A	Total/NA	Water	SM 2540C	
MB 280-533049/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-533049/2	Lab Control Sample	Total/NA	Water	SM 2540C	
280-147469-A-2 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 533242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147470-2	P-06A	Total/NA	Water	SM 2540C	
MB 280-533242/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-533242/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 280-533242/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
280-147470-2 DU	P-06A	Total/NA	Water	SM 2540C	

Analysis Batch: 534091

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147470-1	P-05A	Total/NA	Water	350.1	
280-147470-2	P-06A	Total/NA	Water	350.1	
280-147470-3	P-07A	Total/NA	Water	350.1	
MB 280-534091/55	Method Blank	Total/NA	Water	350.1	
LCS 280-534091/53	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-534091/54	Lab Control Sample Dup	Total/NA	Water	350.1	

General Chemistry (Continued)

Analysis Batch: 534091 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147470-1 MS	P-05A	Total/NA	Water	350.1	
280-147470-1 MSD	P-05A	Total/NA	Water	350.1	

Analysis Batch: 534257

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147470-1	P-05A	Total/NA	Water	353.2	
280-147470-2	P-06A	Total/NA	Water	353.2	
280-147470-3	P-07A	Total/NA	Water	353.2	
MB 280-534257/22	Method Blank	Total/NA	Water	353.2	
LCS 280-534257/21	Lab Control Sample	Total/NA	Water	353.2	
280-147467-H-4 MS	Matrix Spike	Total/NA	Water	353.2	
280-147467-H-4 MSD	Matrix Spike Duplicate	Total/NA	Water	353.2	

Analysis Batch: 534804

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147470-1	P-05A	Total/NA	Water	9060	
280-147470-2	P-06A	Total/NA	Water	9060	
280-147470-3	P-07A	Total/NA	Water	9060	
MB 280-534804/4	Method Blank	Total/NA	Water	9060	
LCS 280-534804/3	Lab Control Sample	Total/NA	Water	9060	
280-147469-B-3 MS	Matrix Spike	Total/NA	Water	9060	
280-147469-B-3 MSD	Matrix Spike Duplicate	Total/NA	Water	9060	

Analysis Batch: 578101

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147470-1	P-05A	Total/NA	Water	300.0	
280-147470-2	P-06A	Total/NA	Water	300.0	
280-147470-3	P-07A	Total/NA	Water	300.0	
MB 480-578101/4	Method Blank	Total/NA	Water	300.0	
LCS 480-578101/3	Lab Control Sample	Total/NA	Water	300.0	
280-147596-D-2 MS	Matrix Spike	Total/NA	Water	300.0	
280-147596-D-2 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Field Service / Mobile Lab

Analysis Batch: 533839

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147470-1	P-05A	Total/NA	Water	Field Sampling	
280-147470-2	P-06A	Total/NA	Water	Field Sampling	
280-147470-3	P-07A	Total/NA	Water	Field Sampling	

Lab Chronicle

Client: Waste Management
Job ID: 280-147470-1
Project/Site: 1003|Riverbend Landfill - P-05A/P-06A/P-07A

Client Sample ID: P-05A
Lab Sample ID: 280-147470-1
Date Collected: 04/13/21 11:40
Matrix: Water
Date Received: 04/15/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			50 mL	50 mL	533573	04/27/21 09:06	MAB	TAL DEN
Dissolved	Analysis	6010B		1			534126	04/27/21 21:21	LMT	TAL DEN
Total/NA	Analysis	300.0		2			578101	04/27/21 18:12	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	534091	04/27/21 15:34	QJB	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	534257	04/28/21 19:58	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	534804	05/03/21 18:14	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			533008	04/17/21 01:57	QJB	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	533049	04/19/21 13:23	JMH	TAL DEN
Total/NA	Analysis	Field Sampling		1			533839	04/13/21 12:40	C1A	TAL DEN

Client Sample ID: P-06A
Lab Sample ID: 280-147470-2
Date Collected: 04/14/21 08:50
Matrix: Water
Date Received: 04/15/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			50 mL	50 mL	533573	04/27/21 09:06	MAB	TAL DEN
Dissolved	Analysis	6010B		1			534126	04/27/21 21:24	LMT	TAL DEN
Total/NA	Analysis	300.0		1			578101	04/27/21 18:30	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	534091	04/27/21 15:40	QJB	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	534257	04/28/21 20:00	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	534804	05/03/21 18:33	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			533008	04/17/21 02:05	QJB	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	533242	04/20/21 16:38	JMH	TAL DEN
Total/NA	Analysis	Field Sampling		1			533839	04/14/21 09:50	C1A	TAL DEN

Client Sample ID: P-07A
Lab Sample ID: 280-147470-3
Date Collected: 04/13/21 13:35
Matrix: Water
Date Received: 04/15/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			50 mL	50 mL	533573	04/27/21 09:06	MAB	TAL DEN
Dissolved	Analysis	6010B		1			534126	04/27/21 21:28	LMT	TAL DEN
Total/NA	Analysis	300.0		1			578101	04/27/21 18:48	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	534091	04/27/21 15:42	QJB	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	534257	04/28/21 20:02	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	534804	05/03/21 18:49	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			533008	04/17/21 02:10	QJB	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	533049	04/19/21 13:23	JMH	TAL DEN
Total/NA	Analysis	Field Sampling		1			533839	04/13/21 14:35	C1A	TAL DEN

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL DEN = Eurofins TestAmerica, Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

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

Chain of Custody Record

Denver #280 eurofins Environment Testing TestAmerica

12/2/2021

Client Information	Sampler: I. Hultquist	Lab PM: Sara, Betsy A	Carrier Tracking No(s):	COC No: 280-23501-10345.1
Client Contact:	Phone: 503-716-6320	E-Mail: Betsy.Sara@Eurofinset.com		Page: Page 1 of 1
Company: Waste Management				Job #:
Address: 13469 SW Highway 18	Due Date Requested:			
City: McMinnville	TAT Requested (days):			
State, Zip: OR, 97128				
Phone:	PO #:			
Email:	WO #:			
Project Name: 1003|Riverbend Landfill SCS Engineers Event Desc: Annual P-05A/P-06A/P-07A - April	Project #: 28002786			
Site: Oregon	SSOW#:			

Analysis Requested

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	TDS/Alks	Dissolved Metals	Nitrate+Nitrite	TOC	Ammonia	Chloride/Sulfate (TA Buffalo)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	S	S	S	N		
P-05A	4/13/2021	1140	G	W	X		X	X	X	X	X	X	4	
P-06A	4/14/2021	0850	G	W	X		X	X	X	X	X	X	4	
P-07A	4/13/2021	1335	G	W	X		X	X	X	X	X	X	4	

280-147470 Chain of Custody

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

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

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

Special Instructions/QC Requirements:

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		4/14/21 1630	SCS		04/15/2021 10:00	LETA MEN
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 0.5/2.8/3.2/2.4, IR: 10.4, 12.9

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill
SITE ADDRESS: McMinnville , Oregon
WELL ID: P-05A
BLIND ID:
DUP ID: NA

WIND FROM:	N	(NE)	E	SE	S	SW	W	NW	LIGHT	(MEDIUM)	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN			?	**TEMPERATURE:**	(F) 50.0 °C	

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW	[Water Column x Gal/ft]	Volume (gal)
4/13/21	10:48	21.44	.	3.55	.	17.89	X 1	0.73
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)^2 x 0.163 (1") = 0.041 | 2" = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	[√ if used]
VOA Glass	/ /	:		40 ml	HCl	YES	NO		
VOA Glass	/ /	:		40 ml	$Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/13/21	11:40	~~B~~ B	2 (250, 500, 1L)	None	YES	NO	NA	
Yellow Glass	4/13/21	11:40	B	1 250, (500) 1L	H_2SO_4	YES	NO		
Red Total Poly	/ /	:		125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/13/21	11:40	B	1 250, 500 1L	HNO_3	YES	YES		
White Poly	/ /	:		250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:		100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — 4 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011)
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD) OR [ ] WA [ ]
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA

Purge Start Time: 10:40

Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	B(1050)	0.00	6.83	10.2	912	11.5	4.98	1.19	Clear/colorless
1	B(1103)	0.75	6.84	28.2	859	11.1	10.95	0.39	Clear/colorless
2	B(1117)	1.50	6.42	20.1	858	11.2	12.51	0.38	Clear/colorless
3	B(1135)	2.25	6.45	22.8	861	11.2	13.01	0.55	clear/colorless
4	B(1137)	2.38	6.44	23.5	861	11.1	13.16	0.56	clear/colorless
5	B(1139)	2.51	6.42	25.0	865	11.1	13.37	0.58	clear/colorless
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Standard purge method ~250 ml/min

SAMPLER: I. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** P-10A
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM: N (NE) E SE S SW W NW
WEATHER: (SUNNY) CLOUDY RAIN ?
LIGHT (MEDIUM) HEAVY
TEMPERATURE: (F) 48.0 °C [Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW	[Water Column x Gal/ft]	Volume (gal)
4/13/21	09:48	21.82	.	5.32	.	16.50	X 1	0.67
4/14/21	08:26	.	.	15.86	.		X 3	.

Gal/ft = (dia./2)^2 x 0.163 (1") = 0.041 2" = 0.163 3" = 0.367 4" = 0.653 6" = 1.469 10" = 4.080 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	[√ if used]
VOA Glass	/ /	:		40 ml	HCl	YES	NO		
VOA Glass	/ /	:		40 ml	$Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/14/21	08:50	B	2 (250, 500, 1L)	None	(YES)	(NO)	NA	✓
Yellow Glass	4/14/21	08:50	B	1 (250, 500) 1L	(H_2SO_4)	(YES)	(NO)		✓
Red Total Poly	/ /	:		125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/14/21	08:50	B	1 (250, 500) 1L	(HNO_3)	(YES)	(YES)		✓
White Poly	/ /	:		250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:		100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — 4 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [ ] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA

Purge Start Time: 09:58

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Pump/Bailer Inlet Depth: Diss O_2 (mg/l)	Water Quality
4/13/21 0	B(0959)	0.00	6.39	22.0	950	11.7	7.07	1.40	Cloudy/light tan
1	B(1012)	0.67	6.88	18.0	923	11.4	13.82	1.16	Cloudy/light tan
2	B(1026)	1.34	6.84	-34.8	932	12.8	18.32	1.10	Clearing/colorless
3	B(1031)	1.42	6.80	-36.1	930	12.8	21.82	1.06	Cloudy/light tan
4/14/21 4	B(0845)	1.62	6.82	11.6	944	11.7	16.86	1.60	Cloudy/light tan
5		.	.			.	.	.	
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Standard purge method (~200 ml/min)
Well dewatered at 1031 on 4/13/2021. Returned on 4/14/2021 to sample

SAMPLER: I. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** P-24A
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?				

TEMPERATURE: °F 55.0 °C [Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW	[Water Column x Gal/ft]	Volume (gal)
4/13/21	12:33	28.48	.	14.38	.	14.10	X 1	2.29
/ /	:	.	.	.	.		X 3	6.87

Gal/ft = (dia./2)² x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	[√ if used] √
VOA Glass	/ /	:		40 ml	HCl	YES	NO		
VOA Glass	/ /	:		40 ml	$Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/13/21	13:35	B	2 250, 500, 1L	None	YES	NO	NA	
Yellow Glass	4/13/21	13:35	B	1 250, 500, 1L	H_2SO_3	YES	NO		
Red Total Poly	/ /	:		125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/13/21	13:35	B	1 250, 500, 1L	HNO_3	YES	YES		
White Poly	/ /	:		250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:		100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — 4 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [ ] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA

Purge Start Time: 12:35 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	B(1237)	0.00	6.20	132.6	211.6	12.6	14.68	2.65	clear/colorless
1	B(1253)	2.30	5.55	167.2	190.4	12.3	17.76	2.33	clear/colorless
2	B(1309)	4.60	5.62	178.1	189.1	12.3	18.52	2.23	clear/colorless
3	B(1326)	6.90	5.80	135.6	193.6	12.3	18.83	2.00	clear/colorless
4	B(1328)	7.20	5.82	135.1	194.7	12.3	18.85	2.00	clear/colorless
5	B(1330)	7.50	5.82	133.6	195.1	12.3	18.87	2.02	clear/colorless
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Standard purge method (~600ml/min)

SAMPLER: Ithelguist (PRINTED NAME) (SIGNATURE)



eurofins

1401204

ORIGIN ID:SAVA (503) 534-3783
TIFFANY ANDREWS
SCS ENGINEERS
[redacted] SW 72ND AVENURE

PORTLAND, OR 97224
UNITED STATES US

SHIP DATE: 31MAR21
ACTWGT: 10.00 LB MAN
CAD: 0886563/CAFE3409

TO

EUROFINS TESTAMERICA DENVER
4955 YARROW STREET

ARVADA CO 800024517
(303) 736-0100
REF: S280-107586

RMA:

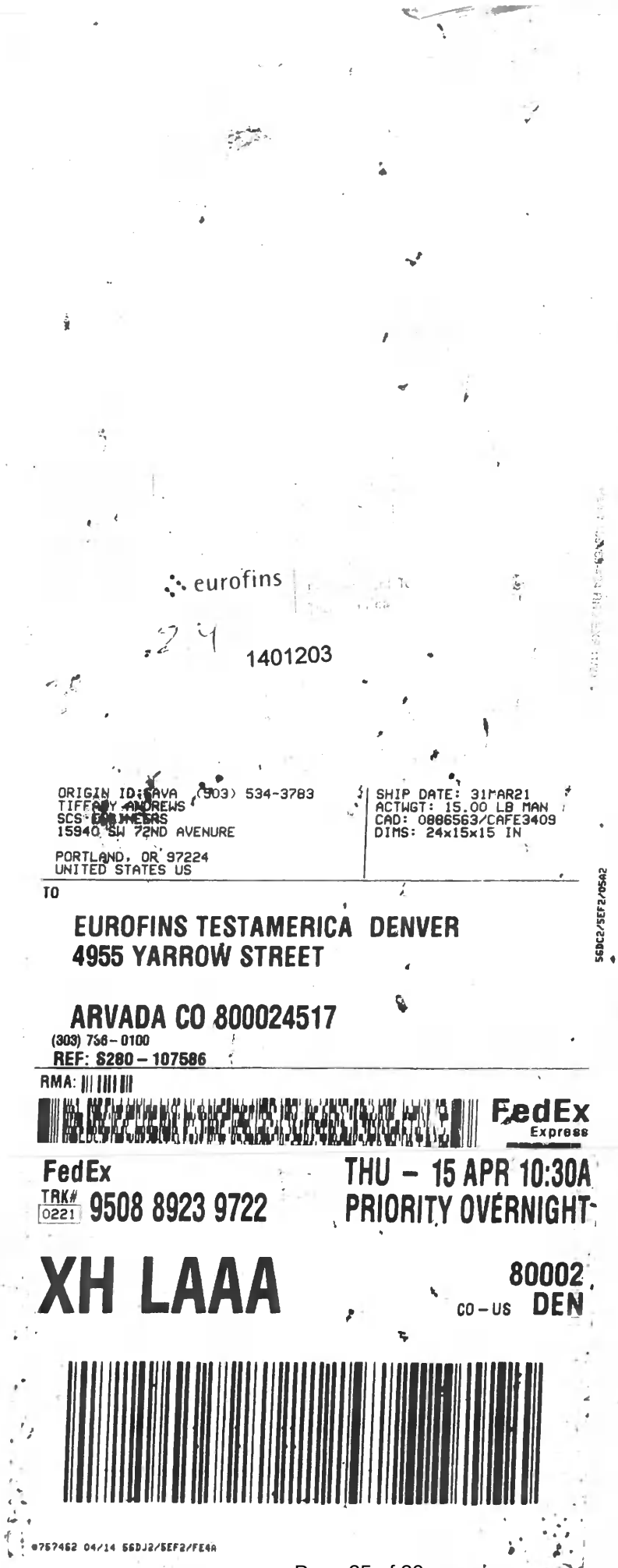
FedEx Express

RETURNS MON-SAT
PRIORITY OVERNIGHT

TRK# 0221 9508 8923 9788

80002

CO-US


eurofins
1401203
ORIGIN ID:SAVA (303) 534-3783
TIFFANY ANDREWS
SCS ENGINEERS
15940 SW 72ND AVENURE
PORTLAND, OR 97224
UNITED STATES US
SHIP DATE: 31MAR21
ACTWGT: 15.00 LB MAN
CAD: 0806563/CAFE3409
DIMS: 24x15x15 IN
TO
EUROFINS TESTAMERICA DENVER
4955 YARROW STREET
ARVADA CO 800024517
(303) 736-0100
REF: S280 - 107586
RMA:
FedEx Express
FedEx
TRK# 0221 9508 8923 9722
THU - 15 APR 10:30A
PRIORITY OVERNIGHT
XH LAAA
80002
CO-US DEN
0757462 04/14 56DJ2/5EF2/FE4A
56DC2/5EF2/0542

ORIGIN ID:SAVA (503) 534-3783
TIFFANY ANDREWS
WASTE MANAGEMENT
15940 SW 72ND AVE
PORTLAND, OR 97224
UNITED STATES US

SHIP DATE: 02APR21
ACTWGT: 15.00 LB MAN
CAD: 0886563/CAFE3409
DIMS: 24x15x15 IN

EUROFINS TESTAMERICA DENVER
4955 YARROW STREET
ARVADA CO 800024517

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FedEx Express

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NIGHT

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TRK# 0221 9508 8924 2740

THU - 15 APR 10:30A
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#757462 04/14 56DJ2/5EF2/FE4A


Custody Sea
SIGNATURE
DATE 4/14/21
eurofins
1401197 2.8
ORIGIN ID:SAVA (503) 534-3783
TIFFANY ANDREWS
WASTE MANAGEMENT
15940 SW 72ND AVE
PORTLAND, OR 97224
UNITED STATES US
SHIP DATE: 02APR21
ACTWGT: 15.00 LB MAN
CAD: 0886563/CAFE3409
DIMS: 24x15x15 IN
TO
EUROFINS TESTAMERICA, DENVER
4955 YARROW STREET
ARVADA CO 80002451?
(303) 736-0100
REF: 6280-107583
RMA:
FedEx
Express
TRK# 0221 9508 8924 2751
RETURNS MON-SAT
PRIORITY OVERNIGHT
80002
CO-US
56DC2/5EF2/0502

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

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Sara, Betsy A	Carrier Tracking No(s):	COC No: 280-563959.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Betsy.Sara@Eurofinset.com	State of Origin: Oregon	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Oregon		Job #: 280-147470-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 5/5/2021			
City: Amherst	TAT Requested (days):			
State, Zip: NY, 14228-2298				
Phone: 716-691-2600(Tel) 716-691-7991(Fax)	PO #:			
Email:	WO #:			
Project Name: 1003|Riverbend Landfill - P-05A/P-06A/P-07A	Project #: 28002786			
Site: 1003|Riverbend Landfill	SSOW#:			

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - 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:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300.0_28D/ 300.0, Sulfate and Chloride (TA Buffalo)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
P-05A (280-147470-1)	4/13/21	11:40 Pacific		Water			X	1	
P-06A (280-147470-2)	4/14/21	08:50 Pacific		Water			X	1	
P-07A (280-147470-3)	4/13/21	13:35 Pacific		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	4/16/21 1320		[signature]	4/17/21 1000	TA
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.2 #1 ICE

Ver: 11/01/2020

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-147470-1

Login Number: 147470
List Number: 1
Creator: Collins, Janice S

List Source: Eurofins TestAmerica, Denver

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	
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.	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	

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-147470-1

Login Number: 147470
List Number: 2
Creator: Kolb, Chris M

List Source: Eurofins TestAmerica, Buffalo
List Creation: 04/19/21 03:40 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	2.2 IR GUN #1 ICE
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

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ANALYTICAL REPORT

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

Laboratory Job ID: 280-147596-1
Client Project/Site: 1003|Riverbend Landfill SCS Engineers
Sampling Event: Semiannual Detection Wells - Apr Oct

For:
Waste Management
13469 SW Highway 18
McMinnville, Oregon 97128

Attn: Mr. Jim Denson

Betsy Sara

Authorized for release by:
12/2/2021 9:03:46 AM

Betsy Sara, Project Manager II
(303)736-0189
Betsy.Sara@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

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Definitions/Glossary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-147596-1

Qualifiers

Metals

Qualifier	Qualifier Description
^2	Calibration Blank (ICB and/or CCB) is outside acceptance limits.

Glossary

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

Job ID: 280-147596-1

Laboratory: Eurofins TestAmerica, Denver

Narrative

CASE NARRATIVE

Client: Waste Management

Project: 1003|Riverbend Landfill SCS Engineers

Report Number: 280-147596-1

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

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

Sample Receiving

The samples were received on 04/17/2021; the samples arrived in good condition, properly preserved and on ice. The temperatures of the coolers at receipt were 1.6º C and 2.1º C.

Holding Times

All holding times were met.

Method Blanks

All Method Blanks met method criteria.

Laboratory Control Samples (LCS)

All Laboratory Control Sample recoveries were within control limits.

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

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) for Method 8260B and Method 8011, however, LCS/LCSD pairs were analyzed to demonstrate method precision and accuracy.

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

Metals

The Method 6010B Instrument Blank was above the control limits for Dissolved Calcium. Because the associated samples exhibited detections of Dissolved Calcium greater than ten times the Instrument Blank result, corrective action was deemed unnecessary.

General Comments

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.

Job ID: 280-147596-1 (Continued)

Laboratory: Eurofins TestAmerica, Denver (Continued)

The analysis for Chloride and Sulfate Method 300.0 was performed by TestAmerica Buffalo. Their address and phone number are:
TestAmerica Buffalo
10 Hazelwood Drive, Suite 106
Amherst, NY 14228
Phone: 716-691-2600

Detection Summary

Client: Waste Management
Job ID: 280-147596-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Client Sample ID: TB2 — Lab Sample ID: 280-147596-1

No Detections.

Client Sample ID: MW-19A — Lab Sample ID: 280-147596-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	34000	^2	500		ug/L	1		6010B	Dissolved
Magnesium	12000		200		ug/L	1		6010B	Dissolved
Manganese	28		3.0		ug/L	1		6010B	Dissolved
Potassium	1200		500		ug/L	1		6010B	Dissolved
Sodium	11000		1000		ug/L	1		6010B	Dissolved
Chloride	24		0.50		mg/L	1		300.0	Total/NA
Sulfate	6.2		1.0		mg/L	1		300.0	Total/NA
Nitrate/Nitrite	0.24		0.050		mg/L	1		353.2	Total/NA
Total Anions	3.4				meq/L	1		SM 1030E	Total/NA
Total Cations	3.2				meq/L	1		SM 1030E	Total/NA
Percent Difference	-3.4				%	1		SM 1030E	Total/NA
Calcium	34				mg/L	1		SM 1030E	Total/NA
Magnesium	12				mg/L	1		SM 1030E	Total/NA
Potassium	1.2				mg/L	1		SM 1030E	Total/NA
Sodium	11				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.00				mg/L	1		SM 1030E	Total/NA
Chloride	24				mg/L	1		SM 1030E	Total/NA
Sulfate	6.2				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	130				mg/L	1		SM 1030E	Total/NA
Alkalinity	130				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.24				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	-3.4				%	1		SM 1030E	Total/NA
Calculated TDS	160				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.4				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	220				mg/L	1		SM 1030E	Total/NA
Iron	0.00				mg/L	1		SM 1030E	Total/NA
Calcium	1.7				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	0.99				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.031				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	0.48				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	0.68				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.13				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	130				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	2.6				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.017				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	130		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	220		10		mg/L	1		SM 2540C	Total/NA
Field pH	7.44				SU	1		Field Sampling	Total/NA
Field Conductivity	311.3				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	11.8				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	1.22				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	-53.4				millivolts	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-147596-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-147596-1	TB2	Water	04/15/21 07:00	04/17/21 09:45
280-147596-2	MW-19A	Water	04/16/21 12:15	04/17/21 09:45

Method Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-147596-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL DEN
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	TAL DEN
6010B	Metals (ICP)	SW846	TAL DEN
300.0	Anions, Ion Chromatography	MCAWW	TAL BUF
350.1	Nitrogen, Ammonia	MCAWW	TAL DEN
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	TAL DEN
9060	Organic Carbon, Total (TOC)	SW846	TAL DEN
SM 1030E	Cation Anion Balance	SM	TAL DEN
SM 1030E (meq)	Cation Anion Balance	SM	TAL DEN
SM 2320B	Alkalinity	SM	TAL DEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL DEN
Field Sampling	Field Sampling	EPA	TAL DEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL DEN
5030B	Purge and Trap	SW846	TAL DEN
8011	Microextraction	SW846	TAL DEN

Protocol 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.

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL DEN = Eurofins TestAmerica, Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-147596-1

Client Sample ID: TB2
Date Collected: 04/15/21 07:00
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147596-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/27/21 02:05	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/27/21 02:05	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/27/21 02:05	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/27/21 02:05	1
1,1-Dichloroethane	ND		1.0		ug/L			04/27/21 02:05	1
1,1-Dichloroethene	ND		1.0		ug/L			04/27/21 02:05	1
1,1-Dichloropropene	ND		1.0		ug/L			04/27/21 02:05	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/27/21 02:05	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/27/21 02:05	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/27/21 02:05	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/27/21 02:05	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/27/21 02:05	1
1,2-Dichloroethane	ND		1.0		ug/L			04/27/21 02:05	1
1,2-Dichloropropane	ND		1.0		ug/L			04/27/21 02:05	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/27/21 02:05	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/27/21 02:05	1
1,3-Dichloropropane	ND		1.0		ug/L			04/27/21 02:05	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/27/21 02:05	1
2,2-Dichloropropane	ND		5.0		ug/L			04/27/21 02:05	1
2-Butanone (MEK)	ND		6.0		ug/L			04/27/21 02:05	1
2-Chlorotoluene	ND		1.0		ug/L			04/27/21 02:05	1
2-Hexanone	ND		5.0		ug/L			04/27/21 02:05	1
4-Chlorotoluene	ND		1.0		ug/L			04/27/21 02:05	1
4-Isopropyltoluene	ND		1.0		ug/L			04/27/21 02:05	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/27/21 02:05	1
Acetone	ND		10		ug/L			04/27/21 02:05	1
Benzene	ND		1.0		ug/L			04/27/21 02:05	1
Bromobenzene	ND		1.0		ug/L			04/27/21 02:05	1
Bromochloromethane	ND		1.0		ug/L			04/27/21 02:05	1
Bromodichloromethane	ND		1.0		ug/L			04/27/21 02:05	1
Bromoform	ND		1.0		ug/L			04/27/21 02:05	1
Bromomethane	ND		2.0		ug/L			04/27/21 02:05	1
Carbon disulfide	ND		2.0		ug/L			04/27/21 02:05	1
Carbon tetrachloride	ND		1.0		ug/L			04/27/21 02:05	1
Chlorobenzene	ND		1.0		ug/L			04/27/21 02:05	1
Chloroethane	ND		2.0		ug/L			04/27/21 02:05	1
Chloroform	ND		1.0		ug/L			04/27/21 02:05	1
Chloromethane	ND		2.0		ug/L			04/27/21 02:05	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/27/21 02:05	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/27/21 02:05	1
Dibromochloromethane	ND		1.0		ug/L			04/27/21 02:05	1
Dibromomethane	ND		1.0		ug/L			04/27/21 02:05	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/27/21 02:05	1
Ethylbenzene	ND		1.0		ug/L			04/27/21 02:05	1
Hexachlorobutadiene	ND		1.0		ug/L			04/27/21 02:05	1
Isopropylbenzene	ND		1.0		ug/L			04/27/21 02:05	1
Methylene Chloride	ND		5.0		ug/L			04/27/21 02:05	1
Naphthalene	ND		1.0		ug/L			04/27/21 02:05	1
n-Butylbenzene	ND		1.0		ug/L			04/27/21 02:05	1

Client Sample ID: TB2

Date Collected: 04/15/21 07:00
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147596-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		1.0		ug/L			04/27/21 02:05	1
sec-Butylbenzene	ND		1.0		ug/L			04/27/21 02:05	1
Styrene	ND		1.0		ug/L			04/27/21 02:05	1
tert-Butylbenzene	ND		1.0		ug/L			04/27/21 02:05	1
Tetrachloroethene	ND		1.0		ug/L			04/27/21 02:05	1
Toluene	ND		1.0		ug/L			04/27/21 02:05	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/27/21 02:05	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/27/21 02:05	1
Trichloroethene	ND		1.0		ug/L			04/27/21 02:05	1
Trichlorofluoromethane	ND		2.0		ug/L			04/27/21 02:05	1
Vinyl chloride	ND		1.0		ug/L			04/27/21 02:05	1
Xylenes (total)	ND		2.0		ug/L			04/27/21 02:05	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/27/21 02:05*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 127*		*04/27/21 02:05*	*1*
4-Bromofluorobenzene (Surr)	*109*		*78 - 120*		*04/27/21 02:05*	*1*
Dibromofluoromethane (Surr)	*99*		*77 - 120*		*04/27/21 02:05*	*1*
Toluene-d8 (Surr)	*109*		*80 - 125*		*04/27/21 02:05*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		04/23/21 10:55	04/23/21 23:09	1
1,2-Dibromoethane	ND		0.050		ug/L		04/23/21 10:55	04/23/21 23:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*110*		*70 - 130*	*04/23/21 10:55*	*04/23/21 23:09*	*1*

Client Sample ID: MW-19A

Date Collected: 04/16/21 12:15
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147596-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/29/21 12:58	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/29/21 12:58	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/29/21 12:58	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/29/21 12:58	1
1,1-Dichloroethane	ND		1.0		ug/L			04/29/21 12:58	1
1,1-Dichloroethene	ND		1.0		ug/L			04/29/21 12:58	1
1,1-Dichloropropene	ND		1.0		ug/L			04/29/21 12:58	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/29/21 12:58	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/29/21 12:58	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/29/21 12:58	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/29/21 12:58	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/29/21 12:58	1
1,2-Dichloroethane	ND		1.0		ug/L			04/29/21 12:58	1
1,2-Dichloropropane	ND		1.0		ug/L			04/29/21 12:58	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/29/21 12:58	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-147596-1

Client Sample ID: MW-19A
Date Collected: 04/16/21 12:15
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147596-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0		ug/L			04/29/21 12:58	1
1,3-Dichloropropane	ND		1.0		ug/L			04/29/21 12:58	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/29/21 12:58	1
2,2-Dichloropropane	ND		5.0		ug/L			04/29/21 12:58	1
2-Butanone (MEK)	ND		6.0		ug/L			04/29/21 12:58	1
2-Chlorotoluene	ND		1.0		ug/L			04/29/21 12:58	1
2-Hexanone	ND		5.0		ug/L			04/29/21 12:58	1
4-Chlorotoluene	ND		1.0		ug/L			04/29/21 12:58	1
4-Isopropyltoluene	ND		1.0		ug/L			04/29/21 12:58	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/29/21 12:58	1
Acetone	ND		10		ug/L			04/29/21 12:58	1
Benzene	ND		1.0		ug/L			04/29/21 12:58	1
Bromobenzene	ND		1.0		ug/L			04/29/21 12:58	1
Bromochloromethane	ND		1.0		ug/L			04/29/21 12:58	1
Bromodichloromethane	ND		1.0		ug/L			04/29/21 12:58	1
Bromoform	ND		1.0		ug/L			04/29/21 12:58	1
Bromomethane	ND		2.0		ug/L			04/29/21 12:58	1
Carbon disulfide	ND		2.0		ug/L			04/29/21 12:58	1
Carbon tetrachloride	ND		1.0		ug/L			04/29/21 12:58	1
Chlorobenzene	ND		1.0		ug/L			04/29/21 12:58	1
Chloroethane	ND		2.0		ug/L			04/29/21 12:58	1
Chloroform	ND		1.0		ug/L			04/29/21 12:58	1
Chloromethane	ND		2.0		ug/L			04/29/21 12:58	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/29/21 12:58	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/29/21 12:58	1
Dibromochloromethane	ND		1.0		ug/L			04/29/21 12:58	1
Dibromomethane	ND		1.0		ug/L			04/29/21 12:58	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/29/21 12:58	1
Ethylbenzene	ND		1.0		ug/L			04/29/21 12:58	1
Hexachlorobutadiene	ND		1.0		ug/L			04/29/21 12:58	1
Isopropylbenzene	ND		1.0		ug/L			04/29/21 12:58	1
Methylene Chloride	ND		5.0		ug/L			04/29/21 12:58	1
Naphthalene	ND		1.0		ug/L			04/29/21 12:58	1
n-Butylbenzene	ND		1.0		ug/L			04/29/21 12:58	1
N-Propylbenzene	ND		1.0		ug/L			04/29/21 12:58	1
sec-Butylbenzene	ND		1.0		ug/L			04/29/21 12:58	1
Styrene	ND		1.0		ug/L			04/29/21 12:58	1
tert-Butylbenzene	ND		1.0		ug/L			04/29/21 12:58	1
Tetrachloroethene	ND		1.0		ug/L			04/29/21 12:58	1
Toluene	ND		1.0		ug/L			04/29/21 12:58	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/29/21 12:58	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/29/21 12:58	1
Trichloroethene	ND		1.0		ug/L			04/29/21 12:58	1
Trichlorofluoromethane	ND		2.0		ug/L			04/29/21 12:58	1
Vinyl chloride	ND		1.0		ug/L			04/29/21 12:58	1
Xylenes (total)	ND		2.0		ug/L			04/29/21 12:58	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/29/21 12:58*	*1*

Client Sample ID: MW-19A

Date Collected: 04/16/21 12:15
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147596-2

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 127*		*04/29/21 12:58*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*04/29/21 12:58*	*1*
Dibromofluoromethane (Surr)	*104*		*77 - 120*		*04/29/21 12:58*	*1*
Toluene-d8 (Surr)	*96*		*80 - 125*		*04/29/21 12:58*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		04/23/21 10:55	04/23/21 23:30	1
1,2-Dibromoethane	ND		0.050		ug/L		04/23/21 10:55	04/23/21 23:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*110*		*70 - 130*	*04/23/21 10:55*	*04/23/21 23:30*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**34000**	**^2**	500		ug/L		04/28/21 08:38	04/28/21 17:20	1
Iron	ND		30		ug/L		04/28/21 08:38	04/28/21 17:20	1
Magnesium	**12000**		200		ug/L		04/28/21 08:38	04/28/21 17:20	1
Manganese	**28**		3.0		ug/L		04/28/21 08:38	04/28/21 17:20	1
Potassium	**1200**		500		ug/L		04/28/21 08:38	04/28/21 17:20	1
Sodium	**11000**		1000		ug/L		04/28/21 08:38	04/28/21 17:20	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	**3.4**				meq/L			05/04/21 13:02	1
Total Cations	**3.2**				meq/L			05/04/21 13:02	1
Percent Difference	**-3.4**				%			05/04/21 13:02	1
Calcium	**34**				mg/L			05/04/21 13:02	1
Magnesium	**12**				mg/L			05/04/21 13:02	1
Potassium	**1.2**				mg/L			05/04/21 13:02	1
Sodium	**11**				mg/L			05/04/21 13:02	1
Ammonia as N	**0.00**				mg/L			05/04/21 13:02	1
Chloride	**24**				mg/L			05/04/21 13:02	1
Sulfate	**6.2**				mg/L			05/04/21 13:02	1
Bicarbonate Alkalinity	**130**				mg/L			05/04/21 13:02	1
Alkalinity	**130**				mg/L			05/04/21 13:02	1
Nitrate/Nitrite	**0.24**				mg/L			05/04/21 13:02	1
Anion/Cation Balance	**-3.4**				%			05/04/21 13:02	1
Calculated TDS	**160**				mg/L			05/04/21 13:02	1
TDS Ratio	**1.4**				NONE			05/04/21 13:02	1
Total Dissolved Solids	**220**				mg/L			05/04/21 13:02	1
Iron	**0.00**				mg/L			05/04/21 13:02	1
Calcium	**1.7**				meq/L			05/04/21 13:02	1
Magnesium	**0.99**				meq/L			05/04/21 13:02	1
Potassium	**0.031**				meq/L			05/04/21 13:02	1
Sodium	**0.48**				meq/L			05/04/21 13:02	1
Ammonia as N	**0.00**				meq/L			05/04/21 13:02	1
Chloride	**0.68**				meq/L			05/04/21 13:02	1
Sulfate	**0.13**				meq/L			05/04/21 13:02	1
Alkalinity	**130**				mg/L			05/04/21 13:02	1
Bicarbonate Alkalinity	**2.6**				meq/L			05/04/21 13:02	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-147596-1

Client Sample ID: MW-19A

Date Collected: 04/16/21 12:15
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147596-2

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate/Nitrite	0.017				meq/L			05/04/21 13:02	1
Iron	0.00				meq/L			05/04/21 13:02	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	24		0.50		mg/L			04/27/21 19:06	1
Sulfate	6.2		1.0		mg/L			04/27/21 19:06	1
Ammonia as N	ND		0.030		mg/L			04/30/21 14:56	1
Nitrate/Nitrite	0.24		0.050		mg/L			05/03/21 19:04	1
Total Organic Carbon - Average	ND		1.0		mg/L			05/05/21 17:49	1
Bicarbonate Alkalinity	130		10		mg/L			04/21/21 00:17	1
Total Dissolved Solids	220		10		mg/L			04/23/21 09:40	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.44				SU			04/16/21 13:15	1
Field Conductivity	311.3				umhos/cm			04/16/21 13:15	1
Field Temperature	11.8				Degrees C			04/16/21 13:15	1
Field Dissolved Oxygen	1.22				mg/L			04/16/21 13:15	1
Field EH/ORP	-53.4				millivolts			04/16/21 13:15	1

Surrogate Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-147596-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-127)	(78-120)	(77-120)	(80-125)
280-147596-1	TB2	102	109	99	109
280-147596-2	MW-19A	99	96	104	96
LCS 280-533957/4	Lab Control Sample	104	104	100	106
LCS 280-534267/5	Lab Control Sample	97	96	101	98
LCSD 280-533957/5	Lab Control Sample Dup	102	106	100	106
LCSD 280-534267/6	Lab Control Sample Dup	96	96	101	98
MB 280-533957/9	Method Blank	103	106	99	108
MB 280-534267/10	Method Blank	100	95	102	96

Surrogate Legend

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

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)
		12DBP1
Lab Sample ID	Client Sample ID	(70-130)
280-147596-1	TB2	110
280-147596-2	MW-19A	110
LCS 280-533634/2-A	Lab Control Sample	109
LCSD 280-533634/3-A	Lab Control Sample Dup	112
MB 280-533634/1-A	Method Blank	115

Surrogate Legend

12DBP = 1,2-Dibromopropane

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

Lab Sample ID: MB 280-533957/9
Matrix: Water
Analysis Batch: 533957

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/27/21 00:10	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/27/21 00:10	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/27/21 00:10	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/27/21 00:10	1
1,1-Dichloroethane	ND		1.0		ug/L			04/27/21 00:10	1
1,1-Dichloroethene	ND		1.0		ug/L			04/27/21 00:10	1
1,1-Dichloropropene	ND		1.0		ug/L			04/27/21 00:10	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/27/21 00:10	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/27/21 00:10	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/27/21 00:10	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/27/21 00:10	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/27/21 00:10	1
1,2-Dichloroethane	ND		1.0		ug/L			04/27/21 00:10	1
1,2-Dichloropropane	ND		1.0		ug/L			04/27/21 00:10	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/27/21 00:10	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/27/21 00:10	1
1,3-Dichloropropane	ND		1.0		ug/L			04/27/21 00:10	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/27/21 00:10	1
2,2-Dichloropropane	ND		5.0		ug/L			04/27/21 00:10	1
2-Butanone (MEK)	ND		6.0		ug/L			04/27/21 00:10	1
2-Chlorotoluene	ND		1.0		ug/L			04/27/21 00:10	1
2-Hexanone	ND		5.0		ug/L			04/27/21 00:10	1
4-Chlorotoluene	ND		1.0		ug/L			04/27/21 00:10	1
4-Isopropyltoluene	ND		1.0		ug/L			04/27/21 00:10	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/27/21 00:10	1
Acetone	ND		10		ug/L			04/27/21 00:10	1
Benzene	ND		1.0		ug/L			04/27/21 00:10	1
Bromobenzene	ND		1.0		ug/L			04/27/21 00:10	1
Bromochloromethane	ND		1.0		ug/L			04/27/21 00:10	1
Bromodichloromethane	ND		1.0		ug/L			04/27/21 00:10	1
Bromoform	ND		1.0		ug/L			04/27/21 00:10	1
Bromomethane	ND		2.0		ug/L			04/27/21 00:10	1
Carbon disulfide	ND		2.0		ug/L			04/27/21 00:10	1
Carbon tetrachloride	ND		1.0		ug/L			04/27/21 00:10	1
Chlorobenzene	ND		1.0		ug/L			04/27/21 00:10	1
Chloroethane	ND		2.0		ug/L			04/27/21 00:10	1
Chloroform	ND		1.0		ug/L			04/27/21 00:10	1
Chloromethane	ND		2.0		ug/L			04/27/21 00:10	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/27/21 00:10	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/27/21 00:10	1
Dibromochloromethane	ND		1.0		ug/L			04/27/21 00:10	1
Dibromomethane	ND		1.0		ug/L			04/27/21 00:10	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/27/21 00:10	1
Ethylbenzene	ND		1.0		ug/L			04/27/21 00:10	1
Hexachlorobutadiene	ND		1.0		ug/L			04/27/21 00:10	1
Isopropylbenzene	ND		1.0		ug/L			04/27/21 00:10	1
Methylene Chloride	ND		5.0		ug/L			04/27/21 00:10	1
Naphthalene	ND		1.0		ug/L			04/27/21 00:10	1

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

Lab Sample ID: MB 280-533957/9
Matrix: Water
Analysis Batch: 533957

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		1.0		ug/L			04/27/21 00:10	1
N-Propylbenzene	ND		1.0		ug/L			04/27/21 00:10	1
sec-Butylbenzene	ND		1.0		ug/L			04/27/21 00:10	1
Styrene	ND		1.0		ug/L			04/27/21 00:10	1
tert-Butylbenzene	ND		1.0		ug/L			04/27/21 00:10	1
Tetrachloroethene	ND		1.0		ug/L			04/27/21 00:10	1
Toluene	ND		1.0		ug/L			04/27/21 00:10	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/27/21 00:10	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/27/21 00:10	1
Trichloroethene	ND		1.0		ug/L			04/27/21 00:10	1
Trichlorofluoromethane	ND		2.0		ug/L			04/27/21 00:10	1
Vinyl chloride	ND		1.0		ug/L			04/27/21 00:10	1
Xylenes (total)	ND		2.0		ug/L			04/27/21 00:10	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/27/21 00:10*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 127*		*04/27/21 00:10*	*1*
4-Bromofluorobenzene (Surr)	*106*		*78 - 120*		*04/27/21 00:10*	*1*
Dibromofluoromethane (Surr)	*99*		*77 - 120*		*04/27/21 00:10*	*1*
Toluene-d8 (Surr)	*108*		*80 - 125*		*04/27/21 00:10*	*1*

Lab Sample ID: LCS 280-533957/4
Matrix: Water
Analysis Batch: 533957

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	27.5		ug/L		110	65 - 135
1,1,1-Trichloroethane	25.0	27.2		ug/L		109	65 - 135
1,1,2,2-Tetrachloroethane	25.0	26.2		ug/L		105	58 - 135
1,1,2-Trichloroethane	25.0	24.0		ug/L		96	64 - 135
1,1-Dichloroethane	25.0	27.5		ug/L		110	65 - 135
1,1-Dichloroethene	25.0	27.2		ug/L		109	65 - 136
1,1-Dichloropropene	25.0	28.1		ug/L		112	65 - 135
1,2,3-Trichlorobenzene	25.0	27.4		ug/L		110	60 - 135
1,2,3-Trichloropropane	25.0	25.1		ug/L		100	65 - 135
1,2,4-Trichlorobenzene	25.0	27.1		ug/L		108	58 - 135
1,2,4-Trimethylbenzene	25.0	28.2		ug/L		113	65 - 135
1,2-Dichlorobenzene	25.0	26.0		ug/L		104	65 - 135
1,2-Dichloroethane	25.0	23.7		ug/L		95	65 - 135
1,2-Dichloropropane	25.0	26.5		ug/L		106	64 - 135
1,3,5-Trimethylbenzene	25.0	29.1		ug/L		116	65 - 135
1,3-Dichlorobenzene	25.0	26.6		ug/L		106	65 - 135
1,3-Dichloropropane	25.0	26.2		ug/L		105	64 - 135
1,4-Dichlorobenzene	25.0	25.5		ug/L		102	65 - 135
2,2-Dichloropropane	25.0	27.4		ug/L		110	65 - 135
2-Butanone (MEK)	100	81.9		ug/L		82	44 - 177

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

Lab Sample ID: LCS 280-533957/4
Matrix: Water
Analysis Batch: 533957

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chlorotoluene	25.0	27.3		ug/L		109	65 - 135
2-Hexanone	100	93.2		ug/L		93	57 - 139
4-Chlorotoluene	25.0	27.0		ug/L		108	65 - 135
4-Isopropyltoluene	25.0	29.2		ug/L		117	65 - 135
4-Methyl-2-pentanone	100	89.0		ug/L		89	60 - 150
Acetone	100	85.0		ug/L		85	39 - 156
Benzene	25.0	26.5		ug/L		106	65 - 135
Bromobenzene	25.0	25.8		ug/L		103	65 - 135
Bromochloromethane	25.0	25.1		ug/L		101	65 - 135
Bromodichloromethane	25.0	26.2		ug/L		105	65 - 135
Bromoform	25.0	22.8		ug/L		91	62 - 135
Bromomethane	25.0	19.9		ug/L		80	45 - 135
Carbon disulfide	25.0	29.4		ug/L		118	55 - 143
Carbon tetrachloride	25.0	25.3		ug/L		101	65 - 135
Chlorobenzene	25.0	25.7		ug/L		103	65 - 135
Chloroethane	25.0	23.4		ug/L		93	46 - 136
Chloroform	25.0	25.9		ug/L		104	65 - 135
Chloromethane	25.0	17.9		ug/L		72	34 - 145
cis-1,2-Dichloroethene	25.0	24.9		ug/L		99	65 - 135
cis-1,3-Dichloropropene	25.0	27.9		ug/L		112	65 - 135
Dibromochloromethane	25.0	24.0		ug/L		96	65 - 135
Dibromomethane	25.0	24.0		ug/L		96	65 - 135
Dichlorodifluoromethane	25.0	18.0		ug/L		72	43 - 142
Ethylbenzene	25.0	26.2		ug/L		105	65 - 135
Hexachlorobutadiene	25.0	26.1		ug/L		104	65 - 135
Isopropylbenzene	25.0	29.1		ug/L		116	65 - 135
Methylene Chloride	25.0	23.7		ug/L		95	54 - 141
Naphthalene	25.0	25.8		ug/L		103	42 - 135
n-Butylbenzene	25.0	30.7		ug/L		123	64 - 135
N-Propylbenzene	25.0	27.7		ug/L		111	65 - 135
sec-Butylbenzene	25.0	28.0		ug/L		112	64 - 135
Styrene	25.0	27.6		ug/L		111	65 - 135
tert-Butylbenzene	25.0	28.7		ug/L		115	65 - 135
Tetrachloroethene	25.0	26.5		ug/L		106	65 - 135
Toluene	25.0	25.1		ug/L		100	65 - 135
trans-1,2-Dichloroethene	25.0	27.6		ug/L		110	65 - 135
trans-1,3-Dichloropropene	25.0	26.0		ug/L		104	65 - 135
Trichloroethene	25.0	28.4		ug/L		114	65 - 135
Trichlorofluoromethane	25.0	25.7		ug/L		103	53 - 137
Vinyl chloride	25.0	20.9		ug/L		84	40 - 137

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 127*
4-Bromofluorobenzene (Surr)	*104*		*78 - 120*
Dibromofluoromethane (Surr)	*100*		*77 - 120*
Toluene-d8 (Surr)	*106*		*80 - 125*

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

Lab Sample ID: LCSD 280-533957/5
Matrix: Water
Analysis Batch: 533957

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane			25.0	26.0		ug/L		104	65 - 135	6	20
1,1,1-Trichloroethane			25.0	26.8		ug/L		107	65 - 135	1	20
1,1,2,2-Tetrachloroethane			25.0	25.1		ug/L		101	58 - 135	4	20
1,1,2-Trichloroethane			25.0	23.1		ug/L		93	64 - 135	4	27
1,1-Dichloroethane			25.0	27.0		ug/L		108	65 - 135	2	21
1,1-Dichloroethene			25.0	24.5		ug/L		98	65 - 136	10	20
1,1-Dichloropropene			25.0	27.3		ug/L		109	65 - 135	3	21
1,2,3-Trichlorobenzene			25.0	26.2		ug/L		105	60 - 135	4	36
1,2,3-Trichloropropane			25.0	25.6		ug/L		102	65 - 135	2	23
1,2,4-Trichlorobenzene			25.0	27.1		ug/L		108	58 - 135	0	25
1,2,4-Trimethylbenzene			25.0	27.3		ug/L		109	65 - 135	3	20
1,2-Dichlorobenzene			25.0	25.0		ug/L		100	65 - 135	4	20
1,2-Dichloroethane			25.0	23.3		ug/L		93	65 - 135	2	20
1,2-Dichloropropane			25.0	25.3		ug/L		101	64 - 135	4	20
1,3,5-Trimethylbenzene			25.0	27.8		ug/L		111	65 - 135	4	20
1,3-Dichlorobenzene			25.0	25.4		ug/L		102	65 - 135	4	20
1,3-Dichloropropane			25.0	25.6		ug/L		102	64 - 135	2	20
1,4-Dichlorobenzene			25.0	24.7		ug/L		99	65 - 135	3	23
2,2-Dichloropropane			25.0	27.5		ug/L		110	65 - 135	0	20
2-Butanone (MEK)			100	83.0		ug/L		83	44 - 177	1	32
2-Chlorotoluene			25.0	25.9		ug/L		104	65 - 135	5	20
2-Hexanone			100	93.9		ug/L		94	57 - 139	1	25
4-Chlorotoluene			25.0	26.2		ug/L		105	65 - 135	3	20
4-Isopropyltoluene			25.0	28.4		ug/L		113	65 - 135	3	20
4-Methyl-2-pentanone			100	91.2		ug/L		91	60 - 150	2	22
Acetone			100	85.3		ug/L		85	39 - 156	0	23
Benzene			25.0	25.5		ug/L		102	65 - 135	4	20
Bromobenzene			25.0	25.2		ug/L		101	65 - 135	3	26
Bromochloromethane			25.0	24.0		ug/L		96	65 - 135	5	29
Bromodichloromethane			25.0	26.0		ug/L		104	65 - 135	1	20
Bromoform			25.0	21.7		ug/L		87	62 - 135	5	27
Bromomethane			25.0	19.4		ug/L		77	45 - 135	3	33
Carbon disulfide			25.0	27.9		ug/L		112	55 - 143	5	20
Carbon tetrachloride			25.0	24.6		ug/L		98	65 - 135	3	21
Chlorobenzene			25.0	25.0		ug/L		100	65 - 135	3	20
Chloroethane			25.0	22.4		ug/L		90	46 - 136	4	25
Chloroform			25.0	24.7		ug/L		99	65 - 135	5	20
Chloromethane			25.0	16.8		ug/L		67	34 - 145	7	24
cis-1,2-Dichloroethene			25.0	24.1		ug/L		97	65 - 135	3	20
cis-1,3-Dichloropropene			25.0	26.6		ug/L		106	65 - 135	5	26
Dibromochloromethane			25.0	23.0		ug/L		92	65 - 135	4	20
Dibromomethane			25.0	23.5		ug/L		94	65 - 135	2	26
Dichlorodifluoromethane			25.0	16.8		ug/L		67	43 - 142	7	30
Ethylbenzene			25.0	25.9		ug/L		104	65 - 135	1	20
Hexachlorobutadiene			25.0	26.5		ug/L		106	65 - 135	2	25
Isopropylbenzene			25.0	27.7		ug/L		111	65 - 135	5	20
Methylene Chloride			25.0	23.5		ug/L		94	54 - 141	1	26
Naphthalene			25.0	25.7		ug/L		103	42 - 135	0	23

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

Lab Sample ID: LCSD 280-533957/5
Matrix: Water
Analysis Batch: 533957

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
n-Butylbenzene			25.0	29.5		ug/L		118	64 - 135	4	21
N-Propylbenzene			25.0	26.5		ug/L		106	65 - 135	4	20
sec-Butylbenzene			25.0	26.2		ug/L		105	64 - 135	7	21
Styrene			25.0	26.3		ug/L		105	65 - 135	5	26
tert-Butylbenzene			25.0	27.2		ug/L		109	65 - 135	5	21
Tetrachloroethene			25.0	25.6		ug/L		103	65 - 135	3	20
Toluene			25.0	24.1		ug/L		97	65 - 135	4	20
trans-1,2-Dichloroethene			25.0	26.4		ug/L		105	65 - 135	5	24
trans-1,3-Dichloropropene			25.0	25.7		ug/L		103	65 - 135	1	26
Trichloroethene			25.0	26.3		ug/L		105	65 - 135	8	20
Trichlorofluoromethane			25.0	24.4		ug/L		97	53 - 137	5	27
Vinyl chloride			25.0	20.0		ug/L		80	40 - 137	4	24

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 127*
4-Bromofluorobenzene (Surr)	*106*		*78 - 120*
Dibromofluoromethane (Surr)	*100*		*77 - 120*
Toluene-d8 (Surr)	*106*		*80 - 125*

Lab Sample ID: MB 280-534267/10
Matrix: Water
Analysis Batch: 534267

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/29/21 09:33	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/29/21 09:33	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/29/21 09:33	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/29/21 09:33	1
1,1-Dichloroethane	ND		1.0		ug/L			04/29/21 09:33	1
1,1-Dichloroethene	ND		1.0		ug/L			04/29/21 09:33	1
1,1-Dichloropropene	ND		1.0		ug/L			04/29/21 09:33	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/29/21 09:33	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/29/21 09:33	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/29/21 09:33	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/29/21 09:33	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/29/21 09:33	1
1,2-Dichloroethane	ND		1.0		ug/L			04/29/21 09:33	1
1,2-Dichloropropane	ND		1.0		ug/L			04/29/21 09:33	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/29/21 09:33	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/29/21 09:33	1
1,3-Dichloropropane	ND		1.0		ug/L			04/29/21 09:33	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/29/21 09:33	1
2,2-Dichloropropane	ND		5.0		ug/L			04/29/21 09:33	1
2-Butanone (MEK)	ND		6.0		ug/L			04/29/21 09:33	1
2-Chlorotoluene	ND		1.0		ug/L			04/29/21 09:33	1
2-Hexanone	ND		5.0		ug/L			04/29/21 09:33	1
4-Chlorotoluene	ND		1.0		ug/L			04/29/21 09:33	1
4-Isopropyltoluene	ND		1.0		ug/L			04/29/21 09:33	1

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

Lab Sample ID: MB 280-534267/10
Matrix: Water
Analysis Batch: 534267

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone	ND		5.0		ug/L			04/29/21 09:33	1
Acetone	ND		10		ug/L			04/29/21 09:33	1
Benzene	ND		1.0		ug/L			04/29/21 09:33	1
Bromobenzene	ND		1.0		ug/L			04/29/21 09:33	1
Bromochloromethane	ND		1.0		ug/L			04/29/21 09:33	1
Bromodichloromethane	ND		1.0		ug/L			04/29/21 09:33	1
Bromoform	ND		1.0		ug/L			04/29/21 09:33	1
Bromomethane	ND		2.0		ug/L			04/29/21 09:33	1
Carbon disulfide	ND		2.0		ug/L			04/29/21 09:33	1
Carbon tetrachloride	ND		1.0		ug/L			04/29/21 09:33	1
Chlorobenzene	ND		1.0		ug/L			04/29/21 09:33	1
Chloroethane	ND		2.0		ug/L			04/29/21 09:33	1
Chloroform	ND		1.0		ug/L			04/29/21 09:33	1
Chloromethane	ND		2.0		ug/L			04/29/21 09:33	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/29/21 09:33	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/29/21 09:33	1
Dibromochloromethane	ND		1.0		ug/L			04/29/21 09:33	1
Dibromomethane	ND		1.0		ug/L			04/29/21 09:33	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/29/21 09:33	1
Ethylbenzene	ND		1.0		ug/L			04/29/21 09:33	1
Hexachlorobutadiene	ND		1.0		ug/L			04/29/21 09:33	1
Isopropylbenzene	ND		1.0		ug/L			04/29/21 09:33	1
Methylene Chloride	ND		5.0		ug/L			04/29/21 09:33	1
Naphthalene	ND		1.0		ug/L			04/29/21 09:33	1
n-Butylbenzene	ND		1.0		ug/L			04/29/21 09:33	1
N-Propylbenzene	ND		1.0		ug/L			04/29/21 09:33	1
sec-Butylbenzene	ND		1.0		ug/L			04/29/21 09:33	1
Styrene	ND		1.0		ug/L			04/29/21 09:33	1
tert-Butylbenzene	ND		1.0		ug/L			04/29/21 09:33	1
Tetrachloroethene	ND		1.0		ug/L			04/29/21 09:33	1
Toluene	ND		1.0		ug/L			04/29/21 09:33	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/29/21 09:33	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/29/21 09:33	1
Trichloroethene	ND		1.0		ug/L			04/29/21 09:33	1
Trichlorofluoromethane	ND		2.0		ug/L			04/29/21 09:33	1
Vinyl chloride	ND		1.0		ug/L			04/29/21 09:33	1
Xylenes (total)	ND		2.0		ug/L			04/29/21 09:33	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/29/21 09:33*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 127*		*04/29/21 09:33*	*1*
4-Bromofluorobenzene (Surr)	*95*		*78 - 120*		*04/29/21 09:33*	*1*
Dibromofluoromethane (Surr)	*102*		*77 - 120*		*04/29/21 09:33*	*1*
Toluene-d8 (Surr)	*96*		*80 - 125*		*04/29/21 09:33*	*1*

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

Lab Sample ID: LCS 280-534267/5
Matrix: Water
Analysis Batch: 534267

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	24.1		ug/L		96	65 - 135
1,1,1-Trichloroethane	25.0	24.1		ug/L		96	65 - 135
1,1,2,2-Tetrachloroethane	25.0	22.5		ug/L		90	58 - 135
1,1,2-Trichloroethane	25.0	24.3		ug/L		97	64 - 135
1,1-Dichloroethane	25.0	25.1		ug/L		100	65 - 135
1,1-Dichloroethene	25.0	23.6		ug/L		94	65 - 136
1,1-Dichloropropene	25.0	23.5		ug/L		94	65 - 135
1,2,3-Trichlorobenzene	25.0	22.7		ug/L		91	60 - 135
1,2,3-Trichloropropane	25.0	22.5		ug/L		90	65 - 135
1,2,4-Trichlorobenzene	25.0	21.8		ug/L		87	58 - 135
1,2,4-Trimethylbenzene	25.0	23.7		ug/L		95	65 - 135
1,2-Dichlorobenzene	25.0	23.5		ug/L		94	65 - 135
1,2-Dichloroethane	25.0	22.6		ug/L		90	65 - 135
1,2-Dichloropropane	25.0	24.7		ug/L		99	64 - 135
1,3,5-Trimethylbenzene	25.0	23.5		ug/L		94	65 - 135
1,3-Dichlorobenzene	25.0	23.3		ug/L		93	65 - 135
1,3-Dichloropropane	25.0	23.7		ug/L		95	64 - 135
1,4-Dichlorobenzene	25.0	22.6		ug/L		90	65 - 135
2,2-Dichloropropane	25.0	23.8		ug/L		95	65 - 135
2-Butanone (MEK)	100	85.0		ug/L		85	44 - 177
2-Chlorotoluene	25.0	23.8		ug/L		95	65 - 135
2-Hexanone	100	78.7		ug/L		79	57 - 139
4-Chlorotoluene	25.0	23.6		ug/L		94	65 - 135
4-Isopropyltoluene	25.0	23.6		ug/L		95	65 - 135
4-Methyl-2-pentanone	100	84.5		ug/L		85	60 - 150
Acetone	100	80.4		ug/L		80	39 - 156
Benzene	25.0	24.3		ug/L		97	65 - 135
Bromobenzene	25.0	23.2		ug/L		93	65 - 135
Bromochloromethane	25.0	27.6		ug/L		111	65 - 135
Bromodichloromethane	25.0	24.9		ug/L		100	65 - 135
Bromoform	25.0	21.4		ug/L		86	62 - 135
Bromomethane	25.0	31.2		ug/L		125	45 - 135
Carbon disulfide	25.0	23.5		ug/L		94	55 - 143
Carbon tetrachloride	25.0	24.1		ug/L		96	65 - 135
Chlorobenzene	25.0	23.8		ug/L		95	65 - 135
Chloroethane	25.0	25.5		ug/L		102	46 - 136
Chloroform	25.0	24.7		ug/L		99	65 - 135
Chloromethane	25.0	25.3		ug/L		101	34 - 145
cis-1,2-Dichloroethene	25.0	24.0		ug/L		96	65 - 135
cis-1,3-Dichloropropene	25.0	24.0		ug/L		96	65 - 135
Dibromochloromethane	25.0	24.9		ug/L		99	65 - 135
Dibromomethane	25.0	23.5		ug/L		94	65 - 135
Dichlorodifluoromethane	25.0	26.1		ug/L		105	43 - 142
Ethylbenzene	25.0	24.1		ug/L		96	65 - 135
Hexachlorobutadiene	25.0	23.2		ug/L		93	65 - 135
Isopropylbenzene	25.0	23.2		ug/L		93	65 - 135
Methylene Chloride	25.0	24.1		ug/L		96	54 - 141
Naphthalene	25.0	20.4		ug/L		82	42 - 135

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

Lab Sample ID: LCS 280-534267/5
Matrix: Water
Analysis Batch: 534267

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
n-Butylbenzene			25.0	22.6		ug/L		91	64 - 135		
N-Propylbenzene			25.0	23.2		ug/L		93	65 - 135		
sec-Butylbenzene			25.0	23.4		ug/L		93	64 - 135		
Styrene			25.0	24.7		ug/L		99	65 - 135		
tert-Butylbenzene			25.0	22.9		ug/L		92	65 - 135		
Tetrachloroethene			25.0	23.4		ug/L		94	65 - 135		
Toluene			25.0	24.4		ug/L		97	65 - 135		
trans-1,2-Dichloroethene			25.0	23.3		ug/L		93	65 - 135		
trans-1,3-Dichloropropene			25.0	25.0		ug/L		100	65 - 135		
Trichloroethene			25.0	22.5		ug/L		90	65 - 135		
Trichlorofluoromethane			25.0	23.4		ug/L		94	53 - 137		
Vinyl chloride			25.0	23.0		ug/L		92	40 - 137		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 127*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*
Dibromofluoromethane (Surr)	*101*		*77 - 120*
Toluene-d8 (Surr)	*98*		*80 - 125*

Lab Sample ID: LCSD 280-534267/6
Matrix: Water
Analysis Batch: 534267

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane			25.0	24.0		ug/L		96	65 - 135	1	20
1,1,1-Trichloroethane			25.0	24.5		ug/L		98	65 - 135	2	20
1,1,2,2-Tetrachloroethane			25.0	22.3		ug/L		89	58 - 135	1	20
1,1,2-Trichloroethane			25.0	24.4		ug/L		98	64 - 135	0	27
1,1-Dichloroethane			25.0	25.4		ug/L		101	65 - 135	1	21
1,1-Dichloroethene			25.0	24.2		ug/L		97	65 - 136	2	20
1,1-Dichloropropene			25.0	24.0		ug/L		96	65 - 135	2	21
1,2,3-Trichlorobenzene			25.0	23.0		ug/L		92	60 - 135	1	36
1,2,3-Trichloropropane			25.0	22.5		ug/L		90	65 - 135	0	23
1,2,4-Trichlorobenzene			25.0	22.5		ug/L		90	58 - 135	3	25
1,2,4-Trimethylbenzene			25.0	24.3		ug/L		97	65 - 135	3	20
1,2-Dichlorobenzene			25.0	23.9		ug/L		96	65 - 135	2	20
1,2-Dichloroethane			25.0	22.9		ug/L		92	65 - 135	1	20
1,2-Dichloropropane			25.0	25.1		ug/L		100	64 - 135	1	20
1,3,5-Trimethylbenzene			25.0	24.1		ug/L		96	65 - 135	2	20
1,3-Dichlorobenzene			25.0	23.8		ug/L		95	65 - 135	2	20
1,3-Dichloropropane			25.0	23.8		ug/L		95	64 - 135	0	20
1,4-Dichlorobenzene			25.0	23.0		ug/L		92	65 - 135	2	23
2,2-Dichloropropane			25.0	24.4		ug/L		98	65 - 135	2	20
2-Butanone (MEK)			100	86.0		ug/L		86	44 - 177	1	32
2-Chlorotoluene			25.0	23.8		ug/L		95	65 - 135	0	20
2-Hexanone			100	79.5		ug/L		80	57 - 139	1	25
4-Chlorotoluene			25.0	23.6		ug/L		94	65 - 135	0	20
4-Isopropyltoluene			25.0	24.3		ug/L		97	65 - 135	3	20

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

Lab Sample ID: LCSD 280-534267/6
Matrix: Water
Analysis Batch: 534267

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Methyl-2-pentanone			100	84.7		ug/L		85	60 - 150	0	22
Acetone			100	79.6		ug/L		80	39 - 156	1	23
Benzene			25.0	24.6		ug/L		99	65 - 135	1	20
Bromobenzene			25.0	23.8		ug/L		95	65 - 135	3	26
Bromochloromethane			25.0	27.8		ug/L		111	65 - 135	0	29
Bromodichloromethane			25.0	25.3		ug/L		101	65 - 135	1	20
Bromoform			25.0	21.4		ug/L		86	62 - 135	0	27
Bromomethane			25.0	29.8		ug/L		119	45 - 135	5	33
Carbon disulfide			25.0	23.9		ug/L		96	55 - 143	2	20
Carbon tetrachloride			25.0	24.5		ug/L		98	65 - 135	2	21
Chlorobenzene			25.0	23.9		ug/L		96	65 - 135	0	20
Chloroethane			25.0	26.9		ug/L		108	46 - 136	5	25
Chloroform			25.0	25.2		ug/L		101	65 - 135	2	20
Chloromethane			25.0	26.3		ug/L		105	34 - 145	4	24
cis-1,2-Dichloroethene			25.0	24.5		ug/L		98	65 - 135	2	20
cis-1,3-Dichloropropene			25.0	24.2		ug/L		97	65 - 135	1	26
Dibromochloromethane			25.0	25.3		ug/L		101	65 - 135	2	20
Dibromomethane			25.0	23.5		ug/L		94	65 - 135	0	26
Dichlorodifluoromethane			25.0	29.5		ug/L		118	43 - 142	12	30
Ethylbenzene			25.0	24.5		ug/L		98	65 - 135	2	20
Hexachlorobutadiene			25.0	24.0		ug/L		96	65 - 135	3	25
Isopropylbenzene			25.0	23.5		ug/L		94	65 - 135	1	20
Methylene Chloride			25.0	24.3		ug/L		97	54 - 141	1	26
Naphthalene			25.0	21.1		ug/L		84	42 - 135	3	23
n-Butylbenzene			25.0	23.3		ug/L		93	64 - 135	3	21
N-Propylbenzene			25.0	23.9		ug/L		96	65 - 135	3	20
sec-Butylbenzene			25.0	24.2		ug/L		97	64 - 135	3	21
Styrene			25.0	24.7		ug/L		99	65 - 135	0	26
tert-Butylbenzene			25.0	23.6		ug/L		94	65 - 135	3	21
Tetrachloroethene			25.0	24.1		ug/L		97	65 - 135	3	20
Toluene			25.0	24.8		ug/L		99	65 - 135	2	20
trans-1,2-Dichloroethene			25.0	24.0		ug/L		96	65 - 135	3	24
trans-1,3-Dichloropropene			25.0	25.1		ug/L		101	65 - 135	1	26
Trichloroethene			25.0	22.9		ug/L		92	65 - 135	2	20
Trichlorofluoromethane			25.0	26.1		ug/L		104	53 - 137	11	27
Vinyl chloride			25.0	24.6		ug/L		99	40 - 137	7	24

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 127*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*
Dibromofluoromethane (Surr)	*101*		*77 - 120*
Toluene-d8 (Surr)	*98*		*80 - 125*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Lab Sample ID: MB 280-533634/1-A
Matrix: Water
Analysis Batch: 533660

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 533634

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		04/23/21 10:55	04/23/21 16:21	1
1,2-Dibromoethane	ND		0.050		ug/L		04/23/21 10:55	04/23/21 16:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*115*		*70 - 130*	*04/23/21 10:55*	*04/23/21 16:21*	*1*

Lab Sample ID: LCS 280-533634/2-A
Matrix: Water
Analysis Batch: 533660

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 533634

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2-Dibromo-3-Chloropropane			0.250	0.248		ug/L		99	60 - 140		
1,2-Dibromoethane			0.250	0.268		ug/L		107	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dibromopropane	*109*		*70 - 130*

Lab Sample ID: LCSD 280-533634/3-A
Matrix: Water
Analysis Batch: 533660

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 533634

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.250	0.248		ug/L		99	60 - 140	0	10
1,2-Dibromoethane			0.250	0.291		ug/L		116	60 - 140	8	10

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dibromopropane	*112*		*70 - 130*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 280-533806/1-A
Matrix: Water
Analysis Batch: 534364

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 533806

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		500		ug/L		04/28/21 08:38	04/28/21 16:25	1
Iron	ND		30		ug/L		04/28/21 08:38	04/28/21 16:25	1
Magnesium	ND		200		ug/L		04/28/21 08:38	04/28/21 16:25	1
Manganese	ND		3.0		ug/L		04/28/21 08:38	04/28/21 16:25	1
Potassium	ND		500		ug/L		04/28/21 08:38	04/28/21 16:25	1
Sodium	ND		1000		ug/L		04/28/21 08:38	04/28/21 16:25	1

Lab Sample ID: LCS 280-533806/2-A
Matrix: Water
Analysis Batch: 534364

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 533806

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Calcium			50000	49200		ug/L		98	90 - 111		

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 280-533806/2-A
Matrix: Water
Analysis Batch: 534364

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 533806

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	10000	9900		ug/L		99	89 - 115
Magnesium	50000	49200		ug/L		98	90 - 113
Manganese	1000	1020		ug/L		102	90 - 110
Potassium	50000	50000		ug/L		100	89 - 114
Sodium	50000	45900		ug/L		92	90 - 115

Lab Sample ID: 280-147511-N-1-B MS
Matrix: Water
Analysis Batch: 534364

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 533806

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	28000	^2	50000	78600		ug/L		101	48 - 153
Iron	35		10000	10200		ug/L		102	52 - 155
Magnesium	12000		50000	63300		ug/L		102	62 - 146
Manganese	330		1000	1340		ug/L		101	79 - 121
Potassium	5400		50000	57100		ug/L		103	76 - 132
Sodium	42000		50000	91200		ug/L		98	70 - 203

Lab Sample ID: 280-147511-N-1-C MSD
Matrix: Water
Analysis Batch: 534364

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 533806

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium	28000	^2	50000	79800		ug/L		104	48 - 153	2	20
Iron	35		10000	10300		ug/L		103	52 - 155	1	20
Magnesium	12000		50000	64200		ug/L		104	62 - 146	1	20
Manganese	330		1000	1350		ug/L		101	79 - 121	0	20
Potassium	5400		50000	58200		ug/L		105	76 - 132	2	20
Sodium	42000		50000	92900		ug/L		102	70 - 203	2	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 480-578101/4
Matrix: Water
Analysis Batch: 578101

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			04/27/21 17:18	1
Sulfate	ND		1.0		mg/L			04/27/21 17:18	1

Lab Sample ID: LCS 480-578101/3
Matrix: Water
Analysis Batch: 578101

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	48.6		mg/L		97	90 - 110
Sulfate	50.0	48.6		mg/L		97	90 - 110

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 280-147596-2 MS
Matrix: Water
Analysis Batch: 578101

Client Sample ID: MW-19A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	24		50.0	71.7		mg/L		95	81 - 120
Sulfate	6.2		50.0	54.6		mg/L		97	80 - 120

Lab Sample ID: 280-147596-2 MSD
Matrix: Water
Analysis Batch: 578101

Client Sample ID: MW-19A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	24		50.0	71.8		mg/L		95	81 - 120	0	15
Sulfate	6.2		50.0	54.7		mg/L		97	80 - 120	0	15

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-534560/31
Matrix: Water
Analysis Batch: 534560

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.030		mg/L			04/30/21 14:22	1

Lab Sample ID: LCS 280-534560/29
Matrix: Water
Analysis Batch: 534560

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N	2.50	2.29		mg/L		92	90 - 110

Lab Sample ID: LCSD 280-534560/30
Matrix: Water
Analysis Batch: 534560

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N	2.50	2.52		mg/L		101	90 - 110	9	10

Lab Sample ID: 280-147896-A-8 MS
Matrix: Water
Analysis Batch: 534560

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N	ND		1.00	0.898		mg/L		90	90 - 110

Lab Sample ID: 280-147896-A-8 MSD
Matrix: Water
Analysis Batch: 534560

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N	ND		1.00	0.986		mg/L		99	90 - 110	9	10

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-534765/22
Matrix: Water
Analysis Batch: 534765

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate/Nitrite	ND		0.050		mg/L			05/03/21 18:25	1

Lab Sample ID: LCS 280-534765/21
Matrix: Water
Analysis Batch: 534765

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate/Nitrite			5.00	4.67		mg/L		93	90 - 110		

Lab Sample ID: 280-147596-2 MS
Matrix: Water
Analysis Batch: 534765

Client Sample ID: MW-19A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate/Nitrite	0.24		4.00	4.36		mg/L		103	90 - 110		

Lab Sample ID: 280-147596-2 MSD
Matrix: Water
Analysis Batch: 534765

Client Sample ID: MW-19A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate/Nitrite	0.24		4.00	4.32		mg/L		102	90 - 110	1	10

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 280-535153/4
Matrix: Water
Analysis Batch: 535153

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Average	ND		1.0		mg/L			05/05/21 17:09	1

Lab Sample ID: LCS 280-535153/3
Matrix: Water
Analysis Batch: 535153

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon - Average			25.0	25.1		mg/L		100	88 - 112		

Lab Sample ID: 280-147602-G-7 MS
Matrix: Water
Analysis Batch: 535153

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon - Average	9.2		25.0	34.5		mg/L		101	88 - 112		

Method: 9060 - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: 280-147602-G-7 MSD
Matrix: Water
Analysis Batch: 535153

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Average	9.2		25.0	34.3		mg/L		100	88 - 112	0	15

Method: SM 1030E (meq) - Cation Anion Balance

Lab Sample ID: MB 280-534856/1
Matrix: Water
Analysis Batch: 534856

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

Analyte	MB Result	MB Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	0.000				meq/L			05/04/21 13:02	1
Magnesium	0.000				meq/L			05/04/21 13:02	1
Potassium	0.000				meq/L			05/04/21 13:02	1
Sodium	0.000				meq/L			05/04/21 13:02	1
Ammonia as N	0.000				meq/L			05/04/21 13:02	1
Chloride	0.000				meq/L			05/04/21 13:02	1
Sulfate	0.000				meq/L			05/04/21 13:02	1
Alkalinity	0.000				mg/L			05/04/21 13:02	1
Bicarbonate Alkalinity	0.000				meq/L			05/04/21 13:02	1
Nitrate/Nitrite	0.000				meq/L			05/04/21 13:02	1
Iron	0.000				meq/L			05/04/21 13:02	1

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-533319/60
Matrix: Water
Analysis Batch: 533319

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity	ND		10		mg/L			04/20/21 23:45	1

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

Lab Sample ID: MB 280-533623/1
Matrix: Water
Analysis Batch: 533623

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10		mg/L			04/23/21 09:40	1

Lab Sample ID: LCS 280-533623/2
Matrix: Water
Analysis Batch: 533623

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			501	512		mg/L		102	88 - 114		

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

Lab Sample ID: LCSD 280-533623/3
Matrix: Water
Analysis Batch: 533623

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Dissolved Solids			501	502		mg/L		100	88 - 114	2	20

Lab Sample ID: 280-147648-A-29 DU
Matrix: Water
Analysis Batch: 533623

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	140			144		mg/L				4	10

QC Association Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-147596-1

GC/MS VOA

Analysis Batch: 533957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147596-1	TB2	Total/NA	Water	8260B	
MB 280-533957/9	Method Blank	Total/NA	Water	8260B	
LCS 280-533957/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-533957/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 534267

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147596-2	MW-19A	Total/NA	Water	8260B	
MB 280-534267/10	Method Blank	Total/NA	Water	8260B	
LCS 280-534267/5	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-534267/6	Lab Control Sample Dup	Total/NA	Water	8260B	

GC Semi VOA

Prep Batch: 533634

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147596-1	TB2	Total/NA	Water	8011	
280-147596-2	MW-19A	Total/NA	Water	8011	
MB 280-533634/1-A	Method Blank	Total/NA	Water	8011	
LCS 280-533634/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 280-533634/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 533660

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147596-1	TB2	Total/NA	Water	8011	533634
280-147596-2	MW-19A	Total/NA	Water	8011	533634
MB 280-533634/1-A	Method Blank	Total/NA	Water	8011	533634
LCS 280-533634/2-A	Lab Control Sample	Total/NA	Water	8011	533634
LCSD 280-533634/3-A	Lab Control Sample Dup	Total/NA	Water	8011	533634

Metals

Prep Batch: 533806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147596-2	MW-19A	Dissolved	Water	3005A	
MB 280-533806/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-533806/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-147511-N-1-B MS	Matrix Spike	Dissolved	Water	3005A	
280-147511-N-1-C MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	

Analysis Batch: 534364

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147596-2	MW-19A	Dissolved	Water	6010B	533806
MB 280-533806/1-A	Method Blank	Total Recoverable	Water	6010B	533806
LCS 280-533806/2-A	Lab Control Sample	Total Recoverable	Water	6010B	533806
280-147511-N-1-B MS	Matrix Spike	Dissolved	Water	6010B	533806
280-147511-N-1-C MSD	Matrix Spike Duplicate	Dissolved	Water	6010B	533806

General Chemistry

Analysis Batch: 533319

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147596-2	MW-19A	Total/NA	Water	SM 2320B	
MB 280-533319/60	Method Blank	Total/NA	Water	SM 2320B	

Analysis Batch: 533623

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147596-2	MW-19A	Total/NA	Water	SM 2540C	
MB 280-533623/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-533623/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 280-533623/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
280-147648-A-29 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 534560

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147596-2	MW-19A	Total/NA	Water	350.1	
MB 280-534560/31	Method Blank	Total/NA	Water	350.1	
LCS 280-534560/29	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-534560/30	Lab Control Sample Dup	Total/NA	Water	350.1	
280-147896-A-8 MS	Matrix Spike	Total/NA	Water	350.1	
280-147896-A-8 MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	

Analysis Batch: 534765

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147596-2	MW-19A	Total/NA	Water	353.2	
MB 280-534765/22	Method Blank	Total/NA	Water	353.2	
LCS 280-534765/21	Lab Control Sample	Total/NA	Water	353.2	
280-147596-2 MS	MW-19A	Total/NA	Water	353.2	
280-147596-2 MSD	MW-19A	Total/NA	Water	353.2	

Analysis Batch: 534856

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147596-2	MW-19A	Total/NA	Water	SM 1030E	
280-147596-2	MW-19A	Total/NA	Water	SM 1030E (meq)	
MB 280-534856/1	Method Blank	Total/NA	Water	SM 1030E (meq)	

Analysis Batch: 535153

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147596-2	MW-19A	Total/NA	Water	9060	
MB 280-535153/4	Method Blank	Total/NA	Water	9060	
LCS 280-535153/3	Lab Control Sample	Total/NA	Water	9060	
280-147602-G-7 MS	Matrix Spike	Total/NA	Water	9060	
280-147602-G-7 MSD	Matrix Spike Duplicate	Total/NA	Water	9060	

Analysis Batch: 578101

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147596-2	MW-19A	Total/NA	Water	300.0	
MB 480-578101/4	Method Blank	Total/NA	Water	300.0	
LCS 480-578101/3	Lab Control Sample	Total/NA	Water	300.0	
280-147596-2 MS	MW-19A	Total/NA	Water	300.0	
280-147596-2 MSD	MW-19A	Total/NA	Water	300.0	

Client: Waste Management
Job ID: 280-147596-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Field Service / Mobile Lab

Analysis Batch: 533841

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147596-2	MW-19A	Total/NA	Water	Field Sampling	

Lab Chronicle

Client: Waste Management
Job ID: 280-147596-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Client Sample ID: TB2
Lab Sample ID: 280-147596-1
Date Collected: 04/15/21 07:00
Matrix: Water
Date Received: 04/17/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	533957	04/27/21 02:05	PP	TAL DEN
Total/NA	Prep	8011			35.2 mL	35 mL	533634	04/23/21 10:55	JSM	TAL DEN
Total/NA	Analysis	8011		1			533660	04/23/21 23:09	JSM	TAL DEN

Client Sample ID: MW-19A
Lab Sample ID: 280-147596-2
Date Collected: 04/16/21 12:15
Matrix: Water
Date Received: 04/17/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	534267	04/29/21 12:58	TAW	TAL DEN
Total/NA	Prep	8011			35 mL	35 mL	533634	04/23/21 10:55	JSM	TAL DEN
Total/NA	Analysis	8011		1			533660	04/23/21 23:30	JSM	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	533806	04/28/21 08:38	MAB	TAL DEN
Dissolved	Analysis	6010B		1			534364	04/28/21 17:20	LMT	TAL DEN
Total/NA	Analysis	300.0		1			578101	04/27/21 19:06	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	534560	04/30/21 14:56	QJB	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	534765	05/03/21 19:04	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	535153	05/05/21 17:49	RAF	TAL DEN
Total/NA	Analysis	SM 1030E		1			534856	05/04/21 13:02	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			534856	05/04/21 13:02	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			533319	04/21/21 00:17	QJB	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	533623	04/23/21 09:40	JMH	TAL DEN
Total/NA	Analysis	Field Sampling		1			533841	04/16/21 13:15	A1S	TAL DEN

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL DEN = Eurofins TestAmerica, Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

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

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: I. Hultquist	Lab PM: Sara, Betsy A	Carrier Tracking No(s):	COC No: 280-16508-865.1
Client Contact:	Phone: 503-716-6320	E-Mail: Betsy.Sara@Eurofinset.com		Page: Page 1 of 1
Company: Waste Management				Job #:
Address: 13469 SW Highway 18	Due Date Requested:			
City: McMinnville	TAT Requested (days):			
State, Zip: OR, 97128				
Phone:	PO #:			
Email:	WO #:			
Project Name: 1003|Riverbend Landfill SCS Engineers Event Desc: Semiannual Detection Wells - Apr Oct	Project #: 28002786			
Site: Oregon	SSOW#:			

Analysis Requested

Preservation Codes:

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	TDS/Alk	Dissolved Metals	Ammonia/TOC/NO3+NO2	8260B	8011	Cation/Anion Balance	Chloride/Sulfate (TA Buffalo)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	S	A	R		N		
TB2	4/15/2021	0700	G	W						X				2	
MW-19A	4/16/2021	1215	G	W	X		X	X	X	X	X	X	X	10	

280-147596 Chain of Custody

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

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

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

Special Instructions/QC Requirements:

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

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
		4/16/2021 1630	SCS		4/17/21 0945	EADEN
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 12,1.7 IR GUN#24

12/2/2021

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill
SITE ADDRESS: McMinnville , Oregon
WELL ID: MW-19A
BLIND ID:
DUP ID: NA

WIND FROM: N | (NE) | E | SE | S | SW | W | NW
WEATHER: (SUNNY) | CLOUDY | RAIN | ?
(LIGHT) | MEDIUM | HEAVY
TEMPERATURE: (F) 65.0 °C
[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW	[Water Column x Gal/ft]	Volume (gal)
4/16/21	10:53	32.00	.	8.81	.	23.19	X 1	3.77
/ /	:	.	.	.	.		X 3	11.31

Gal/ft = (dia./2)^2 x 0.163 | 1" = 0.041 | (2") = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	[√ if used]
VOA Glass	4/16/21	12:15	F	3 (40 ml)	(HCl)	(YES)	NO		
VOA Glass	4/16/21	12:15	F	3 (40 ml)	($Na_2S_2O_3$)	(YES)	NO		
Amber Glass	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/16/21	12:15	F	2 (250, 500, 1L)	None	(YES)	NO	NA	
Yellow Glass	4/16/21	12:15	F	1 250, (500) 1L	(H_2SO_4)	(YES)	NO		
Red Total Poly	/ /	:		125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/16/21	12:15	F	1 250, (500) 1L	(HNO_3)	(YES)	(YES)		
White Poly	/ /	:		250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:		100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 | 10 | Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011)
AMBER - Glass	(8080) (8150) (TOX) OR [X] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD) OR [ ] WA [ ]
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA

Purge Start Time: 10:55

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Pump/Bailer Inlet Depth: Diss O_2 (mg/l)	Water Quality
0	F(1056)	0.00	7.35	32.3	302.4	12.1	9.13	4.78	Clear / colorless
1	F(1120)	3.77	7.28	-9.9	326.4	11.7	9.73	1.27	Clear / colorless
2	F(1143)	7.54	7.38	-41.0	315.0	11.9	9.81	1.16	Clear / colorless
3	F(1206)	11.31	7.40	-50.9	311.1	11.9	9.83	1.31	Clear / colorless
4	F(1208)	11.71	7.43	-52.8	311.2	11.9	9.83	1.30	Clear / colorless
5	F(1210)	12.01	7.44	-53.4	311.3	11.8	9.83	1.22	Clear / colorless
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Standard purge method (7/5/25ml) ~750 ml/min

SAMPLER: I. Hultquist (PRINTED NAME) (SIGNATURE)

Do Not Lift Using This Tag

280-147596 Waybill

ORIGIN ID:SAVA (503) 534-3783
TIFFANY ANDREWS
SCS ENGINEERS
15940 SW 72ND AVE

PORTLAND, OR 97224
UNITED STATES US

SHIP DATE: 02APR21
ACTWGT: 15.00 LB MAN
CAD: 0886563/CAFE3409
DIMS: 24x15x15 IN

TO

EUROFINS TESTAMERICA DENVER
4955 YARROW STREET

ARVADA CO 800024517
(303) 736-0100
REF: S280 - 107585
RMA:

FedEx Express

FedEx
TRK# 0221 9508 8924 2486

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO LAAA

80002
CO-US DEN

ORIGIN ID:SAVA (503) 724-0112
TIFFANY ANDREWS
SCS ENGINEERS
15940 SW 72ND AVE

PORTLAND, OR 97224
UNITED STATES US

SHIP DATE: 02APR21
ACTWGT: 15.00 LB MAN
CAD: 0886563/CAFE3409
DIMS: 24x15x15 IN

TO

EUROFINS TESTAMERICA DENVER
4955 YARROW STREET

ARVADA CO 800024517
(303) 736-0100
REF: S280 - 107587
RMA:

FedEx Expres

FedEx
TRK# 0221 9508 8924 2111

SATURDAY 12:00
PRIORITY OVERNIGH

XO LAAA

8000
CO-US DE

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Sara, Betsy A	Carrier Tracking No(s):	COC No: 280-564250.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Betsy.Sara@Eurofinset.com	State of Origin: Oregon	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Oregon		Job #: 280-147596-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 5/6/2021			
City: Amherst	TAT Requested (days):			
State, Zip: NY, 14228-2298				
Phone: 716-691-2600(Tel) 716-691-7991(Fax)	PO #:			
Email:	WO #:			
Project Name: 1003|Riverbend Landfill SCS Engineers	Project #: 28002786			
Site: 1003|Riverbend Landfill	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300.0_28D/ 300.0, Sulfate and Chloride (TA Buffalo)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-19A (280-147596-2)	4/16/21	12:15 Pacific		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	4/19/21 1525		[signature]	4/21/21 1045	TA
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.9#1 ICE

Ver: 11/01/2020

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-147596-1

Login Number: 147596
List Number: 1
Creator: O'Hara, Jake F

List Source: Eurofins TestAmerica, Denver

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	
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: 280-147596-1

Login Number: 147596
List Number: 2
Creator: Kolb, Chris M

List Source: Eurofins TestAmerica, Buffalo
List Creation: 04/22/21 02:59 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 IR GUN #1 ICE
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

eurofins | Environment Testing America



ANALYTICAL REPORT

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

Laboratory Job ID: 280-147600-1
Client Project/Site: 1003|Riverbend Landfill - Groundwater
Sampling Event: Downgradient Det. Wells - Apr

For:
Waste Management
13469 SW Highway 18
McMinnville, Oregon 97128

Attn: Mr. Jim Denson

Betsy Sara

Authorized for release by:
12/2/2021 9:07:11 AM

Betsy Sara, Project Manager II
(303)736-0189
Betsy.Sara@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

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Definitions/Glossary

Client: Waste Management
Job ID: 280-147600-1
Project/Site: 1003|Riverbend Landfill - Groundwater

Qualifiers

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	Presumptive evidence of material.
T	Result is a tentatively identified compound (TIC) and an estimated value.

Glossary

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

Job ID: 280-147600-1

Laboratory: Eurofins TestAmerica, Denver

Narrative

CASE NARRATIVE

Client: Waste Management

Project: 1003|Riverbend Landfill - Groundwater

Report Number: 280-147600-1

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

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

Sample Receiving

The samples were received on 4/17/2021 9:45 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.6º C and 2.1º C.

Holding Times

All holding times were met.

Method Blanks

All Method Blanks met method criteria.

Laboratory Control Samples (LCS)

All Laboratory Control Sample recoveries were within control limits.

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

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) for Method 8011, however, an LCS/LCSD pair was analyzed to demonstrate method precision and accuracy.

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

General Comments

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.

Detection Summary

Client: Waste Management
Job ID: 280-147600-1
Project/Site: 1003|Riverbend Landfill - Groundwater

Client Sample ID: TB2 — Lab Sample ID: 280-147600-1

No Detections.

Client Sample ID: MW-5A — Lab Sample ID: 280-147600-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	5.6		1.0		ug/L	1		8260B	Total/NA
Benzene	1.0		1.0		ug/L	1		8260B	Total/NA
Chlorobenzene	3.8		1.0		ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	1.3		1.0		ug/L	1		8260B	Total/NA
Field pH	5.76				SU	1		Field Sampling	Total/NA
Field Conductivity	1193				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	14.6				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	0.52				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	-10.1				millivolts	1		Field Sampling	Total/NA

Client Sample ID: MW-5B — Lab Sample ID: 280-147600-3

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Field pH	7.07				SU	1		Field Sampling	Total/NA
Field Conductivity	626				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	15.2				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	1.91				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	-54.2				millivolts	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Waste Management
Job ID: 280-147600-1
Project/Site: 1003|Riverbend Landfill - Groundwater

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-147600-1	TB2	Water	04/15/21 07:00	04/17/21 09:45
280-147600-2	MW-5A	Water	04/15/21 14:51	04/17/21 09:45
280-147600-3	MW-5B	Water	04/15/21 15:41	04/17/21 09:45

Method Summary

Client: Waste Management
Job ID: 280-147600-1
Project/Site: 1003|Riverbend Landfill - Groundwater

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL DEN
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	TAL DEN
Field Sampling	Field Sampling	EPA	TAL DEN
5030B	Purge and Trap	SW846	TAL DEN
8011	Microextraction	SW846	TAL DEN

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL DEN = Eurofins TestAmerica, Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Groundwater

Job ID: 280-147600-1

Client Sample ID: TB2
Date Collected: 04/15/21 07:00
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147600-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/28/21 00:29	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/28/21 00:29	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/28/21 00:29	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/28/21 00:29	1
1,1-Dichloroethane	ND		1.0		ug/L			04/28/21 00:29	1
1,1-Dichloroethene	ND		1.0		ug/L			04/28/21 00:29	1
1,1-Dichloropropene	ND		1.0		ug/L			04/28/21 00:29	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/28/21 00:29	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/28/21 00:29	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/28/21 00:29	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/28/21 00:29	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/28/21 00:29	1
1,2-Dichloroethane	ND		1.0		ug/L			04/28/21 00:29	1
1,2-Dichloropropane	ND		1.0		ug/L			04/28/21 00:29	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/28/21 00:29	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/28/21 00:29	1
1,3-Dichloropropane	ND		1.0		ug/L			04/28/21 00:29	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/28/21 00:29	1
2,2-Dichloropropane	ND		5.0		ug/L			04/28/21 00:29	1
2-Butanone (MEK)	ND		6.0		ug/L			04/28/21 00:29	1
2-Chlorotoluene	ND		1.0		ug/L			04/28/21 00:29	1
2-Hexanone	ND		5.0		ug/L			04/28/21 00:29	1
4-Chlorotoluene	ND		1.0		ug/L			04/28/21 00:29	1
4-Isopropyltoluene	ND		1.0		ug/L			04/28/21 00:29	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/28/21 00:29	1
Acetone	ND		10		ug/L			04/28/21 00:29	1
Benzene	ND		1.0		ug/L			04/28/21 00:29	1
Bromobenzene	ND		1.0		ug/L			04/28/21 00:29	1
Bromochloromethane	ND		1.0		ug/L			04/28/21 00:29	1
Bromodichloromethane	ND		1.0		ug/L			04/28/21 00:29	1
Bromoform	ND		1.0		ug/L			04/28/21 00:29	1
Bromomethane	ND		2.0		ug/L			04/28/21 00:29	1
Carbon disulfide	ND		2.0		ug/L			04/28/21 00:29	1
Carbon tetrachloride	ND		1.0		ug/L			04/28/21 00:29	1
Chlorobenzene	ND		1.0		ug/L			04/28/21 00:29	1
Chloroethane	ND		2.0		ug/L			04/28/21 00:29	1
Chloroform	ND		1.0		ug/L			04/28/21 00:29	1
Chloromethane	ND		2.0		ug/L			04/28/21 00:29	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/28/21 00:29	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/28/21 00:29	1
Dibromochloromethane	ND		1.0		ug/L			04/28/21 00:29	1
Dibromomethane	ND		1.0		ug/L			04/28/21 00:29	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/28/21 00:29	1
Ethylbenzene	ND		1.0		ug/L			04/28/21 00:29	1
Hexachlorobutadiene	ND		1.0		ug/L			04/28/21 00:29	1
Isopropylbenzene	ND		1.0		ug/L			04/28/21 00:29	1
Methylene Chloride	ND		5.0		ug/L			04/28/21 00:29	1
Naphthalene	ND		1.0		ug/L			04/28/21 00:29	1
n-Butylbenzene	ND		1.0		ug/L			04/28/21 00:29	1

Client Sample ID: TB2

Date Collected: 04/15/21 07:00
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147600-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		1.0		ug/L			04/28/21 00:29	1
sec-Butylbenzene	ND		1.0		ug/L			04/28/21 00:29	1
Styrene	ND		1.0		ug/L			04/28/21 00:29	1
tert-Butylbenzene	ND		1.0		ug/L			04/28/21 00:29	1
Tetrachloroethene	ND		1.0		ug/L			04/28/21 00:29	1
Toluene	ND		1.0		ug/L			04/28/21 00:29	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/28/21 00:29	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/28/21 00:29	1
Trichloroethene	ND		1.0		ug/L			04/28/21 00:29	1
Trichlorofluoromethane	ND		2.0		ug/L			04/28/21 00:29	1
Vinyl chloride	ND		1.0		ug/L			04/28/21 00:29	1
Xylenes (total)	ND		2.0		ug/L			04/28/21 00:29	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/28/21 00:29*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 127*		*04/28/21 00:29*	*1*
4-Bromofluorobenzene (Surr)	*99*		*78 - 120*		*04/28/21 00:29*	*1*
Dibromofluoromethane (Surr)	*101*		*77 - 120*		*04/28/21 00:29*	*1*
Toluene-d8 (Surr)	*99*		*80 - 125*		*04/28/21 00:29*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		04/23/21 10:55	04/23/21 23:52	1
1,2-Dibromoethane	ND		0.050		ug/L		04/23/21 10:55	04/23/21 23:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*113*		*70 - 130*	*04/23/21 10:55*	*04/23/21 23:52*	*1*

Client Sample ID: MW-5A

Date Collected: 04/15/21 14:51
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147600-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/28/21 02:00	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/28/21 02:00	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/28/21 02:00	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/28/21 02:00	1
1,1-Dichloroethane	ND		1.0		ug/L			04/28/21 02:00	1
1,1-Dichloroethene	ND		1.0		ug/L			04/28/21 02:00	1
1,1-Dichloropropene	ND		1.0		ug/L			04/28/21 02:00	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/28/21 02:00	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/28/21 02:00	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/28/21 02:00	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/28/21 02:00	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/28/21 02:00	1
1,2-Dichloroethane	ND		1.0		ug/L			04/28/21 02:00	1
1,2-Dichloropropane	ND		1.0		ug/L			04/28/21 02:00	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/28/21 02:00	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Groundwater

Job ID: 280-147600-1

Client Sample ID: MW-5A
Date Collected: 04/15/21 14:51
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147600-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0		ug/L			04/28/21 02:00	1
1,3-Dichloropropane	ND		1.0		ug/L			04/28/21 02:00	1
1,4-Dichlorobenzene	**5.6**		1.0		ug/L			04/28/21 02:00	1
2,2-Dichloropropane	ND		5.0		ug/L			04/28/21 02:00	1
2-Butanone (MEK)	ND		6.0		ug/L			04/28/21 02:00	1
2-Chlorotoluene	ND		1.0		ug/L			04/28/21 02:00	1
2-Hexanone	ND		5.0		ug/L			04/28/21 02:00	1
4-Chlorotoluene	ND		1.0		ug/L			04/28/21 02:00	1
4-Isopropyltoluene	ND		1.0		ug/L			04/28/21 02:00	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/28/21 02:00	1
Acetone	ND		10		ug/L			04/28/21 02:00	1
Benzene	**1.0**		1.0		ug/L			04/28/21 02:00	1
Bromobenzene	ND		1.0		ug/L			04/28/21 02:00	1
Bromochloromethane	ND		1.0		ug/L			04/28/21 02:00	1
Bromodichloromethane	ND		1.0		ug/L			04/28/21 02:00	1
Bromoform	ND		1.0		ug/L			04/28/21 02:00	1
Bromomethane	ND		2.0		ug/L			04/28/21 02:00	1
Carbon disulfide	ND		2.0		ug/L			04/28/21 02:00	1
Carbon tetrachloride	ND		1.0		ug/L			04/28/21 02:00	1
Chlorobenzene	**3.8**		1.0		ug/L			04/28/21 02:00	1
Chloroethane	ND		2.0		ug/L			04/28/21 02:00	1
Chloroform	ND		1.0		ug/L			04/28/21 02:00	1
Chloromethane	ND		2.0		ug/L			04/28/21 02:00	1
cis-1,2-Dichloroethene	**1.3**		1.0		ug/L			04/28/21 02:00	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/28/21 02:00	1
Dibromochloromethane	ND		1.0		ug/L			04/28/21 02:00	1
Dibromomethane	ND		1.0		ug/L			04/28/21 02:00	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/28/21 02:00	1
Ethylbenzene	ND		1.0		ug/L			04/28/21 02:00	1
Hexachlorobutadiene	ND		1.0		ug/L			04/28/21 02:00	1
Isopropylbenzene	ND		1.0		ug/L			04/28/21 02:00	1
Methylene Chloride	ND		5.0		ug/L			04/28/21 02:00	1
Naphthalene	ND		1.0		ug/L			04/28/21 02:00	1
n-Butylbenzene	ND		1.0		ug/L			04/28/21 02:00	1
N-Propylbenzene	ND		1.0		ug/L			04/28/21 02:00	1
sec-Butylbenzene	ND		1.0		ug/L			04/28/21 02:00	1
Styrene	ND		1.0		ug/L			04/28/21 02:00	1
tert-Butylbenzene	ND		1.0		ug/L			04/28/21 02:00	1
Tetrachloroethene	ND		1.0		ug/L			04/28/21 02:00	1
Toluene	ND		1.0		ug/L			04/28/21 02:00	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/28/21 02:00	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/28/21 02:00	1
Trichloroethene	ND		1.0		ug/L			04/28/21 02:00	1
Trichlorofluoromethane	ND		2.0		ug/L			04/28/21 02:00	1
Vinyl chloride	ND		1.0		ug/L			04/28/21 02:00	1
Xylenes (total)	ND		2.0		ug/L			04/28/21 02:00	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Silanol, trimethyl-	*6.4*	*T J N*	*ug/L*		*4.68*	*1066-40-6*		*04/28/21 02:00*	*1*

Client Sample ID: MW-5A
Lab Sample ID: 280-147600-2
Date Collected: 04/15/21 14:51
Matrix: Water
Date Received: 04/17/21 09:45

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 127*		*04/28/21 02:00*	*1*
4-Bromofluorobenzene (Surr)	*100*		*78 - 120*		*04/28/21 02:00*	*1*
Dibromofluoromethane (Surr)	*103*		*77 - 120*		*04/28/21 02:00*	*1*
Toluene-d8 (Surr)	*99*		*80 - 125*		*04/28/21 02:00*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		04/23/21 10:55	04/24/21 00:13	1
1,2-Dibromoethane	ND		0.050		ug/L		04/23/21 10:55	04/24/21 00:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*110*		*70 - 130*	*04/23/21 10:55*	*04/24/21 00:13*	*1*

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**5.76**				SU			04/15/21 15:51	1
Field Conductivity	**1193**				umhos/cm			04/15/21 15:51	1
Field Temperature	**14.6**				Degrees C			04/15/21 15:51	1
Field Dissolved Oxygen	**0.52**				mg/L			04/15/21 15:51	1
Field EH/ORP	**-10.1**				millivolts			04/15/21 15:51	1

Client Sample ID: MW-5B
Lab Sample ID: 280-147600-3
Date Collected: 04/15/21 15:41
Matrix: Water
Date Received: 04/17/21 09:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/28/21 02:23	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/28/21 02:23	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/28/21 02:23	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/28/21 02:23	1
1,1-Dichloroethane	ND		1.0		ug/L			04/28/21 02:23	1
1,1-Dichloroethene	ND		1.0		ug/L			04/28/21 02:23	1
1,1-Dichloropropene	ND		1.0		ug/L			04/28/21 02:23	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/28/21 02:23	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/28/21 02:23	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/28/21 02:23	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/28/21 02:23	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/28/21 02:23	1
1,2-Dichloroethane	ND		1.0		ug/L			04/28/21 02:23	1
1,2-Dichloropropane	ND		1.0		ug/L			04/28/21 02:23	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/28/21 02:23	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/28/21 02:23	1
1,3-Dichloropropane	ND		1.0		ug/L			04/28/21 02:23	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/28/21 02:23	1
2,2-Dichloropropane	ND		5.0		ug/L			04/28/21 02:23	1
2-Butanone (MEK)	ND		6.0		ug/L			04/28/21 02:23	1
2-Chlorotoluene	ND		1.0		ug/L			04/28/21 02:23	1
2-Hexanone	ND		5.0		ug/L			04/28/21 02:23	1
4-Chlorotoluene	ND		1.0		ug/L			04/28/21 02:23	1
4-Isopropyltoluene	ND		1.0		ug/L			04/28/21 02:23	1

Client Sample ID: MW-5B

Date Collected: 04/15/21 15:41
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147600-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone	ND		5.0		ug/L			04/28/21 02:23	1
Acetone	ND		10		ug/L			04/28/21 02:23	1
Benzene	ND		1.0		ug/L			04/28/21 02:23	1
Bromobenzene	ND		1.0		ug/L			04/28/21 02:23	1
Bromochloromethane	ND		1.0		ug/L			04/28/21 02:23	1
Bromodichloromethane	ND		1.0		ug/L			04/28/21 02:23	1
Bromoform	ND		1.0		ug/L			04/28/21 02:23	1
Bromomethane	ND		2.0		ug/L			04/28/21 02:23	1
Carbon disulfide	ND		2.0		ug/L			04/28/21 02:23	1
Carbon tetrachloride	ND		1.0		ug/L			04/28/21 02:23	1
Chlorobenzene	ND		1.0		ug/L			04/28/21 02:23	1
Chloroethane	ND		2.0		ug/L			04/28/21 02:23	1
Chloroform	ND		1.0		ug/L			04/28/21 02:23	1
Chloromethane	ND		2.0		ug/L			04/28/21 02:23	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/28/21 02:23	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/28/21 02:23	1
Dibromochloromethane	ND		1.0		ug/L			04/28/21 02:23	1
Dibromomethane	ND		1.0		ug/L			04/28/21 02:23	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/28/21 02:23	1
Ethylbenzene	ND		1.0		ug/L			04/28/21 02:23	1
Hexachlorobutadiene	ND		1.0		ug/L			04/28/21 02:23	1
Isopropylbenzene	ND		1.0		ug/L			04/28/21 02:23	1
Methylene Chloride	ND		5.0		ug/L			04/28/21 02:23	1
Naphthalene	ND		1.0		ug/L			04/28/21 02:23	1
n-Butylbenzene	ND		1.0		ug/L			04/28/21 02:23	1
N-Propylbenzene	ND		1.0		ug/L			04/28/21 02:23	1
sec-Butylbenzene	ND		1.0		ug/L			04/28/21 02:23	1
Styrene	ND		1.0		ug/L			04/28/21 02:23	1
tert-Butylbenzene	ND		1.0		ug/L			04/28/21 02:23	1
Tetrachloroethene	ND		1.0		ug/L			04/28/21 02:23	1
Toluene	ND		1.0		ug/L			04/28/21 02:23	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/28/21 02:23	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/28/21 02:23	1
Trichloroethene	ND		1.0		ug/L			04/28/21 02:23	1
Trichlorofluoromethane	ND		2.0		ug/L			04/28/21 02:23	1
Vinyl chloride	ND		1.0		ug/L			04/28/21 02:23	1
Xylenes (total)	ND		2.0		ug/L			04/28/21 02:23	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/28/21 02:23*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 127*		*04/28/21 02:23*	*1*
4-Bromofluorobenzene (Surr)	*101*		*78 - 120*		*04/28/21 02:23*	*1*
Dibromofluoromethane (Surr)	*101*		*77 - 120*		*04/28/21 02:23*	*1*
Toluene-d8 (Surr)	*99*		*80 - 125*		*04/28/21 02:23*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		04/23/21 10:55	04/24/21 00:35	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Groundwater

Job ID: 280-147600-1

Client Sample ID: MW-5B

Date Collected: 04/15/21 15:41
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147600-3

Matrix: Water

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.050		ug/L		04/23/21 10:55	04/24/21 00:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*109*		*70 - 130*	*04/23/21 10:55*	*04/24/21 00:35*	*1*

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**7.07**				SU			04/15/21 16:41	1
Field Conductivity	**626**				umhos/cm			04/15/21 16:41	1
Field Temperature	**15.2**				Degrees C			04/15/21 16:41	1
Field Dissolved Oxygen	**1.91**				mg/L			04/15/21 16:41	1
Field EH/ORP	**-54.2**				millivolts			04/15/21 16:41	1

Surrogate Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Groundwater

Job ID: 280-147600-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-127)	(78-120)	(77-120)	(80-125)
280-146973-E-3 MSD	Matrix Spike Duplicate	101	98	104	99
280-146973-G-3 MS	Matrix Spike	101	101	103	100
280-147600-1	TB2	100	99	101	99
280-147600-2	MW-5A	106	100	103	99
280-147600-3	MW-5B	104	101	101	99
LCS 280-534087/5	Lab Control Sample	100	101	102	100
LCSD 280-534087/6	Lab Control Sample Dup	101	100	103	101
MB 280-534087/10	Method Blank	103	100	101	100

Surrogate Legend

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

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)
		12DBP1
Lab Sample ID	Client Sample ID	(70-130)
280-147600-1	TB2	113
280-147600-2	MW-5A	110
280-147600-3	MW-5B	109
LCS 280-533634/2-A	Lab Control Sample	109
LCSD 280-533634/3-A	Lab Control Sample Dup	112
MB 280-533634/1-A	Method Blank	115

Surrogate Legend

12DBP = 1,2-Dibromopropane

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

Lab Sample ID: MB 280-534087/10
Matrix: Water
Analysis Batch: 534087

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/27/21 18:26	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/27/21 18:26	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/27/21 18:26	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/27/21 18:26	1
1,1-Dichloroethane	ND		1.0		ug/L			04/27/21 18:26	1
1,1-Dichloroethene	ND		1.0		ug/L			04/27/21 18:26	1
1,1-Dichloropropene	ND		1.0		ug/L			04/27/21 18:26	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/27/21 18:26	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/27/21 18:26	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/27/21 18:26	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/27/21 18:26	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/27/21 18:26	1
1,2-Dichloroethane	ND		1.0		ug/L			04/27/21 18:26	1
1,2-Dichloropropane	ND		1.0		ug/L			04/27/21 18:26	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/27/21 18:26	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/27/21 18:26	1
1,3-Dichloropropane	ND		1.0		ug/L			04/27/21 18:26	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/27/21 18:26	1
2,2-Dichloropropane	ND		5.0		ug/L			04/27/21 18:26	1
2-Butanone (MEK)	ND		6.0		ug/L			04/27/21 18:26	1
2-Chlorotoluene	ND		1.0		ug/L			04/27/21 18:26	1
2-Hexanone	ND		5.0		ug/L			04/27/21 18:26	1
4-Chlorotoluene	ND		1.0		ug/L			04/27/21 18:26	1
4-Isopropyltoluene	ND		1.0		ug/L			04/27/21 18:26	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/27/21 18:26	1
Acetone	ND		10		ug/L			04/27/21 18:26	1
Benzene	ND		1.0		ug/L			04/27/21 18:26	1
Bromobenzene	ND		1.0		ug/L			04/27/21 18:26	1
Bromochloromethane	ND		1.0		ug/L			04/27/21 18:26	1
Bromodichloromethane	ND		1.0		ug/L			04/27/21 18:26	1
Bromoform	ND		1.0		ug/L			04/27/21 18:26	1
Bromomethane	ND		2.0		ug/L			04/27/21 18:26	1
Carbon disulfide	ND		2.0		ug/L			04/27/21 18:26	1
Carbon tetrachloride	ND		1.0		ug/L			04/27/21 18:26	1
Chlorobenzene	ND		1.0		ug/L			04/27/21 18:26	1
Chloroethane	ND		2.0		ug/L			04/27/21 18:26	1
Chloroform	ND		1.0		ug/L			04/27/21 18:26	1
Chloromethane	ND		2.0		ug/L			04/27/21 18:26	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/27/21 18:26	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/27/21 18:26	1
Dibromochloromethane	ND		1.0		ug/L			04/27/21 18:26	1
Dibromomethane	ND		1.0		ug/L			04/27/21 18:26	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/27/21 18:26	1
Ethylbenzene	ND		1.0		ug/L			04/27/21 18:26	1
Hexachlorobutadiene	ND		1.0		ug/L			04/27/21 18:26	1
Isopropylbenzene	ND		1.0		ug/L			04/27/21 18:26	1
Methylene Chloride	ND		5.0		ug/L			04/27/21 18:26	1
Naphthalene	ND		1.0		ug/L			04/27/21 18:26	1

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

Lab Sample ID: MB 280-534087/10
Matrix: Water
Analysis Batch: 534087

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		1.0		ug/L			04/27/21 18:26	1
N-Propylbenzene	ND		1.0		ug/L			04/27/21 18:26	1
sec-Butylbenzene	ND		1.0		ug/L			04/27/21 18:26	1
Styrene	ND		1.0		ug/L			04/27/21 18:26	1
tert-Butylbenzene	ND		1.0		ug/L			04/27/21 18:26	1
Tetrachloroethene	ND		1.0		ug/L			04/27/21 18:26	1
Toluene	ND		1.0		ug/L			04/27/21 18:26	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/27/21 18:26	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/27/21 18:26	1
Trichloroethene	ND		1.0		ug/L			04/27/21 18:26	1
Trichlorofluoromethane	ND		2.0		ug/L			04/27/21 18:26	1
Vinyl chloride	ND		1.0		ug/L			04/27/21 18:26	1
Xylenes (total)	ND		2.0		ug/L			04/27/21 18:26	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/27/21 18:26*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 127*		*04/27/21 18:26*	*1*
4-Bromofluorobenzene (Surr)	*100*		*78 - 120*		*04/27/21 18:26*	*1*
Dibromofluoromethane (Surr)	*101*		*77 - 120*		*04/27/21 18:26*	*1*
Toluene-d8 (Surr)	*100*		*80 - 125*		*04/27/21 18:26*	*1*

Lab Sample ID: LCS 280-534087/5
Matrix: Water
Analysis Batch: 534087

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	24.7		ug/L		99	65 - 135
1,1,1-Trichloroethane	25.0	23.6		ug/L		94	65 - 135
1,1,2,2-Tetrachloroethane	25.0	22.9		ug/L		92	58 - 135
1,1,2-Trichloroethane	25.0	23.5		ug/L		94	64 - 135
1,1-Dichloroethane	25.0	23.5		ug/L		94	65 - 135
1,1-Dichloroethene	25.0	21.6		ug/L		87	65 - 136
1,1-Dichloropropene	25.0	23.0		ug/L		92	65 - 135
1,2,3-Trichlorobenzene	25.0	23.0		ug/L		92	60 - 135
1,2,3-Trichloropropane	25.0	23.6		ug/L		94	65 - 135
1,2,4-Trichlorobenzene	25.0	22.7		ug/L		91	58 - 135
1,2,4-Trimethylbenzene	25.0	23.9		ug/L		96	65 - 135
1,2-Dichlorobenzene	25.0	24.9		ug/L		100	65 - 135
1,2-Dichloroethane	25.0	25.3		ug/L		101	65 - 135
1,2-Dichloropropane	25.0	23.5		ug/L		94	64 - 135
1,3,5-Trimethylbenzene	25.0	23.7		ug/L		95	65 - 135
1,3-Dichlorobenzene	25.0	24.9		ug/L		99	65 - 135
1,3-Dichloropropane	25.0	23.4		ug/L		93	64 - 135
1,4-Dichlorobenzene	25.0	25.0		ug/L		100	65 - 135
2,2-Dichloropropane	25.0	24.4		ug/L		97	65 - 135
2-Butanone (MEK)	100	83.6		ug/L		84	44 - 177

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

Lab Sample ID: LCS 280-534087/5
Matrix: Water
Analysis Batch: 534087

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chlorotoluene	25.0	23.2		ug/L		93	65 - 135
2-Hexanone	100	88.2		ug/L		88	57 - 139
4-Chlorotoluene	25.0	23.5		ug/L		94	65 - 135
4-Isopropyltoluene	25.0	23.8		ug/L		95	65 - 135
4-Methyl-2-pentanone	100	90.6		ug/L		91	60 - 150
Acetone	100	89.3		ug/L		89	39 - 156
Benzene	25.0	23.8		ug/L		95	65 - 135
Bromobenzene	25.0	22.9		ug/L		92	65 - 135
Bromochloromethane	25.0	23.5		ug/L		94	65 - 135
Bromodichloromethane	25.0	24.0		ug/L		96	65 - 135
Bromoform	25.0	20.4		ug/L		81	62 - 135
Bromomethane	25.0	18.9		ug/L		76	45 - 135
Carbon disulfide	25.0	19.0		ug/L		76	55 - 143
Carbon tetrachloride	25.0	23.6		ug/L		94	65 - 135
Chlorobenzene	25.0	23.9		ug/L		96	65 - 135
Chloroethane	25.0	30.6		ug/L		123	46 - 136
Chloroform	25.0	24.1		ug/L		97	65 - 135
Chloromethane	25.0	24.5		ug/L		98	34 - 145
cis-1,2-Dichloroethene	25.0	23.4		ug/L		94	65 - 135
cis-1,3-Dichloropropene	25.0	23.2		ug/L		93	65 - 135
Dibromochloromethane	25.0	23.5		ug/L		94	65 - 135
Dibromomethane	25.0	23.0		ug/L		92	65 - 135
Dichlorodifluoromethane	25.0	21.1		ug/L		84	43 - 142
Ethylbenzene	25.0	23.5		ug/L		94	65 - 135
Hexachlorobutadiene	25.0	22.6		ug/L		90	65 - 135
Isopropylbenzene	25.0	23.4		ug/L		94	65 - 135
Methylene Chloride	25.0	25.0		ug/L		100	54 - 141
Naphthalene	25.0	21.5		ug/L		86	42 - 135
n-Butylbenzene	25.0	23.6		ug/L		94	64 - 135
N-Propylbenzene	25.0	23.7		ug/L		95	65 - 135
sec-Butylbenzene	25.0	23.3		ug/L		93	64 - 135
Styrene	25.0	23.7		ug/L		95	65 - 135
tert-Butylbenzene	25.0	23.2		ug/L		93	65 - 135
Tetrachloroethene	25.0	23.2		ug/L		93	65 - 135
Toluene	25.0	25.1		ug/L		101	65 - 135
trans-1,2-Dichloroethene	25.0	22.3		ug/L		89	65 - 135
trans-1,3-Dichloropropene	25.0	22.8		ug/L		91	65 - 135
Trichloroethene	25.0	23.2		ug/L		93	65 - 135
Trichlorofluoromethane	25.0	26.4		ug/L		106	53 - 137
Vinyl chloride	25.0	27.6		ug/L		110	40 - 137

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 127*
4-Bromofluorobenzene (Surr)	*101*		*78 - 120*
Dibromofluoromethane (Surr)	*102*		*77 - 120*
Toluene-d8 (Surr)	*100*		*80 - 125*

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

Lab Sample ID: LCSD 280-534087/6
Matrix: Water
Analysis Batch: 534087

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane			25.0	24.3		ug/L		97	65 - 135	1	20
1,1,1-Trichloroethane			25.0	22.4		ug/L		89	65 - 135	5	20
1,1,2,2-Tetrachloroethane			25.0	23.1		ug/L		92	58 - 135	1	20
1,1,2-Trichloroethane			25.0	23.0		ug/L		92	64 - 135	3	27
1,1-Dichloroethane			25.0	22.7		ug/L		91	65 - 135	3	21
1,1-Dichloroethene			25.0	21.0		ug/L		84	65 - 136	3	20
1,1-Dichloropropene			25.0	22.1		ug/L		88	65 - 135	4	21
1,2,3-Trichlorobenzene			25.0	23.0		ug/L		92	60 - 135	0	36
1,2,3-Trichloropropane			25.0	23.5		ug/L		94	65 - 135	0	23
1,2,4-Trichlorobenzene			25.0	22.3		ug/L		89	58 - 135	2	25
1,2,4-Trimethylbenzene			25.0	23.0		ug/L		92	65 - 135	4	20
1,2-Dichlorobenzene			25.0	24.3		ug/L		97	65 - 135	2	20
1,2-Dichloroethane			25.0	25.1		ug/L		100	65 - 135	1	20
1,2-Dichloropropane			25.0	22.9		ug/L		92	64 - 135	3	20
1,3,5-Trimethylbenzene			25.0	22.7		ug/L		91	65 - 135	4	20
1,3-Dichlorobenzene			25.0	24.1		ug/L		96	65 - 135	3	20
1,3-Dichloropropane			25.0	23.0		ug/L		92	64 - 135	2	20
1,4-Dichlorobenzene			25.0	24.1		ug/L		96	65 - 135	3	23
2,2-Dichloropropane			25.0	23.3		ug/L		93	65 - 135	5	20
2-Butanone (MEK)			100	86.4		ug/L		86	44 - 177	3	32
2-Chlorotoluene			25.0	22.3		ug/L		89	65 - 135	4	20
2-Hexanone			100	91.8		ug/L		92	57 - 139	4	25
4-Chlorotoluene			25.0	22.4		ug/L		90	65 - 135	5	20
4-Isopropyltoluene			25.0	22.8		ug/L		91	65 - 135	4	20
4-Methyl-2-pentanone			100	93.8		ug/L		94	60 - 150	3	22
Acetone			100	93.8		ug/L		94	39 - 156	5	23
Benzene			25.0	23.0		ug/L		92	65 - 135	3	20
Bromobenzene			25.0	22.0		ug/L		88	65 - 135	4	26
Bromochloromethane			25.0	22.9		ug/L		91	65 - 135	3	29
Bromodichloromethane			25.0	23.2		ug/L		93	65 - 135	3	20
Bromoform			25.0	20.4		ug/L		82	62 - 135	0	27
Bromomethane			25.0	18.3		ug/L		73	45 - 135	3	33
Carbon disulfide			25.0	18.1		ug/L		72	55 - 143	5	20
Carbon tetrachloride			25.0	22.8		ug/L		91	65 - 135	3	21
Chlorobenzene			25.0	23.1		ug/L		93	65 - 135	3	20
Chloroethane			25.0	27.1		ug/L		108	46 - 136	12	25
Chloroform			25.0	23.4		ug/L		94	65 - 135	3	20
Chloromethane			25.0	23.6		ug/L		94	34 - 145	4	24
cis-1,2-Dichloroethene			25.0	22.7		ug/L		91	65 - 135	3	20
cis-1,3-Dichloropropene			25.0	22.8		ug/L		91	65 - 135	2	26
Dibromochloromethane			25.0	23.2		ug/L		93	65 - 135	1	20
Dibromomethane			25.0	22.7		ug/L		91	65 - 135	1	26
Dichlorodifluoromethane			25.0	20.3		ug/L		81	43 - 142	4	30
Ethylbenzene			25.0	22.7		ug/L		91	65 - 135	4	20
Hexachlorobutadiene			25.0	21.5		ug/L		86	65 - 135	5	25
Isopropylbenzene			25.0	22.2		ug/L		89	65 - 135	5	20
Methylene Chloride			25.0	24.1		ug/L		97	54 - 141	3	26
Naphthalene			25.0	21.9		ug/L		87	42 - 135	2	23

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

Lab Sample ID: LCSD 280-534087/6
Matrix: Water
Analysis Batch: 534087

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
n-Butylbenzene			25.0	22.4		ug/L		89	64 - 135	5	21
N-Propylbenzene			25.0	22.4		ug/L		89	65 - 135	6	20
sec-Butylbenzene			25.0	22.3		ug/L		89	64 - 135	4	21
Styrene			25.0	23.2		ug/L		93	65 - 135	2	26
tert-Butylbenzene			25.0	22.0		ug/L		88	65 - 135	5	21
Tetrachloroethene			25.0	22.5		ug/L		90	65 - 135	3	20
Toluene			25.0	24.3		ug/L		97	65 - 135	3	20
trans-1,2-Dichloroethene			25.0	21.5		ug/L		86	65 - 135	3	24
trans-1,3-Dichloropropene			25.0	22.4		ug/L		90	65 - 135	2	26
Trichloroethene			25.0	22.5		ug/L		90	65 - 135	3	20
Trichlorofluoromethane			25.0	25.1		ug/L		101	53 - 137	5	27
Vinyl chloride			25.0	25.9		ug/L		104	40 - 137	6	24

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 127*
4-Bromofluorobenzene (Surr)	*100*		*78 - 120*
Dibromofluoromethane (Surr)	*103*		*77 - 120*
Toluene-d8 (Surr)	*101*		*80 - 125*

Lab Sample ID: 280-146973-E-3 MSD
Matrix: Water
Analysis Batch: 534087

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		25.0	24.5		ug/L		98	65 - 135	8	20
1,1,1-Trichloroethane	ND		25.0	23.2		ug/L		93	65 - 135	8	20
1,1,2,2-Tetrachloroethane	ND		25.0	23.2		ug/L		93	58 - 135	3	20
1,1,2-Trichloroethane	ND		25.0	23.9		ug/L		95	64 - 135	7	27
1,1-Dichloroethane	ND		25.0	23.4		ug/L		94	65 - 135	6	21
1,1-Dichloroethene	ND		25.0	21.5		ug/L		86	65 - 136	8	20
1,1-Dichloropropene	ND		25.0	22.3		ug/L		89	65 - 135	7	21
1,2,3-Trichlorobenzene	ND		25.0	23.4		ug/L		94	60 - 135	4	36
1,2,3-Trichloropropane	ND		25.0	24.3		ug/L		97	65 - 135	6	23
1,2,4-Trichlorobenzene	ND		25.0	22.4		ug/L		90	58 - 135	6	25
1,2,4-Trimethylbenzene	ND		25.0	22.9		ug/L		92	65 - 135	4	20
1,2-Dichlorobenzene	ND		25.0	24.7		ug/L		99	65 - 135	5	20
1,2-Dichloroethane	ND		25.0	25.5		ug/L		102	65 - 135	5	20
1,2-Dichloropropane	ND		25.0	23.4		ug/L		94	64 - 135	7	20
1,3,5-Trimethylbenzene	ND		25.0	22.8		ug/L		91	65 - 135	7	20
1,3-Dichlorobenzene	ND		25.0	24.2		ug/L		97	65 - 135	5	20
1,3-Dichloropropane	ND		25.0	23.3		ug/L		93	64 - 135	5	20
1,4-Dichlorobenzene	ND		25.0	24.7		ug/L		99	65 - 135	6	23
2,2-Dichloropropane	ND		25.0	22.0		ug/L		88	65 - 135	7	20
2-Butanone (MEK)	ND		100	90.1		ug/L		90	44 - 177	7	32
2-Chlorotoluene	ND		25.0	22.7		ug/L		91	65 - 135	5	20
2-Hexanone	ND		100	94.2		ug/L		94	57 - 139	6	25
4-Chlorotoluene	ND		25.0	22.8		ug/L		91	65 - 135	6	20
4-Isopropyltoluene	ND		25.0	22.5		ug/L		90	65 - 135	6	20

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

Lab Sample ID: 280-146973-E-3 MSD
Matrix: Water
Analysis Batch: 534087

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Methyl-2-pentanone	ND		100	96.8		ug/L		97	60 - 150	6	22
Acetone	ND		100	97.2		ug/L		97	39 - 156	7	23
Benzene	ND		25.0	23.6		ug/L		94	65 - 135	6	20
Bromobenzene	ND		25.0	22.4		ug/L		90	65 - 135	4	26
Bromochloromethane	ND		25.0	23.5		ug/L		94	65 - 135	7	29
Bromodichloromethane	ND		25.0	23.9		ug/L		96	65 - 135	9	20
Bromoform	ND		25.0	21.2		ug/L		85	62 - 135	11	27
Bromomethane	ND		25.0	18.0		ug/L		72	45 - 135	22	33
Carbon disulfide	ND		25.0	17.9		ug/L		72	55 - 143	10	20
Carbon tetrachloride	ND		25.0	23.0		ug/L		92	65 - 135	8	21
Chlorobenzene	ND		25.0	23.8		ug/L		95	65 - 135	7	20
Chloroethane	ND		25.0	26.9		ug/L		108	46 - 136	7	25
Chloroform	ND		25.0	24.1		ug/L		97	65 - 135	8	20
Chloromethane	ND		25.0	23.3		ug/L		93	34 - 145	9	24
cis-1,2-Dichloroethene	20		25.0	39.6		ug/L		77	65 - 135	5	20
cis-1,3-Dichloropropene	ND		25.0	22.5		ug/L		90	65 - 135	8	26
Dibromochloromethane	ND		25.0	23.4		ug/L		94	65 - 135	9	20
Dibromomethane	ND		25.0	23.2		ug/L		93	65 - 135	7	26
Dichlorodifluoromethane	ND		25.0	19.9		ug/L		80	43 - 142	5	30
Ethylbenzene	ND		25.0	22.8		ug/L		91	65 - 135	6	20
Hexachlorobutadiene	ND		25.0	20.6		ug/L		83	65 - 135	7	25
Isopropylbenzene	ND		25.0	22.0		ug/L		88	65 - 135	5	20
Methylene Chloride	ND		25.0	25.1		ug/L		100	54 - 141	8	26
Naphthalene	ND		25.0	22.4		ug/L		90	42 - 135	5	23
n-Butylbenzene	ND		25.0	21.6		ug/L		86	64 - 135	4	21
N-Propylbenzene	ND		25.0	22.4		ug/L		90	65 - 135	6	20
sec-Butylbenzene	ND		25.0	22.1		ug/L		89	64 - 135	7	21
Styrene	ND		25.0	23.5		ug/L		94	65 - 135	7	26
tert-Butylbenzene	ND		25.0	22.1		ug/L		88	65 - 135	6	21
Tetrachloroethene	ND		25.0	22.8		ug/L		91	65 - 135	8	20
Toluene	ND		25.0	24.9		ug/L		100	65 - 135	7	20
trans-1,2-Dichloroethene	6.0		25.0	26.1		ug/L		80	65 - 135	6	24
trans-1,3-Dichloropropene	ND		25.0	22.5		ug/L		90	65 - 135	9	26
Trichloroethene	7.0		25.0	27.2		ug/L		81	65 - 135	7	20
Trichlorofluoromethane	ND		25.0	25.0		ug/L		100	53 - 137	7	27
Vinyl chloride	11		25.0	33.4		ug/L		91	40 - 137	7	24

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 127*
4-Bromofluorobenzene (Surr)	*98*		*78 - 120*
Dibromofluoromethane (Surr)	*104*		*77 - 120*
Toluene-d8 (Surr)	*99*		*80 - 125*

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

Lab Sample ID: 280-146973-G-3 MS
Matrix: Water
Analysis Batch: 534087

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	ND		25.0	22.7		ug/L		91	65 - 135
1,1,1-Trichloroethane	ND		25.0	21.3		ug/L		85	65 - 135
1,1,2,2-Tetrachloroethane	ND		25.0	22.5		ug/L		90	58 - 135
1,1,2-Trichloroethane	ND		25.0	22.2		ug/L		89	64 - 135
1,1-Dichloroethane	ND		25.0	22.0		ug/L		88	65 - 135
1,1-Dichloroethene	ND		25.0	19.8		ug/L		79	65 - 136
1,1-Dichloropropene	ND		25.0	20.7		ug/L		83	65 - 135
1,2,3-Trichlorobenzene	ND		25.0	22.4		ug/L		90	60 - 135
1,2,3-Trichloropropane	ND		25.0	23.0		ug/L		92	65 - 135
1,2,4-Trichlorobenzene	ND		25.0	21.1		ug/L		85	58 - 135
1,2,4-Trimethylbenzene	ND		25.0	21.9		ug/L		88	65 - 135
1,2-Dichlorobenzene	ND		25.0	23.4		ug/L		94	65 - 135
1,2-Dichloroethane	ND		25.0	24.2		ug/L		97	65 - 135
1,2-Dichloropropane	ND		25.0	21.9		ug/L		87	64 - 135
1,3,5-Trimethylbenzene	ND		25.0	21.3		ug/L		85	65 - 135
1,3-Dichlorobenzene	ND		25.0	23.0		ug/L		92	65 - 135
1,3-Dichloropropane	ND		25.0	22.2		ug/L		89	64 - 135
1,4-Dichlorobenzene	ND		25.0	23.2		ug/L		93	65 - 135
2,2-Dichloropropane	ND		25.0	20.5		ug/L		82	65 - 135
2-Butanone (MEK)	ND		100	84.2		ug/L		84	44 - 177
2-Chlorotoluene	ND		25.0	21.6		ug/L		86	65 - 135
2-Hexanone	ND		100	88.9		ug/L		89	57 - 139
4-Chlorotoluene	ND		25.0	21.5		ug/L		86	65 - 135
4-Isopropyltoluene	ND		25.0	21.3		ug/L		85	65 - 135
4-Methyl-2-pentanone	ND		100	91.4		ug/L		91	60 - 150
Acetone	ND		100	90.8		ug/L		91	39 - 156
Benzene	ND		25.0	22.1		ug/L		89	65 - 135
Bromobenzene	ND		25.0	21.5		ug/L		86	65 - 135
Bromochloromethane	ND		25.0	22.0		ug/L		88	65 - 135
Bromodichloromethane	ND		25.0	21.9		ug/L		88	65 - 135
Bromoform	ND		25.0	19.1		ug/L		76	62 - 135
Bromomethane	ND		25.0	14.4		ug/L		58	45 - 135
Carbon disulfide	ND		25.0	16.3		ug/L		65	55 - 143
Carbon tetrachloride	ND		25.0	21.2		ug/L		85	65 - 135
Chlorobenzene	ND		25.0	22.2		ug/L		89	65 - 135
Chloroethane	ND		25.0	25.1		ug/L		100	46 - 136
Chloroform	ND		25.0	22.4		ug/L		89	65 - 135
Chloromethane	ND		25.0	21.2		ug/L		85	34 - 145
cis-1,2-Dichloroethene	20		25.0	37.7		ug/L		69	65 - 135
cis-1,3-Dichloropropene	ND		25.0	20.8		ug/L		83	65 - 135
Dibromochloromethane	ND		25.0	21.4		ug/L		86	65 - 135
Dibromomethane	ND		25.0	21.7		ug/L		87	65 - 135
Dichlorodifluoromethane	ND		25.0	18.9		ug/L		75	43 - 142
Ethylbenzene	ND		25.0	21.4		ug/L		86	65 - 135
Hexachlorobutadiene	ND		25.0	19.2		ug/L		77	65 - 135
Isopropylbenzene	ND		25.0	21.0		ug/L		84	65 - 135
Methylene Chloride	ND		25.0	23.2		ug/L		93	54 - 141
Naphthalene	ND		25.0	21.2		ug/L		85	42 - 135

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

Lab Sample ID: 280-146973-G-3 MS
Matrix: Water
Analysis Batch: 534087

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
n-Butylbenzene	ND		25.0	20.7		ug/L		83	64 - 135
N-Propylbenzene	ND		25.0	21.2		ug/L		85	65 - 135
sec-Butylbenzene	ND		25.0	20.7		ug/L		83	64 - 135
Styrene	ND		25.0	21.9		ug/L		88	65 - 135
tert-Butylbenzene	ND		25.0	20.8		ug/L		83	65 - 135
Tetrachloroethene	ND		25.0	21.1		ug/L		84	65 - 135
Toluene	ND		25.0	23.2		ug/L		93	65 - 135
trans-1,2-Dichloroethene	6.0		25.0	24.5		ug/L		74	65 - 135
trans-1,3-Dichloropropene	ND		25.0	20.6		ug/L		82	65 - 135
Trichloroethene	7.0		25.0	25.3		ug/L		73	65 - 135
Trichlorofluoromethane	ND		25.0	23.4		ug/L		94	53 - 137
Vinyl chloride	11		25.0	31.2		ug/L		82	40 - 137

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 127*
4-Bromofluorobenzene (Surr)	*101*		*78 - 120*
Dibromofluoromethane (Surr)	*103*		*77 - 120*
Toluene-d8 (Surr)	*100*		*80 - 125*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Lab Sample ID: MB 280-533634/1-A
Matrix: Water
Analysis Batch: 533660

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 533634

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		04/23/21 10:55	04/23/21 16:21	1
1,2-Dibromoethane	ND		0.050		ug/L		04/23/21 10:55	04/23/21 16:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*115*		*70 - 130*	*04/23/21 10:55*	*04/23/21 16:21*	*1*

Lab Sample ID: LCS 280-533634/2-A
Matrix: Water
Analysis Batch: 533660

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 533634

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane			0.250	0.248		ug/L		99	60 - 140
1,2-Dibromoethane			0.250	0.268		ug/L		107	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dibromopropane	*109*		*70 - 130*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC) (Continued)

Lab Sample ID: LCSD 280-533634/3-A
Matrix: Water
Analysis Batch: 533660

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 533634

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.250	0.248		ug/L		99	60 - 140	0	10
1,2-Dibromoethane			0.250	0.291		ug/L		116	60 - 140	8	10

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dibromopropane	*112*		*70 - 130*

QC Association Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Groundwater

Job ID: 280-147600-1

GC/MS VOA

Analysis Batch: 534087

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147600-1	TB2	Total/NA	Water	8260B	
280-147600-2	MW-5A	Total/NA	Water	8260B	
280-147600-3	MW-5B	Total/NA	Water	8260B	
MB 280-534087/10	Method Blank	Total/NA	Water	8260B	
LCS 280-534087/5	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-534087/6	Lab Control Sample Dup	Total/NA	Water	8260B	
280-146973-E-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
280-146973-G-3 MS	Matrix Spike	Total/NA	Water	8260B	

GC Semi VOA

Prep Batch: 533634

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147600-1	TB2	Total/NA	Water	8011	
280-147600-2	MW-5A	Total/NA	Water	8011	
280-147600-3	MW-5B	Total/NA	Water	8011	
MB 280-533634/1-A	Method Blank	Total/NA	Water	8011	
LCS 280-533634/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 280-533634/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 533660

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147600-1	TB2	Total/NA	Water	8011	533634
280-147600-2	MW-5A	Total/NA	Water	8011	533634
280-147600-3	MW-5B	Total/NA	Water	8011	533634
MB 280-533634/1-A	Method Blank	Total/NA	Water	8011	533634
LCS 280-533634/2-A	Lab Control Sample	Total/NA	Water	8011	533634
LCSD 280-533634/3-A	Lab Control Sample Dup	Total/NA	Water	8011	533634

Field Service / Mobile Lab

Analysis Batch: 533841

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147600-2	MW-5A	Total/NA	Water	Field Sampling	
280-147600-3	MW-5B	Total/NA	Water	Field Sampling	

Lab Chronicle

Client: Waste Management
Job ID: 280-147600-1
Project/Site: 1003|Riverbend Landfill - Groundwater

Client Sample ID: TB2
Lab Sample ID: 280-147600-1
Date Collected: 04/15/21 07:00
Matrix: Water
Date Received: 04/17/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	534087	04/28/21 00:29	RJS	TAL DEN
Total/NA	Prep	8011			34.9 mL	35 mL	533634	04/23/21 10:55	JSM	TAL DEN
Total/NA	Analysis	8011		1			533660	04/23/21 23:52	JSM	TAL DEN

Client Sample ID: MW-5A
Lab Sample ID: 280-147600-2
Date Collected: 04/15/21 14:51
Matrix: Water
Date Received: 04/17/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	534087	04/28/21 02:00	RJS	TAL DEN
Total/NA	Prep	8011			35 mL	35 mL	533634	04/23/21 10:55	JSM	TAL DEN
Total/NA	Analysis	8011		1			533660	04/24/21 00:13	JSM	TAL DEN
Total/NA	Analysis	Field Sampling		1			533841	04/15/21 15:51	A1S	TAL DEN

Client Sample ID: MW-5B
Lab Sample ID: 280-147600-3
Date Collected: 04/15/21 15:41
Matrix: Water
Date Received: 04/17/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	534087	04/28/21 02:23	RJS	TAL DEN
Total/NA	Prep	8011			35.1 mL	35 mL	533634	04/23/21 10:55	JSM	TAL DEN
Total/NA	Analysis	8011		1			533660	04/24/21 00:35	JSM	TAL DEN
Total/NA	Analysis	Field Sampling		1			533841	04/15/21 16:41	A1S	TAL DEN

Laboratory References:
TAL DEN = Eurofins TestAmerica, Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

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

Chain of Custody Record

Denver #280 eurofins Environment Testing TestAmerica

Client Information	Sampler: Chris Perra / I. Huttquist	Lab PM: Sara, Betsy A	Carrier Tracking No(s):	COC No: 280-16514-867.1
Client Contact:	Phone: 503-716-6320	E-Mail: Betsy.Sara@Eurofinset.com		Page: Page 1 of 1
Company: Waste Management				Job #:
Address: 13469 SW Highway 18	Due Date Requested:			
City: McMinnville	TAT Requested (days):			
State, Zip: OR, 97128				
Phone:	PO #:			
Email:	WO #:			
Project Name: 1003|Riverbend Landfill SCS Engineers Event Desc: Downgradient Det. Wells - Apr	Project #: 28002786			
Site: Oregon	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B	8011	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	R		
TB2	4/15/2021	0700	G	W			X	X	4	
MW-5A	4/15/2021	1451	G	W			X	X	6	
MW-5B	4/15/2021	1541	G	W			X	X	6	

280-147600 Chain of Custody

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: [signature]	Date/Time: 4/16/2021 1630	Company: SCS	Received by: [signature]	Date/Time: 4/17/21 0945	Company: ETADEN
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 1.2, 1.7 1R9 CF+0.4		

12/2/2021

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-5A
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	(E)	SE	S	SW	W	NW
WEATHER:	(SUNNY)	CLOUDY	RAIN	?				

LIGHT	(MEDIUM)	HEAVY

TEMPERATURE: (°F) 71 . °C [Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product [Product Thickness]	DT-Water	DTP-DTW	DTB-DTW [Water Column]	[Water Column x Gal/ft] Volume (gal)
4/15/21	13:50	34.40	-	21.36	-	13.04	X 1 2.13
/ /	:	.	.	.	.		X 3 6.38

Gal/ft = (dia./2)^2 x 0.163 | 1" = 0.041 | (2") = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	[√ if used]
VOA Glass	4/15/21	14:51	F	3 (40 ml)	(HCl)	(YES)	NO		√
VOA Glass	4/15/21	14:51	F	3 (40 ml)	($Na_2S_2O_3$)	(YES)	NO		√
Amber Glass	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
White Poly	/ /	:		250, 500, 1L	None	YES	NO	NA	
Yellow Glass	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
Red Total Poly	/ /	:		125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	/ /	:		250, 500, 1L	HNO_3	YES	YES		
White Poly	/ /	:		250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:		100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 | 6 | Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011)
AMBER - Glass	(8080) (8150) (TOX) OR [X] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD) OR [ ] WA [ ]
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA

Purge Start Time: 13:58 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	F(1359)	0.00	5.77	-12.0	1263	14.5	22.95	0.65	Clear/colorless
1	F(1413)	2.13	5.78	5.5	1160	14.3	25.76	0.56	Clear/colorless
2	F(1428)	4.26	5.77	2.5	1159	14.3	27.31	0.52	Clear/colorless
3	F(1442)	6.38	5.77	-9.6	1189	14.6	28.01	0.51	Clear/colorless
4	F(1444)	6.68	5.76	-9.6	1188	14.6	28.00	0.53	Clear/colorless
5	F(1446)	6.98	5.76	-10.1	1193	14.6	28.01	0.52	Clear/colorless
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Standard Purge Method; 11/9/25 psi 550mL/min

SAMPLER: Chris Perra (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-5B
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY	CLOUDY	RAIN	?							

TEMPERATURE: °F 54 °C (Circle appropriate units)

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
4/15/20	15:10	42.40	—	28.77	—	—	X 1	—
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)^2 x 0.163 | 1" = 0.041 | 2" = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	√
VOA Glass	4/15/20	15:41	F	3	40 ml	HCl	YES	NO		√
VOA Glass	4/15/20	15:41	F	3	40 ml	$Na_2S_2O_3$	YES	NO		√
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L	HNO_3	YES	YES		
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — 6 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011)
AMBER - Glass	(8080) (8150) (TOX) OR [X] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD) OR [ ] WA [ ]
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA

Purge Start Time: 15:13 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	F(15:14)	0.00	7.26	45.5	619	15.4	28.89	4.63	Clear/colorless
1	F(15:19)	0.26	7.11	-20.8	622	15.3	28.97	2.23	Cloudy/colorless
2	F(15:24)	0.52	7.08	-47.8	624	15.2	28.98	2.35	Cloudy/light tan
3	F(15:29)	0.78	7.07	-53.5	623	15.2	28.98	2.01	Cloudy/light tan
4	F(15:34)	1.04	7.07	-53.6	625	15.2	28.98	1.92	Cloudy/light tan
5	F(15:36)	1.09	7.07	-54.2	626	15.2	28.98	1.91	Cloudy/light tan
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Low Flow Purge Method: 20/10/2 spsi ~200 ml/min

SAMPLER: Chris Parra
(PRINTED NAME) (SIGNATURE)

280-147600 Waybill

ORIGIN ID:SAVA (503) 534-3783
TIFFANY ANDREWS
SCS ENGINEERS
15940 SW 72ND AVE

PORTLAND, OR 97224
UNITED STATES US

SHIP DATE: 02APR21
ACTWGT: 15.00 LB MAN
CAD: 0886563/CAFE3409
DIMS: 24x15x15 IN

TO

EUROFINS TESTAMERICA DENVER
4955 YARROW STREET

ARVADA CO 800024517
(303) 736-0100
REF: S280-107585

RMA:

FedEx Express

FedEx
TRK# 0221 9508 8924 2486

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO LAAA

80002
CO-US DEN

Do Not Lift Using This Tag

ORIGIN ID:SAVA (503) 724-0112
TIFFANY ANDREWS
SCS ENGINEERS
15940 SW 72ND AVE

PORTLAND, OR 97224
UNITED STATES US

SHIP DATE: 02APR21
ACTWGT: 15.00 LB MAN
CAD: 0886563/CAFE3409
DIMS: 24x15x15 IN

TO

EUROFINS TESTAMERICA DENVER
4955 YARROW STREET

ARVADA CO 800024517
(303) 736-0100
REF: S280-107587

RMA:

FedEx Express

FedEx
TRK# 0221 9508 8924 2111

SATURDAY 12:00
PRIORITY OVERNIGH

XO LAAA

8000
CO-US DE

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-147600-1

Login Number: 147600

List Source: Eurofins TestAmerica, Denver

List Number: 1

Creator: Rystrom, Joshua R

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	
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	

Spring 2021

Surface Water

Laboratory Analytical Report

eurofins | Environment Testing America



ANALYTICAL REPORT

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

Laboratory Job ID: 280-147467-1
Client Project/Site: 1003|Riverbend Landfill - Surfacewater
Sampling Event: Annual SW - Apr

For:
Waste Management
13469 SW Highway 18
McMinnville, Oregon 97128

Attn: Mr. Jim Denson

Betsy Sara

Authorized for release by:
12/2/2021 8:56:31 AM

Betsy Sara, Project Manager II
(303)736-0189
Betsy.Sara@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

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Definitions/Glossary

Client: Waste Management
Job ID: 280-147467-1
Project/Site: 1003|Riverbend Landfill - Surfacewater

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

General Chemistry

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
b	Result Detected in the Unseeded Control blank (USB).
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
s	Seeded Control Blank (SCB) Recovery Low

Glossary

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

Job ID: 280-147467-1

Laboratory: Eurofins TestAmerica, Denver

Narrative

CASE NARRATIVE

Client: Waste Management

Project: 1003|Riverbend Landfill - Surfacewater

Report Number: 280-147467-1

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

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

Sample Receiving

The samples were received on 04/15/2021; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 1.0 C.

Holding Times

The analysis for pH should be performed in the field immediately following sampling, and therefore the laboratory pH result was flagged with an "HF" flag.

All other holding times were met.

Method Blanks

The seeded control blank (method blank) for BOD Method 5210B depleted more than the method-specified limit, 0.2mgO2/L. The laboratory control sample (LCS) recovery was in control. Because the holding time expired, reanalysis was not performed.

All other Method Blanks met method criteria.

Laboratory Control Samples (LCS)

The Biochemical Oxygen Demand (BOD) Method 5210B glucose-glutamic acid standard (LCS) recovered slightly below the lower control limit specified in the method at 60% (control limits 85%-115%). Because the 48-hour holding time expired, reanalysis was not performed.

All other Laboratory Control Sample recoveries were within control limits.

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

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) for Method 8260B, however, an LCS/LCSD pair was analyzed to demonstrate method precision and accuracy.

The Matrix Spike and Matrix Spike Duplicate performed on a sample from another client exhibited recoveries outside control limits for Chloride Method 300.0. In addition, the RPD result was outside the RPD limit for Chloride. 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.

Job ID: 280-147467-1 (Continued)

Laboratory: Eurofins TestAmerica, Denver (Continued)

Sample SYR MW-12A was selected to fulfill the laboratory batch quality control requirements for Method 9020B. Analysis of the laboratory generated MS/MSD for this sample exhibited recoveries of Total Organic Halogens (TOX) 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 results were within established control limits.

General Comments

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.

The analyses for E. Coli and Fecal Coliform were performed at Alexin Analytical Laboratories, Inc..
Alexin Analytical Laboratories, Inc.
13035 SW Pacific Hwy
Tigard, OR 97223
Telephone: 503-639-9311

Detection Summary

Client: Waste Management
Job ID: 280-147467-1
Project/Site: 1003|Riverbend Landfill - Surfacewater

Client Sample ID: TRIP BLANK — Lab Sample ID: 280-147467-1

No Detections.

Client Sample ID: SYR SW-2 — Lab Sample ID: 280-147467-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	8100		500		ug/L	1		6010B	Total Recoverable
Iron	1400		30		ug/L	1		6010B	Total Recoverable
Magnesium	2800		200		ug/L	1		6010B	Total Recoverable
Manganese	31		3.0		ug/L	1		6010B	Total Recoverable
Potassium	580		500		ug/L	1		6010B	Total Recoverable
Silicon	8000		100		ug/L	1		6010B	Total Recoverable
Sodium	5600		1000		ug/L	1		6010B	Total Recoverable
Chloride	5.3		1.0		mg/L	1		300.0	Total/NA
Sulfate	5.1		1.0		mg/L	1		300.0	Total/NA
Nitrate Nitrite as N	0.24		0.050		mg/L	1		353.2	Total/NA
pH adj. to 25 deg C	7.8	HF	0.1		SU	1		9040B	Total/NA
Specific Conductance	97		2.0		umhos/cm	1		9050A	Total/NA
Total Organic Carbon - Average	1.1		1.0		mg/L	1		9060	Total/NA
Total Anions	1.0				meq/L	1		SM 1030E	Total/NA
Total Cations	0.97				meq/L	1		SM 1030E	Total/NA
Percent Difference	-3.2				%	1		SM 1030E	Total/NA
Calcium	8.1				mg/L	1		SM 1030E	Total/NA
Magnesium	2.8				mg/L	1		SM 1030E	Total/NA
Potassium	0.58				mg/L	1		SM 1030E	Total/NA
Sodium	5.6				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.00				mg/L	1		SM 1030E	Total/NA
Chloride	5.3				mg/L	1		SM 1030E	Total/NA
Sulfate	5.1				mg/L	1		SM 1030E	Total/NA
Carbonate Alkalinity	0.00				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	38				mg/L	1		SM 1030E	Total/NA
Total Alkalinity	38				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.24				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	-3.2				%	1		SM 1030E	Total/NA
Calculated TDS	47				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.3				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	63				mg/L	1		SM 1030E	Total/NA
Iron	1.4				mg/L	1		SM 1030E	Total/NA
Calcium	0.40				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	0.23				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.015				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	0.24				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	0.15				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.11				meq/L	1		SM 1030E (meq)	Total/NA
Carbonate Alkalinity	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	0.76				meq/L	1		SM 1030E (meq)	Total/NA
Total Alkalinity	0.76				meq/L	1		SM 1030E (meq)	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Surfacewater

Job ID: 280-147467-1

Client Sample ID: SYR SW-2 (Continued) — Lab Sample ID: 280-147467-2

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Nitrate/Nitrite	0.017				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.075				meq/L	1		SM 1030E (meq)	Total/NA
Total Alkalinity	38		10		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity	38		10		mg/L	1		SM 2320B	Total/NA
Hardness, as CaCO3	40		3.0		mg/L	1		SM 2340C	Total/NA
Total Dissolved Solids	63		10		mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	13		4.0		mg/L	1		SM 2540D	Total/NA
Biochemical Oxygen Demand	2.5	b *-	2.0		mg/L	1		SM5210B	Total/NA
Field pH	7.22				SU	1		Field Sampling	Total/NA
Field Conductivity	131.8				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	13.6				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	11.50				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	75.5				millivolts	1		Field Sampling	Total/NA

Client Sample ID: SYR MW-12A — Lab Sample ID: 280-147467-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	9300		500		ug/L	1		6010B	Total Recoverable
Iron	440		30		ug/L	1		6010B	Total Recoverable
Magnesium	3000		200		ug/L	1		6010B	Total Recoverable
Manganese	25		3.0		ug/L	1		6010B	Total Recoverable
Potassium	620		500		ug/L	1		6010B	Total Recoverable
Silicon	6800		100		ug/L	1		6010B	Total Recoverable
Sodium	6000		1000		ug/L	1		6010B	Total Recoverable
Chloride	5.9		1.0		mg/L	1		300.0	Total/NA
Sulfate	7.4		1.0		mg/L	1		300.0	Total/NA
Nitrate Nitrite as N	0.44		0.050		mg/L	1		353.2	Total/NA
Halogens, Total Organic	25	F1	15		ug/L	1		9020B	Total/NA
pH adj. to 25 deg C	7.6	HF	0.1		SU	1		9040B	Total/NA
Specific Conductance	110		2.0		umhos/cm	1		9050A	Total/NA
Total Organic Carbon - Average	1.2		1.0		mg/L	1		9060	Total/NA
Total Anions	1.1				meq/L	1		SM 1030E	Total/NA
Total Cations	1.0				meq/L	1		SM 1030E	Total/NA
Percent Difference	-1.9				%	1		SM 1030E	Total/NA
Calcium	9.3				mg/L	1		SM 1030E	Total/NA
Magnesium	3.0				mg/L	1		SM 1030E	Total/NA
Potassium	0.62				mg/L	1		SM 1030E	Total/NA
Sodium	6.0				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.00				mg/L	1		SM 1030E	Total/NA
Chloride	5.9				mg/L	1		SM 1030E	Total/NA
Sulfate	7.4				mg/L	1		SM 1030E	Total/NA
Carbonate Alkalinity	0.00				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	35				mg/L	1		SM 1030E	Total/NA
Total Alkalinity	35				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.44				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	-1.9				%	1		SM 1030E	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Waste Management
Job ID: 280-147467-1
Project/Site: 1003|Riverbend Landfill - Surfacewater

Client Sample ID: SYR MW-12A (Continued) — Lab Sample ID: 280-147467-3

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Calculated TDS	47				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.2				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	57				mg/L	1		SM 1030E	Total/NA
Iron	0.44				mg/L	1		SM 1030E	Total/NA
Calcium	0.46				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	0.25				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.016				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	0.26				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	0.17				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.15				meq/L	1		SM 1030E (meq)	Total/NA
Carbonate Alkalinity	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	0.70				meq/L	1		SM 1030E (meq)	Total/NA
Total Alkalinity	0.70				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.031				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.024				meq/L	1		SM 1030E (meq)	Total/NA
Total Alkalinity	35		10		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity	35		10		mg/L	1		SM 2320B	Total/NA
Hardness, as CaCO3	35		3.0		mg/L	1		SM 2340C	Total/NA
Total Dissolved Solids	57		10		mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	9.6		4.0		mg/L	1		SM 2540D	Total/NA
Biochemical Oxygen Demand	3.8	b *-	2.0		mg/L	1		SM5210B	Total/NA
Field pH	7.15				SU	1		Field Sampling	Total/NA
Field Conductivity	115.2				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	11.8				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	12.64				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	72.6				millivolts	1		Field Sampling	Total/NA

Client Sample ID: SYR SW-1 — Lab Sample ID: 280-147467-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	8200		500		ug/L	1		6010B	Total Recoverable
Iron	490		30		ug/L	1		6010B	Total Recoverable
Magnesium	2700		200		ug/L	1		6010B	Total Recoverable
Manganese	18		3.0		ug/L	1		6010B	Total Recoverable
Potassium	540		500		ug/L	1		6010B	Total Recoverable
Silicon	7100		100		ug/L	1		6010B	Total Recoverable
Sodium	5800		1000		ug/L	1		6010B	Total Recoverable
Chloride	5.3		1.0		mg/L	1		300.0	Total/NA
Sulfate	5.0		1.0		mg/L	1		300.0	Total/NA
Nitrate Nitrite as N	0.39		0.050		mg/L	1		353.2	Total/NA
pH adj. to 25 deg C	7.6	HF	0.1		SU	1		9040B	Total/NA
Specific Conductance	95		2.0		umhos/cm	1		9050A	Total/NA
Total Organic Carbon - Average	1.2		1.0		mg/L	1		9060	Total/NA
Total Anions	0.92				meq/L	1		SM 1030E	Total/NA
Total Cations	0.92				meq/L	1		SM 1030E	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Surfacewater

Job ID: 280-147467-1

Client Sample ID: SYR SW-1 (Continued)

Lab Sample ID: 280-147467-4

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Percent Difference	0.16				%	1		SM 1030E	Total/NA
Calcium	8.2				mg/L	1		SM 1030E	Total/NA
Magnesium	2.7				mg/L	1		SM 1030E	Total/NA
Potassium	0.54				mg/L	1		SM 1030E	Total/NA
Sodium	5.8				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.00				mg/L	1		SM 1030E	Total/NA
Chloride	5.3				mg/L	1		SM 1030E	Total/NA
Sulfate	5.0				mg/L	1		SM 1030E	Total/NA
Carbonate Alkalinity	0.00				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	32				mg/L	1		SM 1030E	Total/NA
Total Alkalinity	32				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.39				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	0.16				%	1		SM 1030E	Total/NA
Calculated TDS	43				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.4				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	61				mg/L	1		SM 1030E	Total/NA
Iron	0.49				mg/L	1		SM 1030E	Total/NA
Calcium	0.41				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	0.22				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.014				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	0.25				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	0.15				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.10				meq/L	1		SM 1030E (meq)	Total/NA
Carbonate Alkalinity	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	0.64				meq/L	1		SM 1030E (meq)	Total/NA
Total Alkalinity	0.64				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.028				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.026				meq/L	1		SM 1030E (meq)	Total/NA
Total Alkalinity	32		10		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity	32		10		mg/L	1		SM 2320B	Total/NA
Hardness, as CaCO3	33		3.0		mg/L	1		SM 2340C	Total/NA
Total Dissolved Solids	61		10		mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	8.8		4.0		mg/L	1		SM 2540D	Total/NA
Biochemical Oxygen Demand	3.8	b *-	2.0		mg/L	1		SM5210B	Total/NA
Field pH	6.73				SU	1		Field Sampling	Total/NA
Field Conductivity	105.1				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	12.8				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	8.45				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	109.8				millivolts	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Waste Management
Job ID: 280-147467-1
Project/Site: 1003|Riverbend Landfill - Surfacewater

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-147467-1	TRIP BLANK	Water	04/14/21 08:00	04/15/21 10:00
280-147467-2	SYR SW-2	Water	04/14/21 11:30	04/15/21 10:00
280-147467-3	SYR MW-12A	Water	04/14/21 12:30	04/15/21 10:00
280-147467-4	SYR SW-1	Water	04/14/21 13:30	04/15/21 10:00

Method Summary

Client: Waste Management
Job ID: 280-147467-1
Project/Site: 1003|Riverbend Landfill - Surfacewater

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL DEN
6010B	Metals (ICP)	SW846	TAL DEN
300.0	Anions, Ion Chromatography	MCAWW	TAL BUF
350.1	Nitrogen, Ammonia	MCAWW	TAL DEN
351.2	Nitrogen, Total Kjeldahl	MCAWW	TAL DEN
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	TAL DEN
365.1	Phosphorus, Ortho	EPA	TAL DEN
365.1	Phosphorus, Total	EPA	TAL DEN
410.4	COD	MCAWW	TAL DEN
9020B	Organic Halides, Total (TOX)	SW846	TAL DEN
9040B	pH	SW846	TAL DEN
9050A	Specific Conductance	SW846	TAL DEN
9060	Organic Carbon, Total (TOC)	SW846	TAL DEN
SM 1030E	Cation Anion Balance	SM	TAL DEN
SM 1030E (meq)	Cation Anion Balance	SM	TAL DEN
SM 2320B	Alkalinity	SM	TAL DEN
SM 2340C	Hardness, Total (mg/l as CaC03)	SM	TAL DEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL DEN
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL DEN
SM5210B	BOD, 5 Day	SM	TAL DEN
Field Sampling	Field Sampling	EPA	TAL DEN
Subcontract	E-coli MPN (Alexin)	None	AAL
Subcontract	Fecal Coliform (Alexin)	None	AAL
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL DEN
351.2	Nitrogen, Total Kjeldahl	MCAWW	TAL DEN
365.1	Sample Digestion for Total Phosphorus	MCAWW	TAL DEN
5030B	Purge and Trap	SW846	TAL DEN

Protocol 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.
None = None
SM = "Standard Methods For The Examination Of Water And Wastewater"
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

AAL = AAL, 13035 SW PACIFIC HWY., Tigard, OR 97223, TEL (503)639-9311
TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
TAL DEN = Eurofins TestAmerica, Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Surfacewater

Job ID: 280-147467-1

Client Sample ID: TRIP BLANK

Date Collected: 04/14/21 08:00
Date Received: 04/15/21 10:00

Lab Sample ID: 280-147467-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/24/21 15:32	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/24/21 15:32	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/24/21 15:32	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/24/21 15:32	1
1,1-Dichloroethane	ND		1.0		ug/L			04/24/21 15:32	1
1,1-Dichloroethene	ND		1.0		ug/L			04/24/21 15:32	1
1,1-Dichloropropene	ND		1.0		ug/L			04/24/21 15:32	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/24/21 15:32	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/24/21 15:32	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/24/21 15:32	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/24/21 15:32	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			04/24/21 15:32	1
1,2-Dibromoethane	ND		1.0		ug/L			04/24/21 15:32	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/24/21 15:32	1
1,2-Dichloroethane	ND		1.0		ug/L			04/24/21 15:32	1
1,2-Dichloropropane	ND		1.0		ug/L			04/24/21 15:32	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/24/21 15:32	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/24/21 15:32	1
1,3-Dichloropropane	ND		1.0		ug/L			04/24/21 15:32	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/24/21 15:32	1
2,2-Dichloropropane	ND		5.0		ug/L			04/24/21 15:32	1
2-Butanone (MEK)	ND		6.0		ug/L			04/24/21 15:32	1
2-Chlorotoluene	ND		1.0		ug/L			04/24/21 15:32	1
2-Hexanone	ND		5.0		ug/L			04/24/21 15:32	1
4-Chlorotoluene	ND		1.0		ug/L			04/24/21 15:32	1
4-Isopropyltoluene	ND		1.0		ug/L			04/24/21 15:32	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/24/21 15:32	1
Acetone	ND		10		ug/L			04/24/21 15:32	1
Benzene	ND		1.0		ug/L			04/24/21 15:32	1
Bromobenzene	ND		1.0		ug/L			04/24/21 15:32	1
Bromochloromethane	ND		1.0		ug/L			04/24/21 15:32	1
Bromodichloromethane	ND		1.0		ug/L			04/24/21 15:32	1
Bromoform	ND		1.0		ug/L			04/24/21 15:32	1
Bromomethane	ND		2.0		ug/L			04/24/21 15:32	1
Carbon disulfide	ND		2.0		ug/L			04/24/21 15:32	1
Carbon tetrachloride	ND		1.0		ug/L			04/24/21 15:32	1
Chlorobenzene	ND		1.0		ug/L			04/24/21 15:32	1
Chloroethane	ND		2.0		ug/L			04/24/21 15:32	1
Chloroform	ND		1.0		ug/L			04/24/21 15:32	1
Chloromethane	ND		2.0		ug/L			04/24/21 15:32	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/24/21 15:32	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/24/21 15:32	1
Dibromochloromethane	ND		1.0		ug/L			04/24/21 15:32	1
Dibromomethane	ND		1.0		ug/L			04/24/21 15:32	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/24/21 15:32	1
Ethylbenzene	ND		1.0		ug/L			04/24/21 15:32	1
Hexachlorobutadiene	ND		1.0		ug/L			04/24/21 15:32	1
Isopropylbenzene	ND		1.0		ug/L			04/24/21 15:32	1
Methylene Chloride	ND		5.0		ug/L			04/24/21 15:32	1

Client Sample ID: TRIP BLANK
Lab Sample ID: 280-147467-1
Date Collected: 04/14/21 08:00
Matrix: Water
Date Received: 04/15/21 10:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0		ug/L			04/24/21 15:32	1
n-Butylbenzene	ND		1.0		ug/L			04/24/21 15:32	1
N-Propylbenzene	ND		1.0		ug/L			04/24/21 15:32	1
sec-Butylbenzene	ND		1.0		ug/L			04/24/21 15:32	1
Styrene	ND		1.0		ug/L			04/24/21 15:32	1
tert-Butylbenzene	ND		1.0		ug/L			04/24/21 15:32	1
Tetrachloroethene	ND		1.0		ug/L			04/24/21 15:32	1
Toluene	ND		1.0		ug/L			04/24/21 15:32	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/24/21 15:32	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/24/21 15:32	1
Trichloroethene	ND		1.0		ug/L			04/24/21 15:32	1
Trichlorofluoromethane	ND		2.0		ug/L			04/24/21 15:32	1
Vinyl chloride	ND		1.0		ug/L			04/24/21 15:32	1
Xylenes (total)	ND		2.0		ug/L			04/24/21 15:32	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/24/21 15:32*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 127*		*04/24/21 15:32*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*04/24/21 15:32*	*1*
Dibromofluoromethane (Surr)	*108*		*77 - 120*		*04/24/21 15:32*	*1*
Toluene-d8 (Surr)	*91*		*80 - 125*		*04/24/21 15:32*	*1*

Client Sample ID: SYR SW-2
Lab Sample ID: 280-147467-2
Date Collected: 04/14/21 11:30
Matrix: Water
Date Received: 04/15/21 10:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/24/21 17:26	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/24/21 17:26	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/24/21 17:26	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/24/21 17:26	1
1,1-Dichloroethane	ND		1.0		ug/L			04/24/21 17:26	1
1,1-Dichloroethene	ND		1.0		ug/L			04/24/21 17:26	1
1,1-Dichloropropene	ND		1.0		ug/L			04/24/21 17:26	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/24/21 17:26	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/24/21 17:26	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/24/21 17:26	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/24/21 17:26	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			04/24/21 17:26	1
1,2-Dibromoethane	ND		1.0		ug/L			04/24/21 17:26	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/24/21 17:26	1
1,2-Dichloroethane	ND		1.0		ug/L			04/24/21 17:26	1
1,2-Dichloropropane	ND		1.0		ug/L			04/24/21 17:26	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/24/21 17:26	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/24/21 17:26	1
1,3-Dichloropropane	ND		1.0		ug/L			04/24/21 17:26	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/24/21 17:26	1

Client Sample ID: SYR SW-2

Date Collected: 04/14/21 11:30
Date Received: 04/15/21 10:00

Lab Sample ID: 280-147467-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,2-Dichloropropane	ND		5.0		ug/L			04/24/21 17:26	1
2-Butanone (MEK)	ND		6.0		ug/L			04/24/21 17:26	1
2-Chlorotoluene	ND		1.0		ug/L			04/24/21 17:26	1
2-Hexanone	ND		5.0		ug/L			04/24/21 17:26	1
4-Chlorotoluene	ND		1.0		ug/L			04/24/21 17:26	1
4-Isopropyltoluene	ND		1.0		ug/L			04/24/21 17:26	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/24/21 17:26	1
Acetone	ND		10		ug/L			04/24/21 17:26	1
Benzene	ND		1.0		ug/L			04/24/21 17:26	1
Bromobenzene	ND		1.0		ug/L			04/24/21 17:26	1
Bromochloromethane	ND		1.0		ug/L			04/24/21 17:26	1
Bromodichloromethane	ND		1.0		ug/L			04/24/21 17:26	1
Bromoform	ND		1.0		ug/L			04/24/21 17:26	1
Bromomethane	ND		2.0		ug/L			04/24/21 17:26	1
Carbon disulfide	ND		2.0		ug/L			04/24/21 17:26	1
Carbon tetrachloride	ND		1.0		ug/L			04/24/21 17:26	1
Chlorobenzene	ND		1.0		ug/L			04/24/21 17:26	1
Chloroethane	ND		2.0		ug/L			04/24/21 17:26	1
Chloroform	ND		1.0		ug/L			04/24/21 17:26	1
Chloromethane	ND		2.0		ug/L			04/24/21 17:26	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/24/21 17:26	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/24/21 17:26	1
Dibromochloromethane	ND		1.0		ug/L			04/24/21 17:26	1
Dibromomethane	ND		1.0		ug/L			04/24/21 17:26	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/24/21 17:26	1
Ethylbenzene	ND		1.0		ug/L			04/24/21 17:26	1
Hexachlorobutadiene	ND		1.0		ug/L			04/24/21 17:26	1
Isopropylbenzene	ND		1.0		ug/L			04/24/21 17:26	1
Methylene Chloride	ND		5.0		ug/L			04/24/21 17:26	1
Naphthalene	ND		1.0		ug/L			04/24/21 17:26	1
n-Butylbenzene	ND		1.0		ug/L			04/24/21 17:26	1
N-Propylbenzene	ND		1.0		ug/L			04/24/21 17:26	1
sec-Butylbenzene	ND		1.0		ug/L			04/24/21 17:26	1
Styrene	ND		1.0		ug/L			04/24/21 17:26	1
tert-Butylbenzene	ND		1.0		ug/L			04/24/21 17:26	1
Tetrachloroethene	ND		1.0		ug/L			04/24/21 17:26	1
Toluene	ND		1.0		ug/L			04/24/21 17:26	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/24/21 17:26	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/24/21 17:26	1
Trichloroethene	ND		1.0		ug/L			04/24/21 17:26	1
Trichlorofluoromethane	ND		2.0		ug/L			04/24/21 17:26	1
Vinyl chloride	ND		1.0		ug/L			04/24/21 17:26	1
Xylenes (total)	ND		2.0		ug/L			04/24/21 17:26	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/24/21 17:26*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 127*		*04/24/21 17:26*	*1*
4-Bromofluorobenzene (Surr)	*95*		*78 - 120*		*04/24/21 17:26*	*1*

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Surfacewater

Job ID: 280-147467-1

Client Sample ID: SYR SW-2

Date Collected: 04/14/21 11:30
Date Received: 04/15/21 10:00

Lab Sample ID: 280-147467-2

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*108*		*77 - 120*		*04/24/21 17:26*	*1*
Toluene-d8 (Surr)	*90*		*80 - 125*		*04/24/21 17:26*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	8100		500		ug/L		04/22/21 16:17	04/23/21 09:29	1
Iron	1400		30		ug/L		04/22/21 16:17	04/23/21 09:29	1
Magnesium	2800		200		ug/L		04/22/21 16:17	04/23/21 09:29	1
Manganese	31		3.0		ug/L		04/22/21 16:17	04/23/21 09:29	1
Potassium	580		500		ug/L		04/22/21 16:17	04/23/21 09:29	1
Silicon	8000		100		ug/L		04/22/21 16:17	04/23/21 09:29	1
Sodium	5600		1000		ug/L		04/22/21 16:17	04/23/21 09:29	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	1.0				meq/L			05/03/21 09:05	1
Total Cations	0.97				meq/L			05/03/21 09:05	1
Percent Difference	-3.2				%			05/03/21 09:05	1
Calcium	8.1				mg/L			05/03/21 09:05	1
Magnesium	2.8				mg/L			05/03/21 09:05	1
Potassium	0.58				mg/L			05/03/21 09:05	1
Sodium	5.6				mg/L			05/03/21 09:05	1
Ammonia as N	0.00				mg/L			05/03/21 09:05	1
Chloride	5.3				mg/L			05/03/21 09:05	1
Sulfate	5.1				mg/L			05/03/21 09:05	1
Carbonate Alkalinity	0.00				mg/L			05/03/21 09:05	1
Bicarbonate Alkalinity	38				mg/L			05/03/21 09:05	1
Total Alkalinity	38				mg/L			05/03/21 09:05	1
Nitrate/Nitrite	0.24				mg/L			05/03/21 09:05	1
Anion/Cation Balance	-3.2				%			05/03/21 09:05	1
Calculated TDS	47				mg/L			05/03/21 09:05	1
TDS Ratio	1.3				NONE			05/03/21 09:05	1
Total Dissolved Solids	63				mg/L			05/03/21 09:05	1
Iron	1.4				mg/L			05/03/21 09:05	1
Calcium	0.40				meq/L			05/03/21 09:05	1
Magnesium	0.23				meq/L			05/03/21 09:05	1
Potassium	0.015				meq/L			05/03/21 09:05	1
Sodium	0.24				meq/L			05/03/21 09:05	1
Ammonia as N	0.00				meq/L			05/03/21 09:05	1
Chloride	0.15				meq/L			05/03/21 09:05	1
Sulfate	0.11				meq/L			05/03/21 09:05	1
Carbonate Alkalinity	0.00				meq/L			05/03/21 09:05	1
Bicarbonate Alkalinity	0.76				meq/L			05/03/21 09:05	1
Total Alkalinity	0.76				meq/L			05/03/21 09:05	1
Nitrate/Nitrite	0.017				meq/L			05/03/21 09:05	1
Iron	0.075				meq/L			05/03/21 09:05	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.3		1.0		mg/L			04/28/21 04:40	1
Sulfate	5.1		1.0		mg/L			04/28/21 04:40	1

Client Sample ID: SYR SW-2

Date Collected: 04/14/21 11:30
Date Received: 04/15/21 10:00

Lab Sample ID: 280-147467-2

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.050		mg/L			04/27/21 15:26	1
Total Kjeldahl Nitrogen	ND		1.0		mg/L		04/26/21 16:49	04/27/21 20:03	1
Nitrate Nitrite as N	**0.24**		0.050		mg/L			04/28/21 19:24	1
Orthophosphate	ND		0.020		mg/L			04/15/21 16:22	1
Total Phosphorus	ND		0.050		mg/L		04/20/21 09:48	04/22/21 09:44	1
Chemical Oxygen Demand (COD)	ND		20		mg/L			04/28/21 09:23	1
Halogens, Total Organic	ND		15		ug/L			04/28/21 16:11	1
Total Organic Carbon - Average	**1.1**		1.0		mg/L			05/02/21 05:15	1
Total Alkalinity	**38**		10		mg/L			04/17/21 00:21	1
Bicarbonate Alkalinity	**38**		10		mg/L			04/17/21 00:21	1
Carbonate Alkalinity	ND		10		mg/L			04/17/21 00:21	1
Hardness, as CaCO3	**40**		3.0		mg/L			04/21/21 10:16	1
Total Dissolved Solids	**63**		10		mg/L			04/20/21 16:39	1
Total Suspended Solids	**13**		4.0		mg/L			04/20/21 16:40	1
Biochemical Oxygen Demand	**2.5**	**b *-**	2.0		mg/L			04/16/21 07:43	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH adj. to 25 deg C	**7.8**	**HF**	0.1		SU			04/16/21 20:08	1
Specific Conductance	**97**		2.0		umhos/cm			04/21/21 12:16	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**7.22**				SU			04/14/21 12:30	1
Field Conductivity	**131.8**				umhos/cm			04/14/21 12:30	1
Field Temperature	**13.6**				Degrees C			04/14/21 12:30	1
Field Dissolved Oxygen	**11.50**				mg/L			04/14/21 12:30	1
Field EH/ORP	**75.5**				millivolts			04/14/21 12:30	1

Client Sample ID: SYR MW-12A

Date Collected: 04/14/21 12:30
Date Received: 04/15/21 10:00

Lab Sample ID: 280-147467-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/24/21 17:49	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/24/21 17:49	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/24/21 17:49	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/24/21 17:49	1
1,1-Dichloroethane	ND		1.0		ug/L			04/24/21 17:49	1
1,1-Dichloroethene	ND		1.0		ug/L			04/24/21 17:49	1
1,1-Dichloropropene	ND		1.0		ug/L			04/24/21 17:49	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/24/21 17:49	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/24/21 17:49	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/24/21 17:49	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/24/21 17:49	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			04/24/21 17:49	1
1,2-Dibromoethane	ND		1.0		ug/L			04/24/21 17:49	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/24/21 17:49	1
1,2-Dichloroethane	ND		1.0		ug/L			04/24/21 17:49	1
1,2-Dichloropropane	ND		1.0		ug/L			04/24/21 17:49	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/24/21 17:49	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Surfacewater

Job ID: 280-147467-1

Client Sample ID: SYR MW-12A
Date Collected: 04/14/21 12:30
Date Received: 04/15/21 10:00

Lab Sample ID: 280-147467-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0		ug/L			04/24/21 17:49	1
1,3-Dichloropropane	ND		1.0		ug/L			04/24/21 17:49	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/24/21 17:49	1
2,2-Dichloropropane	ND		5.0		ug/L			04/24/21 17:49	1
2-Butanone (MEK)	ND		6.0		ug/L			04/24/21 17:49	1
2-Chlorotoluene	ND		1.0		ug/L			04/24/21 17:49	1
2-Hexanone	ND		5.0		ug/L			04/24/21 17:49	1
4-Chlorotoluene	ND		1.0		ug/L			04/24/21 17:49	1
4-Isopropyltoluene	ND		1.0		ug/L			04/24/21 17:49	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/24/21 17:49	1
Acetone	ND		10		ug/L			04/24/21 17:49	1
Benzene	ND		1.0		ug/L			04/24/21 17:49	1
Bromobenzene	ND		1.0		ug/L			04/24/21 17:49	1
Bromochloromethane	ND		1.0		ug/L			04/24/21 17:49	1
Bromodichloromethane	ND		1.0		ug/L			04/24/21 17:49	1
Bromoform	ND		1.0		ug/L			04/24/21 17:49	1
Bromomethane	ND		2.0		ug/L			04/24/21 17:49	1
Carbon disulfide	ND		2.0		ug/L			04/24/21 17:49	1
Carbon tetrachloride	ND		1.0		ug/L			04/24/21 17:49	1
Chlorobenzene	ND		1.0		ug/L			04/24/21 17:49	1
Chloroethane	ND		2.0		ug/L			04/24/21 17:49	1
Chloroform	ND		1.0		ug/L			04/24/21 17:49	1
Chloromethane	ND		2.0		ug/L			04/24/21 17:49	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/24/21 17:49	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/24/21 17:49	1
Dibromochloromethane	ND		1.0		ug/L			04/24/21 17:49	1
Dibromomethane	ND		1.0		ug/L			04/24/21 17:49	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/24/21 17:49	1
Ethylbenzene	ND		1.0		ug/L			04/24/21 17:49	1
Hexachlorobutadiene	ND		1.0		ug/L			04/24/21 17:49	1
Isopropylbenzene	ND		1.0		ug/L			04/24/21 17:49	1
Methylene Chloride	ND		5.0		ug/L			04/24/21 17:49	1
Naphthalene	ND		1.0		ug/L			04/24/21 17:49	1
n-Butylbenzene	ND		1.0		ug/L			04/24/21 17:49	1
N-Propylbenzene	ND		1.0		ug/L			04/24/21 17:49	1
sec-Butylbenzene	ND		1.0		ug/L			04/24/21 17:49	1
Styrene	ND		1.0		ug/L			04/24/21 17:49	1
tert-Butylbenzene	ND		1.0		ug/L			04/24/21 17:49	1
Tetrachloroethene	ND		1.0		ug/L			04/24/21 17:49	1
Toluene	ND		1.0		ug/L			04/24/21 17:49	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/24/21 17:49	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/24/21 17:49	1
Trichloroethene	ND		1.0		ug/L			04/24/21 17:49	1
Trichlorofluoromethane	ND		2.0		ug/L			04/24/21 17:49	1
Vinyl chloride	ND		1.0		ug/L			04/24/21 17:49	1
Xylenes (total)	ND		2.0		ug/L			04/24/21 17:49	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/24/21 17:49*	*1*

Client Sample ID: SYR MW-12A
Lab Sample ID: 280-147467-3

Date Collected: 04/14/21 12:30
Matrix: Water
Date Received: 04/15/21 10:00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 127*		*04/24/21 17:49*	*1*
4-Bromofluorobenzene (Surr)	*95*		*78 - 120*		*04/24/21 17:49*	*1*
Dibromofluoromethane (Surr)	*108*		*77 - 120*		*04/24/21 17:49*	*1*
Toluene-d8 (Surr)	*89*		*80 - 125*		*04/24/21 17:49*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**9300**		500		ug/L		04/22/21 16:17	04/23/21 09:32	1
Iron	**440**		30		ug/L		04/22/21 16:17	04/23/21 09:32	1
Magnesium	**3000**		200		ug/L		04/22/21 16:17	04/23/21 09:32	1
Manganese	**25**		3.0		ug/L		04/22/21 16:17	04/23/21 09:32	1
Potassium	**620**		500		ug/L		04/22/21 16:17	04/23/21 09:32	1
Silicon	**6800**		100		ug/L		04/22/21 16:17	04/23/21 09:32	1
Sodium	**6000**		1000		ug/L		04/22/21 16:17	04/23/21 09:32	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	**1.1**				meq/L			05/03/21 09:05	1
Total Cations	**1.0**				meq/L			05/03/21 09:05	1
Percent Difference	**-1.9**				%			05/03/21 09:05	1
Calcium	**9.3**				mg/L			05/03/21 09:05	1
Magnesium	**3.0**				mg/L			05/03/21 09:05	1
Potassium	**0.62**				mg/L			05/03/21 09:05	1
Sodium	**6.0**				mg/L			05/03/21 09:05	1
Ammonia as N	**0.00**				mg/L			05/03/21 09:05	1
Chloride	**5.9**				mg/L			05/03/21 09:05	1
Sulfate	**7.4**				mg/L			05/03/21 09:05	1
Carbonate Alkalinity	**0.00**				mg/L			05/03/21 09:05	1
Bicarbonate Alkalinity	**35**				mg/L			05/03/21 09:05	1
Total Alkalinity	**35**				mg/L			05/03/21 09:05	1
Nitrate/Nitrite	**0.44**				mg/L			05/03/21 09:05	1
Anion/Cation Balance	**-1.9**				%			05/03/21 09:05	1
Calculated TDS	**47**				mg/L			05/03/21 09:05	1
TDS Ratio	**1.2**				NONE			05/03/21 09:05	1
Total Dissolved Solids	**57**				mg/L			05/03/21 09:05	1
Iron	**0.44**				mg/L			05/03/21 09:05	1
Calcium	**0.46**				meq/L			05/03/21 09:05	1
Magnesium	**0.25**				meq/L			05/03/21 09:05	1
Potassium	**0.016**				meq/L			05/03/21 09:05	1
Sodium	**0.26**				meq/L			05/03/21 09:05	1
Ammonia as N	**0.00**				meq/L			05/03/21 09:05	1
Chloride	**0.17**				meq/L			05/03/21 09:05	1
Sulfate	**0.15**				meq/L			05/03/21 09:05	1
Carbonate Alkalinity	**0.00**				meq/L			05/03/21 09:05	1
Bicarbonate Alkalinity	**0.70**				meq/L			05/03/21 09:05	1
Total Alkalinity	**0.70**				meq/L			05/03/21 09:05	1
Nitrate/Nitrite	**0.031**				meq/L			05/03/21 09:05	1
Iron	**0.024**				meq/L			05/03/21 09:05	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.9**		1.0		mg/L			04/28/21 04:58	1

Client Sample ID: SYR MW-12A
Lab Sample ID: 280-147467-3
Date Collected: 04/14/21 12:30
Matrix: Water
Date Received: 04/15/21 10:00

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**7.4**		1.0		mg/L			04/29/21 22:09	1
Ammonia as N	ND		0.050		mg/L			04/29/21 11:49	1
Total Kjeldahl Nitrogen	ND		1.0		mg/L		04/26/21 16:49	04/27/21 20:05	1
Nitrate Nitrite as N	**0.44**		0.050		mg/L			04/28/21 19:26	1
Orthophosphate	ND		0.020		mg/L			04/15/21 16:22	1
Total Phosphorus	ND		0.050		mg/L		04/20/21 09:48	04/22/21 09:44	1
Chemical Oxygen Demand (COD)	ND		20		mg/L			04/28/21 09:23	1
Halogens, Total Organic	**25**	**F1**	15		ug/L			04/28/21 16:11	1
Total Organic Carbon - Average	**1.2**		1.0		mg/L			05/02/21 05:32	1
Total Alkalinity	**35**		10		mg/L			04/17/21 00:27	1
Bicarbonate Alkalinity	**35**		10		mg/L			04/17/21 00:27	1
Carbonate Alkalinity	ND		10		mg/L			04/17/21 00:27	1
Hardness, as CaCO3	**35**		3.0		mg/L			04/21/21 10:16	1
Total Dissolved Solids	**57**		10		mg/L			04/20/21 16:39	1
Total Suspended Solids	**9.6**		4.0		mg/L			04/20/21 16:40	1
Biochemical Oxygen Demand	**3.8**	**b *-**	2.0		mg/L			04/16/21 07:43	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH adj. to 25 deg C	**7.6**	**HF**	0.1		SU			04/16/21 20:12	1
Specific Conductance	**110**		2.0		umhos/cm			04/21/21 12:16	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**7.15**				SU			04/14/21 13:30	1
Field Conductivity	**115.2**				umhos/cm			04/14/21 13:30	1
Field Temperature	**11.8**				Degrees C			04/14/21 13:30	1
Field Dissolved Oxygen	**12.64**				mg/L			04/14/21 13:30	1
Field EH/ORP	**72.6**				millivolts			04/14/21 13:30	1

Client Sample ID: SYR SW-1
Lab Sample ID: 280-147467-4
Date Collected: 04/14/21 13:30
Matrix: Water
Date Received: 04/15/21 10:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/24/21 18:12	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/24/21 18:12	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/24/21 18:12	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/24/21 18:12	1
1,1-Dichloroethane	ND		1.0		ug/L			04/24/21 18:12	1
1,1-Dichloroethene	ND		1.0		ug/L			04/24/21 18:12	1
1,1-Dichloropropene	ND		1.0		ug/L			04/24/21 18:12	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/24/21 18:12	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/24/21 18:12	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/24/21 18:12	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/24/21 18:12	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			04/24/21 18:12	1
1,2-Dibromoethane	ND		1.0		ug/L			04/24/21 18:12	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/24/21 18:12	1
1,2-Dichloroethane	ND		1.0		ug/L			04/24/21 18:12	1
1,2-Dichloropropane	ND		1.0		ug/L			04/24/21 18:12	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Surfacewater

Job ID: 280-147467-1

Client Sample ID: SYR SW-1
Date Collected: 04/14/21 13:30
Date Received: 04/15/21 10:00

Lab Sample ID: 280-147467-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/24/21 18:12	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/24/21 18:12	1
1,3-Dichloropropane	ND		1.0		ug/L			04/24/21 18:12	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/24/21 18:12	1
2,2-Dichloropropane	ND		5.0		ug/L			04/24/21 18:12	1
2-Butanone (MEK)	ND		6.0		ug/L			04/24/21 18:12	1
2-Chlorotoluene	ND		1.0		ug/L			04/24/21 18:12	1
2-Hexanone	ND		5.0		ug/L			04/24/21 18:12	1
4-Chlorotoluene	ND		1.0		ug/L			04/24/21 18:12	1
4-Isopropyltoluene	ND		1.0		ug/L			04/24/21 18:12	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/24/21 18:12	1
Acetone	ND		10		ug/L			04/24/21 18:12	1
Benzene	ND		1.0		ug/L			04/24/21 18:12	1
Bromobenzene	ND		1.0		ug/L			04/24/21 18:12	1
Bromochloromethane	ND		1.0		ug/L			04/24/21 18:12	1
Bromodichloromethane	ND		1.0		ug/L			04/24/21 18:12	1
Bromoform	ND		1.0		ug/L			04/24/21 18:12	1
Bromomethane	ND		2.0		ug/L			04/24/21 18:12	1
Carbon disulfide	ND		2.0		ug/L			04/24/21 18:12	1
Carbon tetrachloride	ND		1.0		ug/L			04/24/21 18:12	1
Chlorobenzene	ND		1.0		ug/L			04/24/21 18:12	1
Chloroethane	ND		2.0		ug/L			04/24/21 18:12	1
Chloroform	ND		1.0		ug/L			04/24/21 18:12	1
Chloromethane	ND		2.0		ug/L			04/24/21 18:12	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/24/21 18:12	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/24/21 18:12	1
Dibromochloromethane	ND		1.0		ug/L			04/24/21 18:12	1
Dibromomethane	ND		1.0		ug/L			04/24/21 18:12	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/24/21 18:12	1
Ethylbenzene	ND		1.0		ug/L			04/24/21 18:12	1
Hexachlorobutadiene	ND		1.0		ug/L			04/24/21 18:12	1
Isopropylbenzene	ND		1.0		ug/L			04/24/21 18:12	1
Methylene Chloride	ND		5.0		ug/L			04/24/21 18:12	1
Naphthalene	ND		1.0		ug/L			04/24/21 18:12	1
n-Butylbenzene	ND		1.0		ug/L			04/24/21 18:12	1
N-Propylbenzene	ND		1.0		ug/L			04/24/21 18:12	1
sec-Butylbenzene	ND		1.0		ug/L			04/24/21 18:12	1
Styrene	ND		1.0		ug/L			04/24/21 18:12	1
tert-Butylbenzene	ND		1.0		ug/L			04/24/21 18:12	1
Tetrachloroethene	ND		1.0		ug/L			04/24/21 18:12	1
Toluene	ND		1.0		ug/L			04/24/21 18:12	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/24/21 18:12	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/24/21 18:12	1
Trichloroethene	ND		1.0		ug/L			04/24/21 18:12	1
Trichlorofluoromethane	ND		2.0		ug/L			04/24/21 18:12	1
Vinyl chloride	ND		1.0		ug/L			04/24/21 18:12	1
Xylenes (total)	ND		2.0		ug/L			04/24/21 18:12	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/24/21 18:12*	*1*

Client Sample ID: SYR SW-1
Lab Sample ID: 280-147467-4

Date Collected: 04/14/21 13:30
Matrix: Water
Date Received: 04/15/21 10:00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 127*		*04/24/21 18:12*	*1*
4-Bromofluorobenzene (Surr)	*95*		*78 - 120*		*04/24/21 18:12*	*1*
Dibromofluoromethane (Surr)	*107*		*77 - 120*		*04/24/21 18:12*	*1*
Toluene-d8 (Surr)	*90*		*80 - 125*		*04/24/21 18:12*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**8200**		500		ug/L		04/22/21 16:17	04/23/21 09:36	1
Iron	**490**		30		ug/L		04/22/21 16:17	04/23/21 09:36	1
Magnesium	**2700**		200		ug/L		04/22/21 16:17	04/23/21 09:36	1
Manganese	**18**		3.0		ug/L		04/22/21 16:17	04/23/21 09:36	1
Potassium	**540**		500		ug/L		04/22/21 16:17	04/23/21 09:36	1
Silicon	**7100**		100		ug/L		04/22/21 16:17	04/23/21 09:36	1
Sodium	**5800**		1000		ug/L		04/22/21 16:17	04/23/21 09:36	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	**0.92**				meq/L			05/03/21 09:05	1
Total Cations	**0.92**				meq/L			05/03/21 09:05	1
Percent Difference	**0.16**				%			05/03/21 09:05	1
Calcium	**8.2**				mg/L			05/03/21 09:05	1
Magnesium	**2.7**				mg/L			05/03/21 09:05	1
Potassium	**0.54**				mg/L			05/03/21 09:05	1
Sodium	**5.8**				mg/L			05/03/21 09:05	1
Ammonia as N	**0.00**				mg/L			05/03/21 09:05	1
Chloride	**5.3**				mg/L			05/03/21 09:05	1
Sulfate	**5.0**				mg/L			05/03/21 09:05	1
Carbonate Alkalinity	**0.00**				mg/L			05/03/21 09:05	1
Bicarbonate Alkalinity	**32**				mg/L			05/03/21 09:05	1
Total Alkalinity	**32**				mg/L			05/03/21 09:05	1
Nitrate/Nitrite	**0.39**				mg/L			05/03/21 09:05	1
Anion/Cation Balance	**0.16**				%			05/03/21 09:05	1
Calculated TDS	**43**				mg/L			05/03/21 09:05	1
TDS Ratio	**1.4**				NONE			05/03/21 09:05	1
Total Dissolved Solids	**61**				mg/L			05/03/21 09:05	1
Iron	**0.49**				mg/L			05/03/21 09:05	1
Calcium	**0.41**				meq/L			05/03/21 09:05	1
Magnesium	**0.22**				meq/L			05/03/21 09:05	1
Potassium	**0.014**				meq/L			05/03/21 09:05	1
Sodium	**0.25**				meq/L			05/03/21 09:05	1
Ammonia as N	**0.00**				meq/L			05/03/21 09:05	1
Chloride	**0.15**				meq/L			05/03/21 09:05	1
Sulfate	**0.10**				meq/L			05/03/21 09:05	1
Carbonate Alkalinity	**0.00**				meq/L			05/03/21 09:05	1
Bicarbonate Alkalinity	**0.64**				meq/L			05/03/21 09:05	1
Total Alkalinity	**0.64**				meq/L			05/03/21 09:05	1
Nitrate/Nitrite	**0.028**				meq/L			05/03/21 09:05	1
Iron	**0.026**				meq/L			05/03/21 09:05	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.3**		1.0		mg/L			04/28/21 05:15	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Surfacewater

Job ID: 280-147467-1

Client Sample ID: SYR SW-1

Date Collected: 04/14/21 13:30
Date Received: 04/15/21 10:00

Lab Sample ID: 280-147467-4

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**5.0**		1.0		mg/L			04/28/21 05:15	1
Ammonia as N	ND		0.050		mg/L			04/27/21 15:30	1
Total Kjeldahl Nitrogen	ND		1.0		mg/L		04/26/21 16:49	04/27/21 20:08	1
Nitrate Nitrite as N	**0.39**		0.050		mg/L			04/28/21 19:28	1
Orthophosphate	ND		0.020		mg/L			04/15/21 16:22	1
Total Phosphorus	ND		0.050		mg/L		04/20/21 09:49	04/22/21 09:44	1
Chemical Oxygen Demand (COD)	ND		20		mg/L			04/28/21 09:23	1
Halogens, Total Organic	ND		15		ug/L			04/28/21 16:11	1
Total Organic Carbon - Average	**1.2**		1.0		mg/L			05/02/21 05:49	1
Total Alkalinity	**32**		10		mg/L			04/17/21 00:32	1
Bicarbonate Alkalinity	**32**		10		mg/L			04/17/21 00:32	1
Carbonate Alkalinity	ND		10		mg/L			04/17/21 00:32	1
Hardness, as CaCO3	**33**		3.0		mg/L			04/22/21 14:03	1
Total Dissolved Solids	**61**		10		mg/L			04/20/21 16:39	1
Total Suspended Solids	**8.8**		4.0		mg/L			04/20/21 16:40	1
Biochemical Oxygen Demand	**3.8**	**b *-**	2.0		mg/L			04/16/21 07:43	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH adj. to 25 deg C	**7.6**	**HF**	0.1		SU			04/16/21 20:15	1
Specific Conductance	**95**		2.0		umhos/cm			04/21/21 12:16	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**6.73**				SU			04/14/21 14:30	1
Field Conductivity	**105.1**				umhos/cm			04/14/21 14:30	1
Field Temperature	**12.8**				Degrees C			04/14/21 14:30	1
Field Dissolved Oxygen	**8.45**				mg/L			04/14/21 14:30	1
Field EH/ORP	**109.8**				millivolts			04/14/21 14:30	1

Surrogate Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Surfacewater

Job ID: 280-147467-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-127)	(78-120)	(77-120)	(80-125)
280-147467-1	TRIP BLANK	105	96	108	91
280-147467-2	SYR SW-2	105	95	108	90
280-147467-3	SYR MW-12A	106	95	108	89
280-147467-4	SYR SW-1	106	95	107	90
LCS 280-533748/5	Lab Control Sample	102	96	107	92
LCSD 280-533748/6	Lab Control Sample Dup	101	96	106	91
MB 280-533748/10	Method Blank	103	96	107	90

Surrogate Legend

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

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

Lab Sample ID: MB 280-533748/10
Matrix: Water
Analysis Batch: 533748

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/24/21 13:13	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/24/21 13:13	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/24/21 13:13	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/24/21 13:13	1
1,1-Dichloroethane	ND		1.0		ug/L			04/24/21 13:13	1
1,1-Dichloroethene	ND		1.0		ug/L			04/24/21 13:13	1
1,1-Dichloropropene	ND		1.0		ug/L			04/24/21 13:13	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/24/21 13:13	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/24/21 13:13	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/24/21 13:13	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/24/21 13:13	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			04/24/21 13:13	1
1,2-Dibromoethane	ND		1.0		ug/L			04/24/21 13:13	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/24/21 13:13	1
1,2-Dichloroethane	ND		1.0		ug/L			04/24/21 13:13	1
1,2-Dichloropropane	ND		1.0		ug/L			04/24/21 13:13	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/24/21 13:13	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/24/21 13:13	1
1,3-Dichloropropane	ND		1.0		ug/L			04/24/21 13:13	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/24/21 13:13	1
2,2-Dichloropropane	ND		5.0		ug/L			04/24/21 13:13	1
2-Butanone (MEK)	ND		6.0		ug/L			04/24/21 13:13	1
2-Chlorotoluene	ND		1.0		ug/L			04/24/21 13:13	1
2-Hexanone	ND		5.0		ug/L			04/24/21 13:13	1
4-Chlorotoluene	ND		1.0		ug/L			04/24/21 13:13	1
4-Isopropyltoluene	ND		1.0		ug/L			04/24/21 13:13	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/24/21 13:13	1
Acetone	ND		10		ug/L			04/24/21 13:13	1
Benzene	ND		1.0		ug/L			04/24/21 13:13	1
Bromobenzene	ND		1.0		ug/L			04/24/21 13:13	1
Bromochloromethane	ND		1.0		ug/L			04/24/21 13:13	1
Bromodichloromethane	ND		1.0		ug/L			04/24/21 13:13	1
Bromoform	ND		1.0		ug/L			04/24/21 13:13	1
Bromomethane	ND		2.0		ug/L			04/24/21 13:13	1
Carbon disulfide	ND		2.0		ug/L			04/24/21 13:13	1
Carbon tetrachloride	ND		1.0		ug/L			04/24/21 13:13	1
Chlorobenzene	ND		1.0		ug/L			04/24/21 13:13	1
Chloroethane	ND		2.0		ug/L			04/24/21 13:13	1
Chloroform	ND		1.0		ug/L			04/24/21 13:13	1
Chloromethane	ND		2.0		ug/L			04/24/21 13:13	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/24/21 13:13	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/24/21 13:13	1
Dibromochloromethane	ND		1.0		ug/L			04/24/21 13:13	1
Dibromomethane	ND		1.0		ug/L			04/24/21 13:13	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/24/21 13:13	1
Ethylbenzene	ND		1.0		ug/L			04/24/21 13:13	1
Hexachlorobutadiene	ND		1.0		ug/L			04/24/21 13:13	1
Isopropylbenzene	ND		1.0		ug/L			04/24/21 13:13	1

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

Lab Sample ID: MB 280-533748/10
Matrix: Water
Analysis Batch: 533748

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		5.0		ug/L			04/24/21 13:13	1
Naphthalene	ND		1.0		ug/L			04/24/21 13:13	1
n-Butylbenzene	ND		1.0		ug/L			04/24/21 13:13	1
N-Propylbenzene	ND		1.0		ug/L			04/24/21 13:13	1
sec-Butylbenzene	ND		1.0		ug/L			04/24/21 13:13	1
Styrene	ND		1.0		ug/L			04/24/21 13:13	1
tert-Butylbenzene	ND		1.0		ug/L			04/24/21 13:13	1
Tetrachloroethene	ND		1.0		ug/L			04/24/21 13:13	1
Toluene	ND		1.0		ug/L			04/24/21 13:13	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/24/21 13:13	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/24/21 13:13	1
Trichloroethene	ND		1.0		ug/L			04/24/21 13:13	1
Trichlorofluoromethane	ND		2.0		ug/L			04/24/21 13:13	1
Vinyl chloride	ND		1.0		ug/L			04/24/21 13:13	1
Xylenes (total)	ND		2.0		ug/L			04/24/21 13:13	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/24/21 13:13*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 127*		*04/24/21 13:13*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*04/24/21 13:13*	*1*
Dibromofluoromethane (Surr)	*107*		*77 - 120*		*04/24/21 13:13*	*1*
Toluene-d8 (Surr)	*90*		*80 - 125*		*04/24/21 13:13*	*1*

Lab Sample ID: LCS 280-533748/5
Matrix: Water
Analysis Batch: 533748

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	22.5		ug/L		90	65 - 135
1,1,1-Trichloroethane	25.0	26.7		ug/L		107	65 - 135
1,1,2,2-Tetrachloroethane	25.0	21.6		ug/L		86	58 - 135
1,1,2-Trichloroethane	25.0	27.5		ug/L		110	64 - 135
1,1-Dichloroethane	25.0	27.6		ug/L		110	65 - 135
1,1-Dichloroethene	25.0	25.2		ug/L		101	65 - 136
1,1-Dichloropropene	25.0	25.7		ug/L		103	65 - 135
1,2,3-Trichlorobenzene	25.0	21.4		ug/L		86	60 - 135
1,2,3-Trichloropropane	25.0	21.0		ug/L		84	65 - 135
1,2,4-Trichlorobenzene	25.0	20.6		ug/L		82	58 - 135
1,2,4-Trimethylbenzene	25.0	22.2		ug/L		89	65 - 135
1,2-Dibromo-3-Chloropropane	25.0	19.1		ug/L		76	57 - 135
1,2-Dibromoethane	25.0	22.3		ug/L		89	65 - 135
1,2-Dichlorobenzene	25.0	21.4		ug/L		86	65 - 135
1,2-Dichloroethane	25.0	25.2		ug/L		101	65 - 135
1,2-Dichloropropane	25.0	27.7		ug/L		111	64 - 135
1,3,5-Trimethylbenzene	25.0	22.2		ug/L		89	65 - 135
1,3-Dichlorobenzene	25.0	21.5		ug/L		86	65 - 135

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

Lab Sample ID: LCS 280-533748/5
Matrix: Water
Analysis Batch: 533748

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichloropropane	25.0	23.0		ug/L		92	64 - 135
1,4-Dichlorobenzene	25.0	21.0		ug/L		84	65 - 135
2,2-Dichloropropane	25.0	27.9		ug/L		112	65 - 135
2-Butanone (MEK)	100	97.7		ug/L		98	44 - 177
2-Chlorotoluene	25.0	22.0		ug/L		88	65 - 135
2-Hexanone	100	78.0		ug/L		78	57 - 139
4-Chlorotoluene	25.0	21.9		ug/L		87	65 - 135
4-Isopropyltoluene	25.0	22.2		ug/L		89	65 - 135
4-Methyl-2-pentanone	100	95.3		ug/L		95	60 - 150
Acetone	100	96.8		ug/L		97	39 - 156
Benzene	25.0	26.6		ug/L		107	65 - 135
Bromobenzene	25.0	21.5		ug/L		86	65 - 135
Bromochloromethane	25.0	30.2		ug/L		121	65 - 135
Bromodichloromethane	25.0	27.5		ug/L		110	65 - 135
Bromoform	25.0	20.3		ug/L		81	62 - 135
Bromomethane	25.0	31.4		ug/L		126	45 - 135
Carbon disulfide	25.0	25.8		ug/L		103	55 - 143
Carbon tetrachloride	25.0	26.4		ug/L		105	65 - 135
Chlorobenzene	25.0	22.7		ug/L		91	65 - 135
Chloroethane	25.0	26.9		ug/L		108	46 - 136
Chloroform	25.0	27.3		ug/L		109	65 - 135
Chloromethane	25.0	24.8		ug/L		99	34 - 145
cis-1,2-Dichloroethene	25.0	26.4		ug/L		106	65 - 135
cis-1,3-Dichloropropene	25.0	23.3		ug/L		93	65 - 135
Dibromochloromethane	25.0	23.7		ug/L		95	65 - 135
Dibromomethane	25.0	26.5		ug/L		106	65 - 135
Dichlorodifluoromethane	25.0	21.7		ug/L		87	43 - 142
Ethylbenzene	25.0	22.9		ug/L		92	65 - 135
Hexachlorobutadiene	25.0	22.4		ug/L		90	65 - 135
Isopropylbenzene	25.0	21.5		ug/L		86	65 - 135
Methylene Chloride	25.0	27.1		ug/L		108	54 - 141
Naphthalene	25.0	19.8		ug/L		79	42 - 135
n-Butylbenzene	25.0	21.6		ug/L		87	64 - 135
N-Propylbenzene	25.0	22.1		ug/L		88	65 - 135
sec-Butylbenzene	25.0	21.8		ug/L		87	64 - 135
Styrene	25.0	23.2		ug/L		93	65 - 135
tert-Butylbenzene	25.0	21.7		ug/L		87	65 - 135
Tetrachloroethene	25.0	22.9		ug/L		92	65 - 135
Toluene	25.0	26.8		ug/L		107	65 - 135
trans-1,2-Dichloroethene	25.0	25.7		ug/L		103	65 - 135
trans-1,3-Dichloropropene	25.0	27.9		ug/L		111	65 - 135
Trichloroethene	25.0	21.4		ug/L		86	65 - 135
Trichlorofluoromethane	25.0	25.4		ug/L		102	53 - 137
Vinyl chloride	25.0	23.7		ug/L		95	40 - 137

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 127*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*

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

Lab Sample ID: LCS 280-533748/5
Matrix: Water
Analysis Batch: 533748

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane (Surr)	107		77 - 120
Toluene-d8 (Surr)	92		80 - 125

Lab Sample ID: LCSD 280-533748/6
Matrix: Water
Analysis Batch: 533748

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane			25.0	22.8		ug/L		91	65 - 135	1	20
1,1,1-Trichloroethane			25.0	27.0		ug/L		108	65 - 135	1	20
1,1,2,2-Tetrachloroethane			25.0	21.6		ug/L		86	58 - 135	0	20
1,1,2-Trichloroethane			25.0	27.4		ug/L		110	64 - 135	0	27
1,1-Dichloroethane			25.0	28.0		ug/L		112	65 - 135	1	21
1,1-Dichloroethene			25.0	25.8		ug/L		103	65 - 136	3	20
1,1-Dichloropropene			25.0	26.6		ug/L		106	65 - 135	3	21
1,2,3-Trichlorobenzene			25.0	21.4		ug/L		86	60 - 135	0	36
1,2,3-Trichloropropane			25.0	20.7		ug/L		83	65 - 135	1	23
1,2,4-Trichlorobenzene			25.0	20.8		ug/L		83	58 - 135	1	25
1,2,4-Trimethylbenzene			25.0	22.7		ug/L		91	65 - 135	2	20
1,2-Dibromo-3-Chloropropane			25.0	19.0		ug/L		76	57 - 135	0	22
1,2-Dibromoethane			25.0	22.5		ug/L		90	65 - 135	1	27
1,2-Dichlorobenzene			25.0	21.8		ug/L		87	65 - 135	2	20
1,2-Dichloroethane			25.0	25.3		ug/L		101	65 - 135	0	20
1,2-Dichloropropane			25.0	28.0		ug/L		112	64 - 135	1	20
1,3,5-Trimethylbenzene			25.0	22.4		ug/L		89	65 - 135	1	20
1,3-Dichlorobenzene			25.0	21.9		ug/L		87	65 - 135	1	20
1,3-Dichloropropane			25.0	23.1		ug/L		92	64 - 135	1	20
1,4-Dichlorobenzene			25.0	21.1		ug/L		85	65 - 135	1	23
2,2-Dichloropropane			25.0	28.4		ug/L		113	65 - 135	2	20
2-Butanone (MEK)			100	98.2		ug/L		98	44 - 177	0	32
2-Chlorotoluene			25.0	22.1		ug/L		88	65 - 135	0	20
2-Hexanone			100	77.2		ug/L		77	57 - 139	1	25
4-Chlorotoluene			25.0	21.6		ug/L		87	65 - 135	1	20
4-Isopropyltoluene			25.0	22.4		ug/L		90	65 - 135	1	20
4-Methyl-2-pentanone			100	95.0		ug/L		95	60 - 150	0	22
Acetone			100	97.5		ug/L		98	39 - 156	1	23
Benzene			25.0	27.2		ug/L		109	65 - 135	2	20
Bromobenzene			25.0	21.4		ug/L		86	65 - 135	0	26
Bromochloromethane			25.0	29.9		ug/L		120	65 - 135	1	29
Bromodichloromethane			25.0	28.0		ug/L		112	65 - 135	2	20
Bromoform			25.0	20.2		ug/L		81	62 - 135	0	27
Bromomethane			25.0	31.1		ug/L		124	45 - 135	1	33
Carbon disulfide			25.0	26.2		ug/L		105	55 - 143	2	20
Carbon tetrachloride			25.0	26.8		ug/L		107	65 - 135	2	21
Chlorobenzene			25.0	23.0		ug/L		92	65 - 135	1	20
Chloroethane			25.0	27.7		ug/L		111	46 - 136	3	25
Chloroform			25.0	27.6		ug/L		110	65 - 135	1	20
Chloromethane			25.0	24.9		ug/L		100	34 - 145	0	24

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

Lab Sample ID: LCSD 280-533748/6
Matrix: Water
Analysis Batch: 533748

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,2-Dichloroethene			25.0	27.0		ug/L		108	65 - 135	2	20
cis-1,3-Dichloropropene			25.0	23.5		ug/L		94	65 - 135	1	26
Dibromochloromethane			25.0	24.1		ug/L		96	65 - 135	1	20
Dibromomethane			25.0	26.4		ug/L		106	65 - 135	0	26
Dichlorodifluoromethane			25.0	21.9		ug/L		88	43 - 142	1	30
Ethylbenzene			25.0	23.1		ug/L		92	65 - 135	1	20
Hexachlorobutadiene			25.0	22.0		ug/L		88	65 - 135	2	25
Isopropylbenzene			25.0	21.9		ug/L		88	65 - 135	2	20
Methylene Chloride			25.0	27.4		ug/L		110	54 - 141	1	26
Naphthalene			25.0	19.9		ug/L		79	42 - 135	0	23
n-Butylbenzene			25.0	22.2		ug/L		89	64 - 135	3	21
N-Propylbenzene			25.0	22.7		ug/L		91	65 - 135	3	20
sec-Butylbenzene			25.0	22.4		ug/L		90	64 - 135	3	21
Styrene			25.0	23.5		ug/L		94	65 - 135	1	26
tert-Butylbenzene			25.0	22.1		ug/L		88	65 - 135	2	21
Tetrachloroethene			25.0	23.1		ug/L		92	65 - 135	1	20
Toluene			25.0	27.3		ug/L		109	65 - 135	2	20
trans-1,2-Dichloroethene			25.0	26.3		ug/L		105	65 - 135	2	24
trans-1,3-Dichloropropene			25.0	27.9		ug/L		112	65 - 135	0	26
Trichloroethene			25.0	21.7		ug/L		87	65 - 135	1	20
Trichlorofluoromethane			25.0	25.7		ug/L		103	53 - 137	1	27
Vinyl chloride			25.0	23.9		ug/L		96	40 - 137	1	24

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 127*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*
Dibromofluoromethane (Surr)	*106*		*77 - 120*
Toluene-d8 (Surr)	*91*		*80 - 125*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 280-533177/1-A
Matrix: Water
Analysis Batch: 533647

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 533177

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		500		ug/L		04/22/21 16:17	04/23/21 08:29	1
Iron	ND		30		ug/L		04/22/21 16:17	04/23/21 08:29	1
Magnesium	ND		200		ug/L		04/22/21 16:17	04/23/21 08:29	1
Manganese	ND		3.0		ug/L		04/22/21 16:17	04/23/21 08:29	1
Potassium	ND		500		ug/L		04/22/21 16:17	04/23/21 08:29	1
Silicon	ND		100		ug/L		04/22/21 16:17	04/23/21 08:29	1
Sodium	ND		1000		ug/L		04/22/21 16:17	04/23/21 08:29	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 280-533177/2-A
Matrix: Water
Analysis Batch: 533647

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 533177

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	50000	49500		ug/L		99	90 - 111
Iron	10000	9800		ug/L		98	89 - 115
Magnesium	50000	48500		ug/L		97	90 - 113
Manganese	1000	987		ug/L		99	90 - 110
Potassium	50000	48600		ug/L		97	89 - 114
Silicon	2000	1980		ug/L		99	90 - 110
Sodium	50000	48500		ug/L		97	90 - 115

Lab Sample ID: 280-147379-D-1-B MS
Matrix: Water
Analysis Batch: 533647

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 533177

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	72000		50000	117000		ug/L		90	48 - 153
Iron	73		10000	9510		ug/L		94	52 - 155
Magnesium	20000		50000	66400		ug/L		93	62 - 146
Manganese	8.1		1000	953		ug/L		94	79 - 121
Potassium	5400		50000	52800		ug/L		95	76 - 132
Silicon	14000		2000	15400	4	ug/L		85	79 - 140
Sodium	190000		50000	235000		ug/L		86	70 - 203

Lab Sample ID: 280-147379-D-1-C MSD
Matrix: Water
Analysis Batch: 533647

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 533177

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium	72000		50000	119000		ug/L		95	48 - 153	2	20
Iron	73		10000	9800		ug/L		97	52 - 155	3	20
Magnesium	20000		50000	68500		ug/L		97	62 - 146	3	20
Manganese	8.1		1000	986		ug/L		98	79 - 121	3	20
Potassium	5400		50000	54500		ug/L		98	76 - 132	3	20
Silicon	14000		2000	15800	4	ug/L		105	79 - 140	3	20
Sodium	190000		50000	239000		ug/L		94	70 - 203	2	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 480-578094/28
Matrix: Water
Analysis Batch: 578094

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0		mg/L			04/27/21 23:36	1
Sulfate	ND		1.0		mg/L			04/27/21 23:36	1

Lab Sample ID: LCS 480-578094/27
Matrix: Water
Analysis Batch: 578094

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	48.4		mg/L		97	90 - 110

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 480-578094/27
Matrix: Water
Analysis Batch: 578094

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			50.0	48.6		mg/L		97	90 - 110		

Lab Sample ID: 280-147466-E-3 MS
Matrix: Water
Analysis Batch: 578094

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	14		50.0	62.1		mg/L		96	81 - 120		
Sulfate	3.2		50.0	51.7		mg/L		97	80 - 120		

Lab Sample ID: 280-147466-E-3 MSD
Matrix: Water
Analysis Batch: 578094

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	14		50.0	62.4		mg/L		96	81 - 120	1	15
Sulfate	3.2		50.0	52.0		mg/L		98	80 - 120	1	15

Lab Sample ID: 280-147467-4 MS
Matrix: Water
Analysis Batch: 578094

Client Sample ID: SYR SW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	5.3		50.0	54.5		mg/L		98	81 - 120		
Sulfate	5.0		50.0	54.3		mg/L		99	80 - 120		

Lab Sample ID: MB 480-578589/4
Matrix: Water
Analysis Batch: 578589

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0		mg/L			04/29/21 20:40	1
Sulfate	ND		1.0		mg/L			04/29/21 20:40	1

Lab Sample ID: LCS 480-578589/3
Matrix: Water
Analysis Batch: 578589

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			50.0	48.5		mg/L		97	90 - 110		
Sulfate			50.0	48.5		mg/L		97	90 - 110		

Lab Sample ID: 480-183933-E-4 MS
Matrix: Water
Analysis Batch: 578589

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	40	F1 F2	250	346	F1	mg/L		123	81 - 120		
Sulfate	ND		250	230		mg/L		92	80 - 120		

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 480-183933-E-4 MSD
Matrix: Water
Analysis Batch: 578589

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	40	F1 F2	250	266	F2	mg/L		91	81 - 120	26	15
Sulfate	ND		250	233		mg/L		93	80 - 120	1	15

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-534091/55
Matrix: Water
Analysis Batch: 534091

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.050		mg/L			04/27/21 15:22	1

Lab Sample ID: LCS 280-534091/53
Matrix: Water
Analysis Batch: 534091

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N	2.50	2.39		mg/L		96	90 - 110

Lab Sample ID: LCSD 280-534091/54
Matrix: Water
Analysis Batch: 534091

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N	2.50	2.35		mg/L		94	90 - 110	2	10

Lab Sample ID: 280-147447-C-6 MS
Matrix: Water
Analysis Batch: 534091

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N	ND		1.00	0.950		mg/L		95	90 - 110

Lab Sample ID: 280-147447-C-6 MSD
Matrix: Water
Analysis Batch: 534091

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N	ND		1.00	1.00		mg/L		100	90 - 110	5	10

Lab Sample ID: MB 280-534359/20
Matrix: Water
Analysis Batch: 534359

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.050		mg/L			04/29/21 11:41	1

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: LCS 280-534359/18
Matrix: Water
Analysis Batch: 534359

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia as N			2.50	2.53		mg/L		101	90 - 110		

Lab Sample ID: LCSD 280-534359/19
Matrix: Water
Analysis Batch: 534359

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N			2.50	2.52		mg/L		101	90 - 110	1	10

Lab Sample ID: 280-147466-D-6 MS
Matrix: Water
Analysis Batch: 534359

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia as N	0.051		1.00	1.05		mg/L		100	90 - 110		

Lab Sample ID: 280-147466-D-6 MSD
Matrix: Water
Analysis Batch: 534359

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N	0.051		1.00	1.05		mg/L		100	90 - 110	1	10

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 280-533943/2-A
Matrix: Water
Analysis Batch: 534113

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 533943

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen	ND		1.0		mg/L		04/26/21 16:49	04/27/21 19:42	1

Lab Sample ID: LCS 280-533943/1-A
Matrix: Water
Analysis Batch: 534113

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 533943

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Kjeldahl Nitrogen			6.00	5.95		mg/L		99	90 - 110		

Lab Sample ID: 280-147467-4 MS
Matrix: Water
Analysis Batch: 534113

Client Sample ID: SYR SW-1
Prep Type: Total/NA
Prep Batch: 533943

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Kjeldahl Nitrogen	ND		3.00	2.91		mg/L		97	90 - 110		

Method: 351.2 - Nitrogen, Total Kjeldahl (Continued)

Lab Sample ID: 280-147467-4 MSD
Matrix: Water
Analysis Batch: 534113

Client Sample ID: SYR SW-1
Prep Type: Total/NA
Prep Batch: 533943

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Kjeldahl Nitrogen	ND		3.00	2.98		mg/L		99	90 - 110	3	25

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-534257/22
Matrix: Water
Analysis Batch: 534257

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	ND		0.050		mg/L			04/28/21 18:50	1

Lab Sample ID: LCS 280-534257/21
Matrix: Water
Analysis Batch: 534257

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate Nitrite as N			5.00	5.07		mg/L		101	90 - 110		

Lab Sample ID: 280-147467-4 MS
Matrix: Water
Analysis Batch: 534257

Client Sample ID: SYR SW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate Nitrite as N	0.39		4.00	4.24		mg/L		96	90 - 110		

Lab Sample ID: 280-147467-4 MSD
Matrix: Water
Analysis Batch: 534257

Client Sample ID: SYR SW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate Nitrite as N	0.39		4.00	4.32		mg/L		98	90 - 110	2	10

Method: 365.1 - Phosphorus, Ortho

Lab Sample ID: MB 280-532697/71
Matrix: Water
Analysis Batch: 532697

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Orthophosphate	ND		0.020		mg/L			04/15/21 16:22	1

Lab Sample ID: LCS 280-532697/69
Matrix: Water
Analysis Batch: 532697

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Orthophosphate			0.500	0.504		mg/L		101	90 - 110		

Method: 365.1 - Phosphorus, Ortho (Continued)

Lab Sample ID: LCSD 280-532697/70
Matrix: Water
Analysis Batch: 532697

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Orthophosphate			0.500	0.503		mg/L		101	90 - 110	0	10

Lab Sample ID: 280-147467-2 MS
Matrix: Water
Analysis Batch: 532697

Client Sample ID: SYR SW-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Orthophosphate	ND		0.500	0.527		mg/L		105	90 - 110		

Lab Sample ID: 280-147467-2 MSD
Matrix: Water
Analysis Batch: 532697

Client Sample ID: SYR SW-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Orthophosphate	ND		0.500	0.525		mg/L		105	90 - 110	0	10

Method: 365.1 - Phosphorus, Total

Lab Sample ID: MB 280-533163/36-A
Matrix: Water
Analysis Batch: 533526

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 533163

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Phosphorus	ND		0.050		mg/L		04/20/21 09:48	04/22/21 09:42	1

Lab Sample ID: MB 280-533163/5-A
Matrix: Water
Analysis Batch: 533526

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 533163

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Phosphorus	ND		0.050		mg/L		04/20/21 09:48	04/22/21 09:37	1

Lab Sample ID: LCS 280-533163/34-A
Matrix: Water
Analysis Batch: 533526

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 533163

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Phosphorus			0.500	0.503		mg/L		101	90 - 110		

Lab Sample ID: LCS 280-533163/3-A
Matrix: Water
Analysis Batch: 533526

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 533163

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Phosphorus			0.500	0.506		mg/L		101	90 - 110		

Method: 365.1 - Phosphorus, Total (Continued)

Lab Sample ID: LCSD 280-533163/35-A
Matrix: Water
Analysis Batch: 533526

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 533163

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Phosphorus			0.500	0.507		mg/L		101	90 - 110	1	10

Lab Sample ID: LCSD 280-533163/4-A
Matrix: Water
Analysis Batch: 533526

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 533163

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Phosphorus			0.500	0.508		mg/L		102	90 - 110	0	10

Lab Sample ID: 280-147298-L-5-B MS
Matrix: Water
Analysis Batch: 533526

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 533163

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Phosphorus	0.27		0.500	0.744		mg/L		95	90 - 110		

Lab Sample ID: 280-147298-L-5-C MSD
Matrix: Water
Analysis Batch: 533526

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 533163

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Phosphorus	0.27		0.500	0.739		mg/L		94	90 - 110	1	10

Method: 410.4 - COD

Lab Sample ID: MB 280-534146/5
Matrix: Water
Analysis Batch: 534146

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (COD)	ND		20		mg/L			04/28/21 09:23	1

Lab Sample ID: LCS 280-534146/3
Matrix: Water
Analysis Batch: 534146

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chemical Oxygen Demand (COD)			100	99.8		mg/L		100	90 - 110		

Lab Sample ID: LCSD 280-534146/4
Matrix: Water
Analysis Batch: 534146

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chemical Oxygen Demand (COD)			100	95.2		mg/L		95	90 - 110	5	11

Method: 410.4 - COD (Continued)

Lab Sample ID: 280-147447-A-1 MS
Matrix: Water
Analysis Batch: 534146

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand (COD)	ND		50.0	59.3		mg/L		101	90 - 110

Lab Sample ID: 280-147447-A-1 MSD
Matrix: Water
Analysis Batch: 534146

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chemical Oxygen Demand (COD)	ND		50.0	55.1		mg/L		92	90 - 110	7	11

Method: 9020B - Organic Halides, Total (TOX)

Lab Sample ID: MB 280-534414/2
Matrix: Water
Analysis Batch: 534414

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Halogens, Total Organic	ND		10		ug/L			04/28/21 16:11	1

Lab Sample ID: LCS 280-534414/4
Matrix: Water
Analysis Batch: 534414

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Halogens, Total Organic	100	91.7		ug/L		92	78 - 114

Lab Sample ID: 280-147467-3 MS
Matrix: Water
Analysis Batch: 534414

Client Sample ID: SYR MW-12A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Halogens, Total Organic	25	F1	100	95.2	F1	ug/L		70	78 - 114

Lab Sample ID: 280-147467-3 MSD
Matrix: Water
Analysis Batch: 534414

Client Sample ID: SYR MW-12A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Halogens, Total Organic	25	F1	100	101	F1	ug/L		76	78 - 114	5	23

Method: 9040B - pH

Lab Sample ID: LCS 280-533009/30
Matrix: Water
Analysis Batch: 533009

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH adj. to 25 deg C	7.00	7.1		SU		101	99 - 101

Method: 9040B - pH (Continued)

Lab Sample ID: 280-147416-A-3 DU
Matrix: Water
Analysis Batch: 533009

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH adj. to 25 deg C	8.7			8.7		SU				0.2	5

Method: 9050A - Specific Conductance

Lab Sample ID: MB 280-533352/5
Matrix: Water
Analysis Batch: 533352

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	ND		2.0		umhos/cm			04/21/21 12:16	1

Lab Sample ID: LCS 280-533352/3
Matrix: Water
Analysis Batch: 533352

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Specific Conductance			1410	1440		umhos/cm		102	90 - 110		

Lab Sample ID: LCSD 280-533352/4
Matrix: Water
Analysis Batch: 533352

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Specific Conductance			1410	1430		umhos/cm		102	90 - 110	1	10

Lab Sample ID: 280-147467-2 DU
Matrix: Water
Analysis Batch: 533352

Client Sample ID: SYR SW-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Specific Conductance	97			96.4		umhos/cm				0.3	10

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 280-534659/4
Matrix: Water
Analysis Batch: 534659

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Average	ND		1.0		mg/L			05/02/21 01:26	1

Lab Sample ID: LCS 280-534659/3
Matrix: Water
Analysis Batch: 534659

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon - Average			25.0	24.7		mg/L		99	88 - 112		

Method: 9060 - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: 280-147467-4 MS
Matrix: Water
Analysis Batch: 534659

Client Sample ID: SYR SW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon - Average	1.2		25.0	26.3		mg/L		100	88 - 112		

Lab Sample ID: 280-147467-4 MSD
Matrix: Water
Analysis Batch: 534659

Client Sample ID: SYR SW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Average	1.2		25.0	26.1		mg/L		100	88 - 112	1	15

Method: SM 1030E - Cation Anion Balance

Lab Sample ID: MB 280-534660/1
Matrix: Water
Analysis Batch: 534660

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

Analyte	MB Result	MB Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	0.000				meq/L			05/03/21 09:05	1
Total Cations	0.000				meq/L			05/03/21 09:05	1
Percent Difference	NC				%			05/03/21 09:05	1
Calcium	0.000				mg/L			05/03/21 09:05	1
Magnesium	0.000				mg/L			05/03/21 09:05	1
Potassium	0.000				mg/L			05/03/21 09:05	1
Sodium	0.000				mg/L			05/03/21 09:05	1
Ammonia as N	0.000				mg/L			05/03/21 09:05	1
Chloride	0.000				mg/L			05/03/21 09:05	1
Sulfate	0.000				mg/L			05/03/21 09:05	1
Carbonate Alkalinity	0.000				mg/L			05/03/21 09:05	1
Bicarbonate Alkalinity	0.000				mg/L			05/03/21 09:05	1
Total Alkalinity	0.000				mg/L			05/03/21 09:05	1
Nitrate/Nitrite	0.000				mg/L			05/03/21 09:05	1
Anion/Cation Balance	NC				%			05/03/21 09:05	1
Calculated TDS	0.000				mg/L			05/03/21 09:05	1
TDS Ratio	NC				NONE			05/03/21 09:05	1
Total Dissolved Solids	0.000				mg/L			05/03/21 09:05	1
Iron	0.000				mg/L			05/03/21 09:05	1

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-533008/60
Matrix: Water
Analysis Batch: 533008

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	ND		10		mg/L			04/17/21 00:02	1
Bicarbonate Alkalinity	ND		10		mg/L			04/17/21 00:02	1
Carbonate Alkalinity	ND		10		mg/L			04/17/21 00:02	1

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: LCS 280-533008/58
Matrix: Water
Analysis Batch: 533008

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Alkalinity			200	196		mg/L		98	89 - 109		

Lab Sample ID: LCSD 280-533008/59
Matrix: Water
Analysis Batch: 533008

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Alkalinity			200	196		mg/L		98	89 - 109	0	10

Lab Sample ID: 280-147466-A-9 DU
Matrix: Water
Analysis Batch: 533008

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Alkalinity	290			287		mg/L				1	10

Method: SM 2340C - Hardness, Total (mg/l as CaC03)

Lab Sample ID: MB 280-533327/2
Matrix: Water
Analysis Batch: 533327

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness, as CaCO3	ND		3.0		mg/L			04/21/21 10:16	1

Lab Sample ID: LCS 280-533327/1
Matrix: Water
Analysis Batch: 533327

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Hardness, as CaCO3			398	397		mg/L		100	90 - 110		

Lab Sample ID: 280-147378-F-2 MS
Matrix: Water
Analysis Batch: 533327

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Hardness, as CaCO3	170		398	574		mg/L		101	90 - 110		

Lab Sample ID: 280-147378-F-2 MSD
Matrix: Water
Analysis Batch: 533327

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Hardness, as CaCO3	170		398	573		mg/L		101	90 - 110	0	10

Method: SM 2340C - Hardness, Total (mg/l as CaC03) (Continued)

Lab Sample ID: MB 280-533520/2
Matrix: Water
Analysis Batch: 533520

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness, as CaCO3	ND		3.0		mg/L			04/22/21 14:03	1

Lab Sample ID: LCS 280-533520/1
Matrix: Water
Analysis Batch: 533520

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Hardness, as CaCO3			398	394		mg/L		99	90 - 110		

Lab Sample ID: 280-147467-4 MS
Matrix: Water
Analysis Batch: 533520

Client Sample ID: SYR SW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Hardness, as CaCO3	33		398	431		mg/L		100	90 - 110		

Lab Sample ID: 280-147467-4 MSD
Matrix: Water
Analysis Batch: 533520

Client Sample ID: SYR SW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Hardness, as CaCO3	33		398	428		mg/L		99	90 - 110	1	10

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

Lab Sample ID: MB 280-533243/1
Matrix: Water
Analysis Batch: 533243

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10		mg/L			04/20/21 16:39	1

Lab Sample ID: LCS 280-533243/2
Matrix: Water
Analysis Batch: 533243

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			501	489		mg/L		98	88 - 114		

Lab Sample ID: 280-147466-A-5 DU
Matrix: Water
Analysis Batch: 533243

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	260			268		mg/L				4	10

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 280-533244/1
Matrix: Water
Analysis Batch: 533244

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0		mg/L			04/20/21 16:40	1

Lab Sample ID: LCS 280-533244/2
Matrix: Water
Analysis Batch: 533244

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	100	80.4		mg/L		80	79 - 114

Lab Sample ID: LCSD 280-533244/3
Matrix: Water
Analysis Batch: 533244

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Suspended Solids	100	90.4		mg/L		90	79 - 114	12	20

Lab Sample ID: 280-147482-A-5 DU
Matrix: Water
Analysis Batch: 533244

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	24		21.6		mg/L		9	10

Method: SM5210B - BOD, 5 Day

Lab Sample ID: MB 280-532745/14
Matrix: Water
Analysis Batch: 532745

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		2.0		mg/L			04/16/21 07:43	1

Lab Sample ID: SCB 280-532745/11
Matrix: Water
Analysis Batch: 532745

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

Analyte	SCB Result	SCB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND	s	2.0		mg/L			04/16/21 07:43	1

Lab Sample ID: USB 280-532745/12
Matrix: Water
Analysis Batch: 532745

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

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		2.0		mg/L			04/16/21 07:43	1

Method: SM5210B - BOD, 5 Day (Continued)

Lab Sample ID: LCS 280-532745/13
Matrix: Water
Analysis Batch: 532745

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Biochemical Oxygen Demand			198	119	*-	mg/L		60	85 - 115		

Lab Sample ID: 280-147447-B-1 DU
Matrix: Water
Analysis Batch: 532745

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Biochemical Oxygen Demand	2.6	b *-		ND	*-	mg/L				NC	20

GC/MS VOA

Analysis Batch: 533748

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147467-1	TRIP BLANK	Total/NA	Water	8260B	
280-147467-2	SYR SW-2	Total/NA	Water	8260B	
280-147467-3	SYR MW-12A	Total/NA	Water	8260B	
280-147467-4	SYR SW-1	Total/NA	Water	8260B	
MB 280-533748/10	Method Blank	Total/NA	Water	8260B	
LCS 280-533748/5	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-533748/6	Lab Control Sample Dup	Total/NA	Water	8260B	

Metals

Prep Batch: 533177

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147467-2	SYR SW-2	Total Recoverable	Water	3005A	
280-147467-3	SYR MW-12A	Total Recoverable	Water	3005A	
280-147467-4	SYR SW-1	Total Recoverable	Water	3005A	
MB 280-533177/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-533177/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-147379-D-1-B MS	Matrix Spike	Total Recoverable	Water	3005A	
280-147379-D-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Analysis Batch: 533647

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147467-2	SYR SW-2	Total Recoverable	Water	6010B	533177
280-147467-3	SYR MW-12A	Total Recoverable	Water	6010B	533177
280-147467-4	SYR SW-1	Total Recoverable	Water	6010B	533177
MB 280-533177/1-A	Method Blank	Total Recoverable	Water	6010B	533177
LCS 280-533177/2-A	Lab Control Sample	Total Recoverable	Water	6010B	533177
280-147379-D-1-B MS	Matrix Spike	Total Recoverable	Water	6010B	533177
280-147379-D-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	6010B	533177

General Chemistry

Analysis Batch: 532697

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147467-2	SYR SW-2	Total/NA	Water	365.1	
280-147467-3	SYR MW-12A	Total/NA	Water	365.1	
280-147467-4	SYR SW-1	Total/NA	Water	365.1	
MB 280-532697/71	Method Blank	Total/NA	Water	365.1	
LCS 280-532697/69	Lab Control Sample	Total/NA	Water	365.1	
LCSD 280-532697/70	Lab Control Sample Dup	Total/NA	Water	365.1	
280-147467-2 MS	SYR SW-2	Total/NA	Water	365.1	
280-147467-2 MSD	SYR SW-2	Total/NA	Water	365.1	

Analysis Batch: 532745

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147467-2	SYR SW-2	Total/NA	Water	SM5210B	
280-147467-3	SYR MW-12A	Total/NA	Water	SM5210B	
280-147467-4	SYR SW-1	Total/NA	Water	SM5210B	
MB 280-532745/14	Method Blank	Total/NA	Water	SM5210B	
SCB 280-532745/11	Method Blank	Total/NA	Water	SM5210B	
USB 280-532745/12	Method Blank	Total/NA	Water	SM5210B	
LCS 280-532745/13	Lab Control Sample	Total/NA	Water	SM5210B	

General Chemistry (Continued)

Analysis Batch: 532745 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147447-B-1 DU	Duplicate	Total/NA	Water	SM5210B	

Analysis Batch: 533008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147467-2	SYR SW-2	Total/NA	Water	SM 2320B	
280-147467-3	SYR MW-12A	Total/NA	Water	SM 2320B	
280-147467-4	SYR SW-1	Total/NA	Water	SM 2320B	
MB 280-533008/60	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-533008/58	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 280-533008/59	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
280-147466-A-9 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 533009

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147467-2	SYR SW-2	Total/NA	Water	9040B	
280-147467-3	SYR MW-12A	Total/NA	Water	9040B	
280-147467-4	SYR SW-1	Total/NA	Water	9040B	
LCS 280-533009/30	Lab Control Sample	Total/NA	Water	9040B	
280-147416-A-3 DU	Duplicate	Total/NA	Water	9040B	

Prep Batch: 533163

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147467-2	SYR SW-2	Total/NA	Water	365.1	
280-147467-3	SYR MW-12A	Total/NA	Water	365.1	
280-147467-4	SYR SW-1	Total/NA	Water	365.1	
MB 280-533163/36-A	Method Blank	Total/NA	Water	365.1	
MB 280-533163/5-A	Method Blank	Total/NA	Water	365.1	
LCS 280-533163/34-A	Lab Control Sample	Total/NA	Water	365.1	
LCS 280-533163/3-A	Lab Control Sample	Total/NA	Water	365.1	
LCSD 280-533163/35-A	Lab Control Sample Dup	Total/NA	Water	365.1	
LCSD 280-533163/4-A	Lab Control Sample Dup	Total/NA	Water	365.1	
280-147298-L-5-B MS	Matrix Spike	Total/NA	Water	365.1	
280-147298-L-5-C MSD	Matrix Spike Duplicate	Total/NA	Water	365.1	

Analysis Batch: 533243

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147467-2	SYR SW-2	Total/NA	Water	SM 2540C	
280-147467-3	SYR MW-12A	Total/NA	Water	SM 2540C	
280-147467-4	SYR SW-1	Total/NA	Water	SM 2540C	
MB 280-533243/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-533243/2	Lab Control Sample	Total/NA	Water	SM 2540C	
280-147466-A-5 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 533244

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147467-2	SYR SW-2	Total/NA	Water	SM 2540D	
280-147467-3	SYR MW-12A	Total/NA	Water	SM 2540D	
280-147467-4	SYR SW-1	Total/NA	Water	SM 2540D	
MB 280-533244/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 280-533244/2	Lab Control Sample	Total/NA	Water	SM 2540D	
LCSD 280-533244/3	Lab Control Sample Dup	Total/NA	Water	SM 2540D	

General Chemistry (Continued)

Analysis Batch: 533244 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147482-A-5 DU	Duplicate	Total/NA	Water	SM 2540D	

Analysis Batch: 533327

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147467-2	SYR SW-2	Total/NA	Water	SM 2340C	
280-147467-3	SYR MW-12A	Total/NA	Water	SM 2340C	
MB 280-533327/2	Method Blank	Total/NA	Water	SM 2340C	
LCS 280-533327/1	Lab Control Sample	Total/NA	Water	SM 2340C	
280-147378-F-2 MS	Matrix Spike	Total/NA	Water	SM 2340C	
280-147378-F-2 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 2340C	

Analysis Batch: 533352

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147467-2	SYR SW-2	Total/NA	Water	9050A	
280-147467-3	SYR MW-12A	Total/NA	Water	9050A	
280-147467-4	SYR SW-1	Total/NA	Water	9050A	
MB 280-533352/5	Method Blank	Total/NA	Water	9050A	
LCS 280-533352/3	Lab Control Sample	Total/NA	Water	9050A	
LCSD 280-533352/4	Lab Control Sample Dup	Total/NA	Water	9050A	
280-147467-2 DU	SYR SW-2	Total/NA	Water	9050A	

Analysis Batch: 533520

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147467-4	SYR SW-1	Total/NA	Water	SM 2340C	
MB 280-533520/2	Method Blank	Total/NA	Water	SM 2340C	
LCS 280-533520/1	Lab Control Sample	Total/NA	Water	SM 2340C	
280-147467-4 MS	SYR SW-1	Total/NA	Water	SM 2340C	
280-147467-4 MSD	SYR SW-1	Total/NA	Water	SM 2340C	

Analysis Batch: 533526

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147467-2	SYR SW-2	Total/NA	Water	365.1	533163
280-147467-3	SYR MW-12A	Total/NA	Water	365.1	533163
280-147467-4	SYR SW-1	Total/NA	Water	365.1	533163
MB 280-533163/36-A	Method Blank	Total/NA	Water	365.1	533163
MB 280-533163/5-A	Method Blank	Total/NA	Water	365.1	533163
LCS 280-533163/34-A	Lab Control Sample	Total/NA	Water	365.1	533163
LCS 280-533163/3-A	Lab Control Sample	Total/NA	Water	365.1	533163
LCSD 280-533163/35-A	Lab Control Sample Dup	Total/NA	Water	365.1	533163
LCSD 280-533163/4-A	Lab Control Sample Dup	Total/NA	Water	365.1	533163
280-147298-L-5-B MS	Matrix Spike	Total/NA	Water	365.1	533163
280-147298-L-5-C MSD	Matrix Spike Duplicate	Total/NA	Water	365.1	533163

Prep Batch: 533943

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147467-2	SYR SW-2	Total/NA	Water	351.2	
280-147467-3	SYR MW-12A	Total/NA	Water	351.2	
280-147467-4	SYR SW-1	Total/NA	Water	351.2	
MB 280-533943/2-A	Method Blank	Total/NA	Water	351.2	
LCS 280-533943/1-A	Lab Control Sample	Total/NA	Water	351.2	
280-147467-4 MS	SYR SW-1	Total/NA	Water	351.2	

General Chemistry (Continued)

Prep Batch: 533943 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147467-4 MSD	SYR SW-1	Total/NA	Water	351.2	

Analysis Batch: 534091

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147467-2	SYR SW-2	Total/NA	Water	350.1	
280-147467-4	SYR SW-1	Total/NA	Water	350.1	
MB 280-534091/55	Method Blank	Total/NA	Water	350.1	
LCS 280-534091/53	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-534091/54	Lab Control Sample Dup	Total/NA	Water	350.1	
280-147447-C-6 MS	Matrix Spike	Total/NA	Water	350.1	
280-147447-C-6 MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	

Analysis Batch: 534113

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147467-2	SYR SW-2	Total/NA	Water	351.2	533943
280-147467-3	SYR MW-12A	Total/NA	Water	351.2	533943
280-147467-4	SYR SW-1	Total/NA	Water	351.2	533943
MB 280-533943/2-A	Method Blank	Total/NA	Water	351.2	533943
LCS 280-533943/1-A	Lab Control Sample	Total/NA	Water	351.2	533943
280-147467-4 MS	SYR SW-1	Total/NA	Water	351.2	533943
280-147467-4 MSD	SYR SW-1	Total/NA	Water	351.2	533943

Analysis Batch: 534146

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147467-2	SYR SW-2	Total/NA	Water	410.4	
280-147467-3	SYR MW-12A	Total/NA	Water	410.4	
280-147467-4	SYR SW-1	Total/NA	Water	410.4	
MB 280-534146/5	Method Blank	Total/NA	Water	410.4	
LCS 280-534146/3	Lab Control Sample	Total/NA	Water	410.4	
LCSD 280-534146/4	Lab Control Sample Dup	Total/NA	Water	410.4	
280-147447-A-1 MS	Matrix Spike	Total/NA	Water	410.4	
280-147447-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	410.4	

Analysis Batch: 534257

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147467-2	SYR SW-2	Total/NA	Water	353.2	
280-147467-3	SYR MW-12A	Total/NA	Water	353.2	
280-147467-4	SYR SW-1	Total/NA	Water	353.2	
MB 280-534257/22	Method Blank	Total/NA	Water	353.2	
LCS 280-534257/21	Lab Control Sample	Total/NA	Water	353.2	
280-147467-4 MS	SYR SW-1	Total/NA	Water	353.2	
280-147467-4 MSD	SYR SW-1	Total/NA	Water	353.2	

Analysis Batch: 534359

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147467-3	SYR MW-12A	Total/NA	Water	350.1	
MB 280-534359/20	Method Blank	Total/NA	Water	350.1	
LCS 280-534359/18	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-534359/19	Lab Control Sample Dup	Total/NA	Water	350.1	
280-147466-D-6 MS	Matrix Spike	Total/NA	Water	350.1	
280-147466-D-6 MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	

General Chemistry

Analysis Batch: 534414

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147467-2	SYR SW-2	Total/NA	Water	9020B	
280-147467-3	SYR MW-12A	Total/NA	Water	9020B	
280-147467-4	SYR SW-1	Total/NA	Water	9020B	
MB 280-534414/2	Method Blank	Total/NA	Water	9020B	
LCS 280-534414/4	Lab Control Sample	Total/NA	Water	9020B	
280-147467-3 MS	SYR MW-12A	Total/NA	Water	9020B	
280-147467-3 MSD	SYR MW-12A	Total/NA	Water	9020B	

Analysis Batch: 534659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147467-2	SYR SW-2	Total/NA	Water	9060	
280-147467-3	SYR MW-12A	Total/NA	Water	9060	
280-147467-4	SYR SW-1	Total/NA	Water	9060	
MB 280-534659/4	Method Blank	Total/NA	Water	9060	
LCS 280-534659/3	Lab Control Sample	Total/NA	Water	9060	
280-147467-4 MS	SYR SW-1	Total/NA	Water	9060	
280-147467-4 MSD	SYR SW-1	Total/NA	Water	9060	

Analysis Batch: 534660

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147467-2	SYR SW-2	Total/NA	Water	SM 1030E	
280-147467-2	SYR SW-2	Total/NA	Water	SM 1030E (meq)	
280-147467-3	SYR MW-12A	Total/NA	Water	SM 1030E	
280-147467-3	SYR MW-12A	Total/NA	Water	SM 1030E (meq)	
280-147467-4	SYR SW-1	Total/NA	Water	SM 1030E	
280-147467-4	SYR SW-1	Total/NA	Water	SM 1030E (meq)	
MB 280-534660/1	Method Blank	Total/NA	Water	SM 1030E	

Analysis Batch: 578094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147467-2	SYR SW-2	Total/NA	Water	300.0	
280-147467-3	SYR MW-12A	Total/NA	Water	300.0	
280-147467-4	SYR SW-1	Total/NA	Water	300.0	
MB 480-578094/28	Method Blank	Total/NA	Water	300.0	
LCS 480-578094/27	Lab Control Sample	Total/NA	Water	300.0	
280-147466-E-3 MS	Matrix Spike	Total/NA	Water	300.0	
280-147466-E-3 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
280-147467-4 MS	SYR SW-1	Total/NA	Water	300.0	

Analysis Batch: 578589

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147467-3	SYR MW-12A	Total/NA	Water	300.0	
MB 480-578589/4	Method Blank	Total/NA	Water	300.0	
LCS 480-578589/3	Lab Control Sample	Total/NA	Water	300.0	
480-183933-E-4 MS	Matrix Spike	Total/NA	Water	300.0	
480-183933-E-4 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Client: Waste Management
Job ID: 280-147467-1
Project/Site: 1003|Riverbend Landfill - Surfacewater

Field Service / Mobile Lab

Analysis Batch: 533839

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147467-2	SYR SW-2	Total/NA	Water	Field Sampling	
280-147467-3	SYR MW-12A	Total/NA	Water	Field Sampling	
280-147467-4	SYR SW-1	Total/NA	Water	Field Sampling	

Client Sample ID: TRIP BLANK
Lab Sample ID: 280-147467-1
Date Collected: 04/14/21 08:00
Matrix: Water
Date Received: 04/15/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	533748	04/24/21 15:32	RJS	TAL DEN

Client Sample ID: SYR SW-2
Lab Sample ID: 280-147467-2
Date Collected: 04/14/21 11:30
Matrix: Water
Date Received: 04/15/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	533748	04/24/21 17:26	RJS	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	533177	04/22/21 16:17	EC	TAL DEN
Total Recoverable	Analysis	6010B		1			533647	04/23/21 09:29	LMT	TAL DEN
Total/NA	Analysis	300.0		1			578094	04/28/21 04:40	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	534091	04/27/21 15:26	QJB	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	533943	04/26/21 16:49	SVC	TAL DEN
Total/NA	Analysis	351.2		1			534113	04/27/21 20:03	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	534257	04/28/21 19:24	SVC	TAL DEN
Total/NA	Prep	365.1			50 mL	50 mL	533163	04/20/21 09:48	SPG	TAL DEN
Total/NA	Analysis	365.1		1			533526	04/22/21 09:44	SPG	TAL DEN
Total/NA	Analysis	365.1		1	2 mL	2 mL	532697	04/15/21 16:22	SPG	TAL DEN
Total/NA	Analysis	410.4		1	2 mL	2 mL	534146	04/28/21 09:23	SPG	TAL DEN
Total/NA	Analysis	9020B		1	50 mL	100 mL	534414	04/28/21 16:11	SAH	TAL DEN
Total/NA	Analysis	9040B		1			533009	04/16/21 20:08	QJB	TAL DEN
Total/NA	Analysis	9050A		1			533352	04/21/21 12:16	QJB	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	534659	05/02/21 05:15	RAF	TAL DEN
Total/NA	Analysis	SM 1030E		1			534660	05/03/21 09:05	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			534660	05/03/21 09:05	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			533008	04/17/21 00:21	QJB	TAL DEN
Total/NA	Analysis	SM 2340C		1	25 mL	25 mL	533327	04/21/21 10:16	RAF	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	533243	04/20/21 16:39	JMH	TAL DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	533244	04/20/21 16:40	JMH	TAL DEN
Total/NA	Analysis	SM5210B		1	60 mL	300 mL	532745	04/16/21 07:43	LEB	TAL DEN
Total/NA	Analysis	Field Sampling		1			533839	04/14/21 12:30	C1A	TAL DEN

Client Sample ID: SYR MW-12A
Lab Sample ID: 280-147467-3
Date Collected: 04/14/21 12:30
Matrix: Water
Date Received: 04/15/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	533748	04/24/21 17:49	RJS	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	533177	04/22/21 16:17	EC	TAL DEN
Total Recoverable	Analysis	6010B		1			533647	04/23/21 09:32	LMT	TAL DEN
Total/NA	Analysis	300.0		1			578094	04/28/21 04:58	IMZ	TAL BUF
Total/NA	Analysis	300.0		1			578589	04/29/21 22:09	IMZ	TAL BUF

Client Sample ID: SYR MW-12A

Lab Sample ID: 280-147467-3

Date Collected: 04/14/21 12:30

Matrix: Water

Date Received: 04/15/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	350.1		1	10 mL	10 mL	534359	04/29/21 11:49	QJB	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	533943	04/26/21 16:49	SVC	TAL DEN
Total/NA	Analysis	351.2		1			534113	04/27/21 20:05	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	534257	04/28/21 19:26	SVC	TAL DEN
Total/NA	Prep	365.1			50 mL	50 mL	533163	04/20/21 09:48	SPG	TAL DEN
Total/NA	Analysis	365.1		1			533526	04/22/21 09:44	SPG	TAL DEN
Total/NA	Analysis	365.1		1	2 mL	2 mL	532697	04/15/21 16:22	SPG	TAL DEN
Total/NA	Analysis	410.4		1	2 mL	2 mL	534146	04/28/21 09:23	SPG	TAL DEN
Total/NA	Analysis	9020B		1	50 mL	100 mL	534414	04/28/21 16:11	SAH	TAL DEN
Total/NA	Analysis	9040B		1			533009	04/16/21 20:12	QJB	TAL DEN
Total/NA	Analysis	9050A		1			533352	04/21/21 12:16	QJB	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	534659	05/02/21 05:32	RAF	TAL DEN
Total/NA	Analysis	SM 1030E		1			534660	05/03/21 09:05	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			534660	05/03/21 09:05	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			533008	04/17/21 00:27	QJB	TAL DEN
Total/NA	Analysis	SM 2340C		1	25 mL	25 mL	533327	04/21/21 10:16	RAF	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	533243	04/20/21 16:39	JMH	TAL DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	533244	04/20/21 16:40	JMH	TAL DEN
Total/NA	Analysis	SM5210B		1	60 mL	300 mL	532745	04/16/21 07:43	LEB	TAL DEN
Total/NA	Analysis	Field Sampling		1			533839	04/14/21 13:30	C1A	TAL DEN

Client Sample ID: SYR SW-1

Lab Sample ID: 280-147467-4

Date Collected: 04/14/21 13:30

Matrix: Water

Date Received: 04/15/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	533748	04/24/21 18:12	RJS	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	533177	04/22/21 16:17	EC	TAL DEN
Total Recoverable	Analysis	6010B		1			533647	04/23/21 09:36	LMT	TAL DEN
Total/NA	Analysis	300.0		1			578094	04/28/21 05:15	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	534091	04/27/21 15:30	QJB	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	533943	04/26/21 16:49	SVC	TAL DEN
Total/NA	Analysis	351.2		1			534113	04/27/21 20:08	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	534257	04/28/21 19:28	SVC	TAL DEN
Total/NA	Prep	365.1			50 mL	50 mL	533163	04/20/21 09:49	SPG	TAL DEN
Total/NA	Analysis	365.1		1			533526	04/22/21 09:44	SPG	TAL DEN
Total/NA	Analysis	365.1		1	2 mL	2 mL	532697	04/15/21 16:22	SPG	TAL DEN
Total/NA	Analysis	410.4		1	2 mL	2 mL	534146	04/28/21 09:23	SPG	TAL DEN
Total/NA	Analysis	9020B		1	50 mL	100 mL	534414	04/28/21 16:11	SAH	TAL DEN
Total/NA	Analysis	9040B		1			533009	04/16/21 20:15	QJB	TAL DEN
Total/NA	Analysis	9050A		1			533352	04/21/21 12:16	QJB	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	534659	05/02/21 05:49	RAF	TAL DEN

Lab Chronicle

Client: Waste Management
Job ID: 280-147467-1
Project/Site: 1003|Riverbend Landfill - Surfacewater

Client Sample ID: SYR SW-1
Lab Sample ID: 280-147467-4

Date Collected: 04/14/21 13:30
Matrix: Water

Date Received: 04/15/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 1030E		1			534660	05/03/21 09:05	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			534660	05/03/21 09:05	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			533008	04/17/21 00:32	QJB	TAL DEN
Total/NA	Analysis	SM 2340C		1	25 mL	25 mL	533520	04/22/21 14:03	RAF	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	533243	04/20/21 16:39	JMH	TAL DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	533244	04/20/21 16:40	JMH	TAL DEN
Total/NA	Analysis	SM5210B		1	60 mL	300 mL	532745	04/16/21 07:43	LEB	TAL DEN
Total/NA	Analysis	Field Sampling		1			533839	04/14/21 14:30	C1A	TAL DEN

Laboratory References:

AAL = AAL, 13035 SW PACIFIC HWY., Tigard, OR 97223, TEL (503)639-9311

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL DEN = Eurofins TestAmerica, Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Alexin Analytical LABORATORIES, INC.
Professional Laboratory Services
13035 SW Pacific Hwy
Tigard, OR 97223
Tel.: (503) 639-9311 Fax: (503) 684-1588

ANALYSIS REPORT

Reported: 05/03/2021
Received: 04/14/21
Sampled By: Ian Hultquist
Work Order: 1104038

CLIENT
Test America - Denver
Attn: Betsy Sara
4955 Yarrow St
Arvada CO, 80002
Phone: (303) 736-0100

Project: 2Q2021 Monitoring
Permit # :
Sampling Location: Riverbend Landfill
Temperature Upon Recept: 15.00 ± 1°C

Microbiological Analysis

Lab Number	Sample Name	Method	Units	Result	MRL	Analysis Date/ Time Begun
1104038-01	**SYR-SW-2**					**Sample Type:** Non-Complian
	Sampled: 4/14/21 11:30					**Matrix:** Water
	E. coli	SM 9223B (colilert-18) 21st Ed.	MPN/100 mL	6	1	04/14/21 15:28
	Fecal Coliform	SM 9223B 21st Ed.	MPN/100 mL	3	1	04/14/21 15:28
						Analyzed: 04/15/21 10:27 by: RAD
1104038-02	**SYR MW-12A**					
	Sampled: 4/14/21 12:30					**Matrix:** Water
A	*E. coli*	SM 9223B (colilert-18) 21st Ed.	MPN/100 mL	14	1	04/14/21 15:28
	Fecal Coliform	SM 9223B 21st Ed.	MPN/100 mL	10	1	04/14/21 15:28
						Analyzed: 04/15/21 10:27 by: RAD
1104038-03	**SYR-SW-1**					**Sample Type:** Non-Complian
	Sampled: 4/14/21 13:30					**Matrix:** Water
	E. coli	SM 9223B (colilert-18) 21st Ed.	MPN/100 mL	8	1	04/14/21 15:28
	Fecal Coliform	SM 9223B 21st Ed.	MPN/100 mL	4	1	04/14/21 15:28
						Analyzed: 04/15/21 10:27 by: RAD

MPN= Most Probable Number
ND = None detected **MRL** = Minimum Reporting Limit
A = All laboratory procedures for this analysis are accredited in accordance with NELAP standards. Lab Accreditation No. OR-100013

Approved by: _____
Vandana Gade
Microbiology Technical Director

This report shall not be reproduced, except in full, without the written approval of the laboratory.

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

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: I. Holtquist	Lab PM: Sara, Betsy A	Carrier Tracking No(s):	COC No: 280-23502-10346.1
Client Contact:	Phone: 503 716-6320	E-Mail: Betsy.Sara@Eurofinset.com		Page:
Company: Waste Management				Job #:
Address: 13469 SW Highway 18	Due Date Requested:			
City: McMinnville	TAT Requested (days):			
State, Zip: OR, 97128				
Phone:	PO #:			
Email:	WO #:			
Project Name: 1003|Riverbend Landfill SCS Engineers Event Desc: Annual SW - Apr	Project #: 28002786			
Site: Oregon	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	TDS/Alks/EC/pH	Hardness	Total Metals	Ammonia/TOC/TOX/Nitrate+Nitrite	TKN/COD/Total Phos	8260B	TSS	BOD	Cation Balance	Orthophosphate (365.1) (Field Filtered)	Chloride/Sulfate (TA Buffalo)	E.Coli + Fecal Coliform (Sub Diana)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	D	S	S	A	N	N		N	N			
~~FB~~ Trip Blank	4/14/21	0800	G	W								X							2	Short Holds: pH, BOD, Orthophosphate(365.1)
SYR SW-2	4/14/21	1130	G	W	X		X	X	X	X	X	X	X	X	X	X	X		13	
SYR MW-12A	4/14/21	1230	G	W	X		X	X	X	X	X	X	X	X	X	X	X		13	
SYR SW-1	4/14/21	1330	G	W	X		X	X	X	X	X	X	X	X	X	X	X		13	

280-147467 Chain of Custody

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

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

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

Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	4/14/21 @1630	SCS		04/15/2021 10:00	ETA DEN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 0.6, CF: to.4, IR: 9

JS 04/15/21

12/2/2021

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** SYR SW-2

SITE ADDRESS: McMinnville , Oregon **BLIND ID:**

DUP ID: NA

WIND FROM:	N	(NE)	E	SE	S	SW	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(F) 60.0	° C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
/ /	:	.	.	.	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia /2)^2 x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other: Grab w/ 14 SS dipper

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	√
VOA Glass	4/14/21	11:30	G	3	40 ml	HCl	YES	NO		
VOA Glass	/ /	:			40 ml	$Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/14/21	11:30	G	4	(250), 500, (1L)	None	YES	NO	NA	
Yellow Glass	4/14/21	11:30	G	3	250, (500), 1L	H_2SO_4	YES	NO		
Red Total Poly	4/14/21	11:30	G	2	125, 250, (500)	HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L	HNO_3	YES	YES		
White Poly	4/14/21	11:30	G	1	(250), 500, 1L	None	YES	YES		
Clear Poly	4/14/21	11:30	G	2	(100), 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — 15 Total Bottles (include duplicate count)

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8260) (8011) OR [X] WA [ ]
	AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3,CO_3) (Cl) (SO_4) (Silica, T) (NO3) (COD)
	YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3,NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
	RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
	RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
	WHITE - Poly	(Orthophosphate)
	Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O_2 (mg/l)	Water Quality
0	G (1130)	0.00	7.22	75.5	131.8	13.6	–	11.50	Clear / ~~Cloudy~~ Colorless IH
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Grab Sample with SS dipper

SAMPLER: I. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** SYR MW-12A
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	(NE)	E	SE	S	SW	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)	CLOUDY	RAIN	?	**TEMPERATURE:**	(F) 60.0 °C					

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
/ /	:	.	.	.	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia /2)^2 x 0.163 | 1" = 0.041 | 2" = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other = Grab with SS dipper

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	√
VOA Glass	4/14/21	12:30	G	3	(40 ml)	(HCl)	(YES)	(NO)		
VOA Glass	/ /	:			40 ml	$Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/14/21	12:30	G	4	(250), 500, (1L)	(None)	(YES)	(NO)	NA	
Yellow Glass	4/14/21	12:30	G	3	250, (500), 1L	(H_2SO_4)	(YES)	(NO)		
Red Total Poly	4/14/21	12:30	G	2	125, 250, (500)	(HNO_3)	(YES)	(NO)		
Red Diss. Poly	/ /	:			250, 500, 1L	HNO_3	YES	YES		
White Poly	4/14/21	12:30	G	1	(250), 500, 1L	(None)	(YES)	(YES)		
Clear Poly	4/14/21	12:30	G	2	(100) 250, 500	($Na_2S_2O_3$)	(YES)	(NO)		

White no acid, Yellow H2SO4, Red HNO3 — 15 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (DOC) (NO$_3$/NO$_2$) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (C)	DTW	Diss O_2 (mg/l)	Water Quality
0	(G)(1230)	0.00	7.15	72.6	115.2	11.8	–	12.64	clear/colorless
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Grab with SS dipper

SAMPLER: I. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** SYR SW-1

SITE ADDRESS: McMinnville , Oregon **BLIND ID:**

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		**TEMPERATURE:**	(F) 60.0	°C

(Circle appropriate units)

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
/ /	:	.	.	.	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia /2)^2 x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other = SS dipper

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	√
VOA Glass	4/14/21	13:30	G	3	40 ml	HCl	YES	NO		
VOA Glass	/ /	:			40 ml	$Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/14/21	13:30	G	4	250, 500, 1L	None	YES	NO	NA	
Yellow Glass	4/14/21	13:30	G	3	250, 500, 1L	H_2SO_4	YES	NO		
Red Total Poly	4/14/21	13:30	G	2	125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L	HNO_3	YES	YES		
White Poly	4/14/21	13:30	G	1	250, 500, 1L	None	YES	YES		
Clear Poly	4/14/21	13:30	G	2	100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — 15 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8260) (8011) OR [X] WA [ ]
	AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T) (NO3) (BOD)
	YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
	RED TOTAL - Poly	(Ba) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
	RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
	WHITE - Poly	(Orthophosphate)
	Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	G (1330)	0.00	6.73	109.8	105.1	12.8	-	8.45	Clear / ~~Cloudy~~ colorless IH
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Grab Sample with Stainless Steel dipper

SAMPLER: J. Hultquist (PRINTED NAME) (SIGNATURE)



280-147467 Waybill

SHIP DATE: 14APR21
ACTWGT: 61.45 LB
CAD: /SSFE2201
DIMS: 24x13x13 IN

TO SAMPLE RECEIVING

4955 YARROW ST

ARVADA CO 80002 (US)

(999) 999-9999 REF:

INV: PO: DEPT:

FedEx Express

J211321033102aw

TRK# 0667 8156 5957 4075

THU - 15 APR 10:30A
PRIORITY OVERNIGHT

XH LAAA

80002
CO-US DEN

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Sara, Betsy A	Carrier Tracking No(s):	COC No: 280-563859.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Betsy.Sara@Eurofinset.com	State of Origin: Oregon	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Oregon		Job #: 280-147467-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 5/5/2021			
City: Amherst	TAT Requested (days):			
State, Zip: NY, 14228-2298				
Phone: 716-691-2600(Tel) 716-691-7991(Fax)	PO #:			
Email:	WO #:			
Project Name: 1003|Riverbend Landfill - Surfacewater	Project #: 28002786			
Site: 1003|Riverbend Landfill	SSOW#:			

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - 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:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300.0_28D/ 300.0, Sulfate and Chloride (TA Buffalo)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
SYR SW-2 (280-147467-2)	4/14/21	11:30 Pacific		Water			X	1	
SYR MW-12A (280-147467-3)	4/14/21	12:30 Pacific		Water			X	1	
SYR SW-1 (280-147467-4)	4/14/21	13:30 Pacific		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification
Unconfirmed

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

Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by:	Date/Time: 4/16/21 1325	Company	Received by:	Date/Time: 4/17/21 1000	Company TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.2 # 1 ICE

Ver: 11/01/2020

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-147467-1

Login Number: 147467
List Number: 1
Creator: O'Hara, Jake F

List Source: Eurofins TestAmerica, Denver

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	
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: 280-147467-1

Login Number: 147467
List Number: 2
Creator: Kolb, Chris M

List Source: Eurofins TestAmerica, Buffalo
List Creation: 04/19/21 03:41 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	2.2 IR GUN #1 ICE
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

Spring 2021

Leachate Management System Liquids

Laboratory Analytical Reports

eurofins | Environment Testing America



ANALYTICAL REPORT

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

Laboratory Job ID: 280-147589-1
Client Project/Site: 1003|Riverbend Landfill - Leachate Lagoon
Sampling Event: Semiannual Leachate Lagoon - Apr Nov

For:
Waste Management
13469 SW Highway 18
McMinnville, Oregon 97128

Attn: Mr. Jim Denson

Betsy Sara

Authorized for release by:
12/2/2021 9:01:51 AM

Betsy Sara, Project Manager II
(303)736-0189
Betsy.Sara@Eurofinset.com

LINKS

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

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Definitions/Glossary

Client: Waste Management
Job ID: 280-147589-1
Project/Site: 1003|Riverbend Landfill - Leachate Lagoon

Qualifiers

Metals

Qualifier	Qualifier Description
^2	Calibration Blank (ICB and/or CCB) 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.
F1	MS and/or MSD recovery exceeds control limits.

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
F3	Duplicate RPD exceeds the control limit
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

Glossary

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

Job ID: 280-147589-1

Laboratory: Eurofins TestAmerica, Denver

Narrative

CASE NARRATIVE

Client: Waste Management

Project: 1003|Riverbend Landfill - Leachate Lagoon

Report Number: 280-147589-1

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

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

Sample Receiving

The samples were received on 04/17/2021; the samples arrived in good condition and on ice. The temperature of the cooler at receipt was 1.0 C.

Holding Times

The analysis for pH should be performed in the field immediately following sampling, and therefore the laboratory pH result was flagged with an "HF" flag.

All other holding times were met.

Method Blanks

Total Alkalinity and Bicarbonate Alkalinity Method 2320B were detected in the Method Blanks above the project established reporting limits. Because the associated sample exhibited levels of Total Alkalinity and Bicarbonate Alkalinity greater than ten times that of the Method Blank values, corrective action was deemed unnecessary.

All other Method Blanks met method criteria.

Laboratory Control Samples (LCS)

All Laboratory Control Sample recoveries were within control limits.

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

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) for Method 8260B, however, an LCS/LCSD pair was analyzed to demonstrate method precision and accuracy.

The percent recoveries and/or relative percent difference of the MS/MSD performed on a sample from another client were outside control limits for Total Molybdenum 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 LPOND LDS were outside control limits for Total Silicon Method 6010B because the sample concentration was greater than four times the spike amount. Because the corresponding

Job ID: 280-147589-1 (Continued)

Laboratory: Eurofins TestAmerica, Denver (Continued)

Laboratory Control Sample and the Method Blank sample were within control limits, no corrective action was taken.

The Matrix Spikes and Matrix Spike Duplicates performed on samples from other clients exhibited recoveries outside control limits for Total Boron, Total Molybdenum Method 6010B, Ammonia Method 350.1, and Total Kjeldahl Nitrogen (TKN) Method 351.2. In addition, the RPD result was outside the RPD limit for Ammonia Method 350.1. 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.

Sample MW-12A (147597) was selected to fulfill the laboratory batch quality control requirements for Method 353.2. Analysis of the laboratory generated MS/MSD for this sample exhibited recoveries of Nitrate/Nitrite below the lower control limit. In addition, the RPD result was outside the RPD limit for Nitrate/Nitrite. 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 results were within established control limits.

Sample Duplicate

The RPD for pH performed on a sample from another client was outside control limits. Because all other QC and calibration criteria were met no corrective action was needed.

Organics

The samples LEACH-POND and LPOND LDS were analyzed at dilutions for Method 8260B due to foamy matrix. As a result, the reporting limits were elevated.

The prepreserved hydrochloric acid preserved vials for Method 8260B analysis for the samples LEACH-POND and LPOND LDS exhibited pH values greater than 2. This is non-compliant with Method 8260B which requires samples to be preserved with hydrochloric acid to a pH of less than 2. Because these samples were leachate samples, a buffering effect was suspected.

Metals

The Method 6010B Instrument Blank was above the control limits for Dissolved Calcium. Because the associated samples exhibited detections of Dissolved Calcium greater than ten times the Instrument Blank result, corrective action was deemed unnecessary.

General Comments

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.

Detection Summary

Client: Waste Management
Job ID: 280-147589-1
Project/Site: 1003|Riverbend Landfill - Leachate Lagoon

Client Sample ID: TRIP BLANK — Lab Sample ID: 280-147589-1

No Detections.

Client Sample ID: LEACH-POND- — Lab Sample ID: 280-147589-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	10000		100		ug/L	1		6010B	Total Recoverable
Silicon	23000		100		ug/L	1		6010B	Total Recoverable
Calcium	67000	^2	500		ug/L	1		6010B	Dissolved
Iron	3300		30		ug/L	1		6010B	Dissolved
Magnesium	83000		200		ug/L	1		6010B	Dissolved
Manganese	800		3.0		ug/L	1		6010B	Dissolved
Potassium	360000		500		ug/L	1		6010B	Dissolved
Sodium	1300000		1000		ug/L	1		6010B	Dissolved
Antimony	19		0.60		ug/L	1		6020	Total Recoverable
Arsenic	120		1.0		ug/L	1		6020	Total Recoverable
Barium	360		1.0		ug/L	1		6020	Total Recoverable
Chromium	140		2.0		ug/L	1		6020	Total Recoverable
Cobalt	26		0.20		ug/L	1		6020	Total Recoverable
Lead	2.2		0.50		ug/L	1		6020	Total Recoverable
Nickel	73		1.0		ug/L	1		6020	Total Recoverable
Selenium	1.7		1.0		ug/L	1		6020	Total Recoverable
Vanadium	89		3.0		ug/L	1		6020	Total Recoverable
Chloride	1300		10		mg/L	10		300.0	Total/NA
Sulfate	60		5.0		mg/L	1		300.0	Total/NA
Ammonia as N	420		2.2		mg/L	100		350.1	Total/NA
Total Kjeldahl Nitrogen	410		34		mg/L	1		351.2	Total/NA
Chemical Oxygen Demand (COD)	1100		170		mg/L	20		410.4	Total/NA
pH adj. to 25 deg C	8.2	HF	0.1		SU	1		9040B	Total/NA
Specific Conductance	9700		2.0		umhos/cm	1		9050A	Total/NA
Total Organic Carbon - Average	330		6.9		mg/L	20		9060	Total/NA
Total Anions	96				meq/L	1		SM 1030E	Total/NA
Total Cations	110				meq/L	1		SM 1030E	Total/NA
Percent Difference	5.1				%	1		SM 1030E	Total/NA
Calcium	67				mg/L	1		SM 1030E	Total/NA
Magnesium	83				mg/L	1		SM 1030E	Total/NA
Potassium	360				mg/L	1		SM 1030E	Total/NA
Sodium	1300				mg/L	1		SM 1030E	Total/NA
Ammonia as N	420				mg/L	1		SM 1030E	Total/NA
Chloride	1300				mg/L	1		SM 1030E	Total/NA
Sulfate	60				mg/L	1		SM 1030E	Total/NA
Carbonate Alkalinity	0.00				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	2900				mg/L	1		SM 1030E	Total/NA
Total Alkalinity	2900				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.00				mg/L	1		SM 1030E	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: LEACH-POND- (Continued)

Lab Sample ID: 280-147589-2

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Anion/Cation Balance	5.1				%	1		SM 1030E	Total/NA
Calculated TDS	5300				mg/L	1		SM 1030E	Total/NA
TDS Ratio	0.89				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	4700				mg/L	1		SM 1030E	Total/NA
Iron	3.3				mg/L	1		SM 1030E	Total/NA
Calcium	3.3				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	6.8				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	9.2				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	57				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.18				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia	30				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	37				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	1.2				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate Nitrite as N	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	58				meq/L	1		SM 1030E (meq)	Total/NA
Carbonate Alkalinity as CaCO3	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity as CaCO3	58				meq/L	1		SM 1030E (meq)	Total/NA
Total Alkalinity	2900		10		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity	2900		10		mg/L	1		SM 2320B	Total/NA
Hardness, as CaCO3	520		3.0		mg/L	5		SM 2340C	Total/NA
Total Dissolved Solids	4700		19		mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	50		4.0		mg/L	1		SM 2540D	Total/NA
Field pH	8.35				SU	1		Field Sampling	Total/NA
Field Conductivity	10043				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	14.2				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	0.73				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	161.6				millivolts	1		Field Sampling	Total/NA

Client Sample ID: LPOND LDS

Lab Sample ID: 280-147589-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	7600		100		ug/L	1		6010B	Total Recoverable
Silicon	18000		100		ug/L	1		6010B	Total Recoverable
Zinc	38		26		ug/L	1		6010B	Total Recoverable
Calcium	65000		500		ug/L	1		6010B	Dissolved
Iron	6200		30		ug/L	1		6010B	Dissolved
Magnesium	87000		200		ug/L	1		6010B	Dissolved
Manganese	1900		3.0		ug/L	1		6010B	Dissolved
Potassium	240000		500		ug/L	1		6010B	Dissolved
Sodium	1200000		1000		ug/L	1		6010B	Dissolved
Antimony	13		0.60		ug/L	1		6020	Total Recoverable
Arsenic	18		1.0		ug/L	1		6020	Total Recoverable
Barium	210		1.0		ug/L	1		6020	Total Recoverable
Chromium	80		2.0		ug/L	1		6020	Total Recoverable
Cobalt	47		0.20		ug/L	1		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: LPOND LDS (Continued)

Lab Sample ID: 280-147589-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Copper	30		2.8		ug/L	5		6020	Total Recoverable
Lead	0.87		0.50		ug/L	1		6020	Total Recoverable
Nickel	92		1.0		ug/L	1		6020	Total Recoverable
Selenium	1.8		1.0		ug/L	1		6020	Total Recoverable
Vanadium	28		3.0		ug/L	1		6020	Total Recoverable
Chloride	1000		10		mg/L	10		300.0	Total/NA
Sulfate	230		10		mg/L	10		300.0	Total/NA
Ammonia as N	240		11		mg/L	500		350.1	Total/NA
Total Kjeldahl Nitrogen	190		34		mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	0.57		0.10		mg/L	1		353.2	Total/NA
Chemical Oxygen Demand (COD)	730		87		mg/L	10		410.4	Total/NA
pH adj. to 25 deg C	7.3	HF	0.1		SU	1		9040B	Total/NA
Specific Conductance	7800		2.0		umhos/cm	1		9050A	Total/NA
Total Organic Carbon - Average	230		3.5		mg/L	10		9060	Total/NA
Total Anions	67				meq/L	1		SM 1030E	Total/NA
Total Cations	86				meq/L	1		SM 1030E	Total/NA
Percent Difference	13				%	1		SM 1030E	Total/NA
Calcium	65				mg/L	1		SM 1030E	Total/NA
Magnesium	87				mg/L	1		SM 1030E	Total/NA
Potassium	240				mg/L	1		SM 1030E	Total/NA
Sodium	1200				mg/L	1		SM 1030E	Total/NA
Ammonia as N	240				mg/L	1		SM 1030E	Total/NA
Chloride	1000				mg/L	1		SM 1030E	Total/NA
Sulfate	230				mg/L	1		SM 1030E	Total/NA
Carbonate Alkalinity	0.00				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	1700				mg/L	1		SM 1030E	Total/NA
Total Alkalinity	1700				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.57				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	13				%	1		SM 1030E	Total/NA
Calculated TDS	3900				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.2				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	4500				mg/L	1		SM 1030E	Total/NA
Iron	6.2				mg/L	1		SM 1030E	Total/NA
Calcium	3.2				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	7.2				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	6.1				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	52				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.33				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia	17				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	28				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	4.8				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate Nitrite as N	0.041				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	34				meq/L	1		SM 1030E (meq)	Total/NA
Carbonate Alkalinity as CaCO3	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity as CaCO3	34				meq/L	1		SM 1030E (meq)	Total/NA
Total Alkalinity	1700	B	10		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity	1700	B	10		mg/L	1		SM 2320B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: LPOND LDS (Continued) — Lab Sample ID: 280-147589-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Hardness, as CaCO3	560		3.0		mg/L	5		SM 2340C	Total/NA
Total Dissolved Solids	4500		19		mg/L	1		SM 2540C	Total/NA
Field pH	6.97				SU	1		Field Sampling	Total/NA
Field Conductivity	8221				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	14.4				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	0.84				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	4.5				millivolts	1		Field Sampling	Total/NA

Client Sample ID: FB3 — Lab Sample ID: 280-147589-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Silicon	490		100		ug/L	1		6010B	Total Recoverable
pH adj. to 25 deg C	8.4	HF	0.1		SU	1		9040B	Total/NA
Specific Conductance	2.4		2.0		umhos/cm	1		9050A	Total/NA
Total Anions	0.00				meq/L	1		SM 1030E	Total/NA
Total Cations	0.00				meq/L	1		SM 1030E	Total/NA
Percent Difference	NC				%	1		SM 1030E	Total/NA
Calcium	0.00				mg/L	1		SM 1030E	Total/NA
Magnesium	0.00				mg/L	1		SM 1030E	Total/NA
Potassium	0.00				mg/L	1		SM 1030E	Total/NA
Sodium	0.00				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.00				mg/L	1		SM 1030E	Total/NA
Chloride	0.00				mg/L	1		SM 1030E	Total/NA
Sulfate	0.00				mg/L	1		SM 1030E	Total/NA
Carbonate Alkalinity	0.00				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	0.00				mg/L	1		SM 1030E	Total/NA
Total Alkalinity	0.00				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.00				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	NC				%	1		SM 1030E	Total/NA
Calculated TDS	0.00				mg/L	1		SM 1030E	Total/NA
TDS Ratio	NC				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	17				mg/L	1		SM 1030E	Total/NA
Iron	0.00				mg/L	1		SM 1030E	Total/NA
Calcium	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate Nitrite as N	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Carbonate Alkalinity as CaCO3	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity as CaCO3	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Total Dissolved Solids	17		10		mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Waste Management
Job ID: 280-147589-1
Project/Site: 1003|Riverbend Landfill - Leachate Lagoon

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-147589-1	TRIP BLANK	Water	04/15/21 09:00	04/17/21 09:45
280-147589-2	LEACH-POND-	Water	04/15/21 09:10	04/17/21 09:45
280-147589-3	LPOND LDS	Water	04/15/21 10:00	04/17/21 09:45
280-147589-4	FB3	Water	04/15/21 09:45	04/17/21 09:45

Method Summary

Client: Waste Management
Job ID: 280-147589-1
Project/Site: 1003|Riverbend Landfill - Leachate Lagoon

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL DEN
6010B	Metals (ICP)	SW846	TAL DEN
6020	Metals (ICP/MS)	SW846	TAL DEN
7470A	Mercury (CVAA)	SW846	TAL DEN
300.0	Anions, Ion Chromatography	MCAWW	TAL DEN
350.1	Nitrogen, Ammonia	MCAWW	TAL DEN
351.2	Nitrogen, Total Kjeldahl	MCAWW	TAL DEN
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	TAL DEN
410.4	COD	MCAWW	TAL DEN
9040B	pH	SW846	TAL DEN
9050A	Specific Conductance	SW846	TAL DEN
9060	Organic Carbon, Total (TOC)	SW846	TAL DEN
SM 1030E	Cation Anion Balance	SM	TAL DEN
SM 1030E (meq)	Cation Anion Balance	SM	TAL DEN
SM 2320B	Alkalinity	SM	TAL DEN
SM 2340C	Hardness, Total (mg/l as CaC03)	SM	TAL DEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL DEN
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL DEN
Field Sampling	Field Sampling	EPA	TAL DEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL DEN
351.2	Nitrogen, Total Kjeldahl	MCAWW	TAL DEN
5030B	Purge and Trap	SW846	TAL DEN
7470A	Preparation, Mercury	SW846	TAL DEN

Protocol 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.

Laboratory References:

TAL DEN = Eurofins TestAmerica, Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Leachate Lagoon

Job ID: 280-147589-1

Client Sample ID: TRIP BLANK

Date Collected: 04/15/21 09:00
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147589-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/28/21 10:38	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/28/21 10:38	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/28/21 10:38	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/28/21 10:38	1
1,1-Dichloroethane	ND		1.0		ug/L			04/28/21 10:38	1
1,1-Dichloroethene	ND		1.0		ug/L			04/28/21 10:38	1
1,1-Dichloropropene	ND		1.0		ug/L			04/28/21 10:38	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/28/21 10:38	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/28/21 10:38	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/28/21 10:38	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/28/21 10:38	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			04/28/21 10:38	1
1,2-Dibromoethane	ND		1.0		ug/L			04/28/21 10:38	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/28/21 10:38	1
1,2-Dichloroethane	ND		1.0		ug/L			04/28/21 10:38	1
1,2-Dichloropropane	ND		1.0		ug/L			04/28/21 10:38	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/28/21 10:38	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/28/21 10:38	1
1,3-Dichloropropane	ND		1.0		ug/L			04/28/21 10:38	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/28/21 10:38	1
2,2-Dichloropropane	ND		5.0		ug/L			04/28/21 10:38	1
2-Butanone (MEK)	ND		6.0		ug/L			04/28/21 10:38	1
2-Chlorotoluene	ND		1.0		ug/L			04/28/21 10:38	1
2-Hexanone	ND		5.0		ug/L			04/28/21 10:38	1
4-Chlorotoluene	ND		1.0		ug/L			04/28/21 10:38	1
4-Isopropyltoluene	ND		1.0		ug/L			04/28/21 10:38	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/28/21 10:38	1
Acetone	ND		10		ug/L			04/28/21 10:38	1
Benzene	ND		1.0		ug/L			04/28/21 10:38	1
Bromobenzene	ND		1.0		ug/L			04/28/21 10:38	1
Bromochloromethane	ND		1.0		ug/L			04/28/21 10:38	1
Bromodichloromethane	ND		1.0		ug/L			04/28/21 10:38	1
Bromoform	ND		1.0		ug/L			04/28/21 10:38	1
Bromomethane	ND		2.0		ug/L			04/28/21 10:38	1
Carbon disulfide	ND		2.0		ug/L			04/28/21 10:38	1
Carbon tetrachloride	ND		1.0		ug/L			04/28/21 10:38	1
Chlorobenzene	ND		1.0		ug/L			04/28/21 10:38	1
Chloroethane	ND		2.0		ug/L			04/28/21 10:38	1
Chloroform	ND		1.0		ug/L			04/28/21 10:38	1
Chloromethane	ND		2.0		ug/L			04/28/21 10:38	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/28/21 10:38	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/28/21 10:38	1
Dibromochloromethane	ND		1.0		ug/L			04/28/21 10:38	1
Dibromomethane	ND		1.0		ug/L			04/28/21 10:38	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/28/21 10:38	1
Ethylbenzene	ND		1.0		ug/L			04/28/21 10:38	1
Hexachlorobutadiene	ND		1.0		ug/L			04/28/21 10:38	1
Isopropylbenzene	ND		1.0		ug/L			04/28/21 10:38	1
Methylene Chloride	ND		5.0		ug/L			04/28/21 10:38	1

Client Sample ID: TRIP BLANK
Lab Sample ID: 280-147589-1
Date Collected: 04/15/21 09:00
Matrix: Water
Date Received: 04/17/21 09:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0		ug/L			04/28/21 10:38	1
n-Butylbenzene	ND		1.0		ug/L			04/28/21 10:38	1
N-Propylbenzene	ND		1.0		ug/L			04/28/21 10:38	1
sec-Butylbenzene	ND		1.0		ug/L			04/28/21 10:38	1
Styrene	ND		1.0		ug/L			04/28/21 10:38	1
tert-Butylbenzene	ND		1.0		ug/L			04/28/21 10:38	1
Tetrachloroethene	ND		1.0		ug/L			04/28/21 10:38	1
Toluene	ND		1.0		ug/L			04/28/21 10:38	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/28/21 10:38	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/28/21 10:38	1
Trichloroethene	ND		1.0		ug/L			04/28/21 10:38	1
Trichlorofluoromethane	ND		2.0		ug/L			04/28/21 10:38	1
Vinyl chloride	ND		1.0		ug/L			04/28/21 10:38	1
Xylenes (total)	ND		2.0		ug/L			04/28/21 10:38	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/28/21 10:38*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 127*		*04/28/21 10:38*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*04/28/21 10:38*	*1*
Dibromofluoromethane (Surr)	*101*		*77 - 120*		*04/28/21 10:38*	*1*
Toluene-d8 (Surr)	*98*		*80 - 125*		*04/28/21 10:38*	*1*

Client Sample ID: LEACH-POND-
Lab Sample ID: 280-147589-2
Date Collected: 04/15/21 09:10
Matrix: Water
Date Received: 04/17/21 09:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/28/21 17:30	4
1,1,1-Trichloroethane	ND		1.0		ug/L			04/28/21 17:30	4
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/28/21 17:30	4
1,1,2-Trichloroethane	ND		1.1		ug/L			04/28/21 17:30	4
1,1-Dichloroethane	ND		1.0		ug/L			04/28/21 17:30	4
1,1-Dichloroethene	ND		1.0		ug/L			04/28/21 17:30	4
1,1-Dichloropropene	ND		1.0		ug/L			04/28/21 17:30	4
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/28/21 17:30	4
1,2,3-Trichloropropane	ND		1.3		ug/L			04/28/21 17:30	4
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/28/21 17:30	4
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/28/21 17:30	4
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			04/28/21 17:30	4
1,2-Dibromoethane	ND		1.0		ug/L			04/28/21 17:30	4
1,2-Dichlorobenzene	ND		1.0		ug/L			04/28/21 17:30	4
1,2-Dichloroethane	ND		1.0		ug/L			04/28/21 17:30	4
1,2-Dichloropropane	ND		1.0		ug/L			04/28/21 17:30	4
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/28/21 17:30	4
1,3-Dichlorobenzene	ND		1.0		ug/L			04/28/21 17:30	4
1,3-Dichloropropane	ND		1.0		ug/L			04/28/21 17:30	4
1,4-Dichlorobenzene	ND		1.0		ug/L			04/28/21 17:30	4

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Leachate Lagoon

Job ID: 280-147589-1

Client Sample ID: LEACH-POND-
Date Collected: 04/15/21 09:10
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147589-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,2-Dichloropropane	ND		5.0		ug/L			04/28/21 17:30	4
2-Butanone (MEK)	ND		8.0		ug/L			04/28/21 17:30	4
2-Chlorotoluene	ND		1.0		ug/L			04/28/21 17:30	4
2-Hexanone	ND		6.8		ug/L			04/28/21 17:30	4
4-Chlorotoluene	ND		1.0		ug/L			04/28/21 17:30	4
4-Isopropyltoluene	ND		1.0		ug/L			04/28/21 17:30	4
4-Methyl-2-pentanone	ND		5.0		ug/L			04/28/21 17:30	4
Acetone	ND		10		ug/L			04/28/21 17:30	4
Benzene	ND		1.0		ug/L			04/28/21 17:30	4
Bromobenzene	ND		1.0		ug/L			04/28/21 17:30	4
Bromochloromethane	ND		1.0		ug/L			04/28/21 17:30	4
Bromodichloromethane	ND		1.0		ug/L			04/28/21 17:30	4
Bromoform	ND		1.8		ug/L			04/28/21 17:30	4
Bromomethane	ND		2.0		ug/L			04/28/21 17:30	4
Carbon disulfide	ND		2.0		ug/L			04/28/21 17:30	4
Carbon tetrachloride	ND		1.0		ug/L			04/28/21 17:30	4
Chlorobenzene	ND		1.0		ug/L			04/28/21 17:30	4
Chloroethane	ND		2.0		ug/L			04/28/21 17:30	4
Chloroform	ND		1.0		ug/L			04/28/21 17:30	4
Chloromethane	ND		2.0		ug/L			04/28/21 17:30	4
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/28/21 17:30	4
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/28/21 17:30	4
Dibromochloromethane	ND		1.0		ug/L			04/28/21 17:30	4
Dibromomethane	ND		1.0		ug/L			04/28/21 17:30	4
Dichlorodifluoromethane	ND		2.0		ug/L			04/28/21 17:30	4
Ethylbenzene	ND		1.0		ug/L			04/28/21 17:30	4
Hexachlorobutadiene	ND		1.4		ug/L			04/28/21 17:30	4
Isopropylbenzene	ND		1.0		ug/L			04/28/21 17:30	4
Methylene Chloride	ND		5.0		ug/L			04/28/21 17:30	4
Naphthalene	ND		1.0		ug/L			04/28/21 17:30	4
n-Butylbenzene	ND		1.0		ug/L			04/28/21 17:30	4
N-Propylbenzene	ND		1.0		ug/L			04/28/21 17:30	4
sec-Butylbenzene	ND		1.0		ug/L			04/28/21 17:30	4
Styrene	ND		1.4		ug/L			04/28/21 17:30	4
tert-Butylbenzene	ND		1.0		ug/L			04/28/21 17:30	4
Tetrachloroethene	ND		1.0		ug/L			04/28/21 17:30	4
Toluene	ND		1.0		ug/L			04/28/21 17:30	4
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/28/21 17:30	4
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/28/21 17:30	4
Trichloroethene	ND		1.0		ug/L			04/28/21 17:30	4
Trichlorofluoromethane	ND		2.0		ug/L			04/28/21 17:30	4
Vinyl chloride	ND		1.0		ug/L			04/28/21 17:30	4
Xylenes (total)	ND		2.0		ug/L			04/28/21 17:30	4

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrahydrofuran	*15*		*ug/L*		*4.32*	*109-99-9*		*04/28/21 17:30*	*4*
Tentatively Identified Compound	*None*		*ug/L*					*04/28/21 17:30*	*4*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 127*		*04/28/21 17:30*	*4*

Client Sample ID: LEACH-POND-

Date Collected: 04/15/21 09:10
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147589-2

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*78 - 120*		*04/28/21 17:30*	*4*
Dibromofluoromethane (Surr)	*102*		*77 - 120*		*04/28/21 17:30*	*4*
Toluene-d8 (Surr)	*99*		*80 - 125*		*04/28/21 17:30*	*4*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**10000**		100		ug/L		04/30/21 08:21	05/03/21 17:55	1
Molybdenum	ND		20		ug/L		04/30/21 08:21	05/03/21 17:55	1
Silicon	**23000**		100		ug/L		04/30/21 08:21	05/03/21 17:55	1
Silver	ND		3.0		ug/L		04/30/21 08:21	05/03/21 17:55	1
Zinc	ND		26		ug/L		04/30/21 08:21	05/03/21 17:55	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**67000**	**^2**	500		ug/L		04/28/21 08:38	04/28/21 16:49	1
Iron	**3300**		30		ug/L		04/28/21 08:38	04/28/21 16:49	1
Magnesium	**83000**		200		ug/L		04/28/21 08:38	04/28/21 16:49	1
Manganese	**800**		3.0		ug/L		04/28/21 08:38	04/28/21 16:49	1
Potassium	**360000**		500		ug/L		04/28/21 08:38	04/28/21 16:49	1
Sodium	**1300000**		1000		ug/L		04/28/21 08:38	04/28/21 16:49	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**19**		0.60		ug/L		04/23/21 09:05	04/28/21 15:52	1
Arsenic	**120**		1.0		ug/L		04/23/21 09:05	04/27/21 20:46	1
Barium	**360**		1.0		ug/L		04/23/21 09:05	04/28/21 15:52	1
Beryllium	ND		0.40		ug/L		04/23/21 09:05	04/27/21 20:46	1
Cadmium	ND		0.30		ug/L		04/23/21 09:05	04/28/21 15:52	1
Chromium	**140**		2.0		ug/L		04/23/21 09:05	04/27/21 20:46	1
Cobalt	**26**		0.20		ug/L		04/23/21 09:05	04/27/21 20:46	1
Copper	ND		2.8		ug/L		04/23/21 09:05	04/29/21 17:08	5
Lead	**2.2**		0.50		ug/L		04/23/21 09:05	04/28/21 15:52	1
Nickel	**73**		1.0		ug/L		04/23/21 09:05	04/27/21 20:46	1
Selenium	**1.7**		1.0		ug/L		04/23/21 09:05	04/27/21 20:46	1
Thallium	ND		0.20		ug/L		04/23/21 09:05	04/28/21 15:52	1
Vanadium	**89**		3.0		ug/L		04/23/21 09:05	04/27/21 20:46	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20		ug/L		04/30/21 12:30	04/30/21 17:07	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	**96**				meq/L			05/13/21 08:11	1
Total Cations	**110**				meq/L			05/13/21 08:11	1
Percent Difference	**5.1**				%			05/13/21 08:11	1
Calcium	**67**				mg/L			05/13/21 08:11	1
Magnesium	**83**				mg/L			05/13/21 08:11	1
Potassium	**360**				mg/L			05/13/21 08:11	1
Sodium	**1300**				mg/L			05/13/21 08:11	1

Client Sample ID: LEACH-POND-

Date Collected: 04/15/21 09:10
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147589-2

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	420				mg/L			05/13/21 08:11	1
Chloride	1300				mg/L			05/13/21 08:11	1
Sulfate	60				mg/L			05/13/21 08:11	1
Carbonate Alkalinity	0.00				mg/L			05/13/21 08:11	1
Bicarbonate Alkalinity	2900				mg/L			05/13/21 08:11	1
Total Alkalinity	2900				mg/L			05/13/21 08:11	1
Nitrate/Nitrite	0.00				mg/L			05/13/21 08:11	1
Anion/Cation Balance	5.1				%			05/13/21 08:11	1
Calculated TDS	5300				mg/L			05/13/21 08:11	1
TDS Ratio	0.89				NONE			05/13/21 08:11	1
Total Dissolved Solids	4700				mg/L			05/13/21 08:11	1
Iron	3.3				mg/L			05/13/21 08:11	1
Calcium	3.3				meq/L			05/13/21 08:11	1
Magnesium	6.8				meq/L			05/13/21 08:11	1
Potassium	9.2				meq/L			05/13/21 08:11	1
Sodium	57				meq/L			05/13/21 08:11	1
Iron	0.18				meq/L			05/13/21 08:11	1
Ammonia	30				meq/L			05/13/21 08:11	1
Chloride	37				meq/L			05/13/21 08:11	1
Sulfate	1.2				meq/L			05/13/21 08:11	1
Nitrate Nitrite as N	0.00				meq/L			05/13/21 08:11	1
Alkalinity	58				meq/L			05/13/21 08:11	1
Carbonate Alkalinity as CaCO3	0.00				meq/L			05/13/21 08:11	1
Bicarbonate Alkalinity as CaCO3	58				meq/L			05/13/21 08:11	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1300		10		mg/L			05/11/21 04:44	10
Sulfate	60		5.0		mg/L			05/12/21 03:18	1
Ammonia as N	420		2.2		mg/L			04/30/21 16:08	100
Total Kjeldahl Nitrogen	410		34		mg/L		04/28/21 17:08	04/29/21 18:37	1
Nitrate Nitrite as N	ND		0.10		mg/L			05/04/21 18:16	1
Chemical Oxygen Demand (COD)	1100		170		mg/L			04/29/21 08:54	20
Total Organic Carbon - Average	330		6.9		mg/L			05/04/21 18:12	20
Total Alkalinity	2900		10		mg/L			04/20/21 18:02	1
Bicarbonate Alkalinity	2900		10		mg/L			04/20/21 18:02	1
Carbonate Alkalinity	ND		10		mg/L			04/20/21 18:02	1
Hardness, as CaCO3	520		3.0		mg/L			04/22/21 14:03	5
Total Dissolved Solids	4700		19		mg/L			04/22/21 16:29	1
Total Suspended Solids	50		4.0		mg/L			04/21/21 10:54	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH adj. to 25 deg C	8.2	HF	0.1		SU			04/19/21 20:36	1
Specific Conductance	9700		2.0		umhos/cm			04/21/21 12:16	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	8.35				SU			04/15/21 10:10	1
Field Conductivity	10043				umhos/cm			04/15/21 10:10	1
Field Temperature	14.2				Degrees C			04/15/21 10:10	1
Field Dissolved Oxygen	0.73				mg/L			04/15/21 10:10	1
Field EH/ORP	161.6				millivolts			04/15/21 10:10	1

Client Sample ID: LPOND LDS
Lab Sample ID: 280-147589-3

Date Collected: 04/15/21 10:00
Matrix: Water
Date Received: 04/17/21 09:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/28/21 17:53	4
1,1,1-Trichloroethane	ND		1.0		ug/L			04/28/21 17:53	4
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/28/21 17:53	4
1,1,2-Trichloroethane	ND		1.1		ug/L			04/28/21 17:53	4
1,1-Dichloroethane	ND		1.0		ug/L			04/28/21 17:53	4
1,1-Dichloroethene	ND		1.0		ug/L			04/28/21 17:53	4
1,1-Dichloropropene	ND		1.0		ug/L			04/28/21 17:53	4
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/28/21 17:53	4
1,2,3-Trichloropropane	ND		1.3		ug/L			04/28/21 17:53	4
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/28/21 17:53	4
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/28/21 17:53	4
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			04/28/21 17:53	4
1,2-Dibromoethane	ND		1.0		ug/L			04/28/21 17:53	4
1,2-Dichlorobenzene	ND		1.0		ug/L			04/28/21 17:53	4
1,2-Dichloroethane	ND		1.0		ug/L			04/28/21 17:53	4
1,2-Dichloropropane	ND		1.0		ug/L			04/28/21 17:53	4
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/28/21 17:53	4
1,3-Dichlorobenzene	ND		1.0		ug/L			04/28/21 17:53	4
1,3-Dichloropropane	ND		1.0		ug/L			04/28/21 17:53	4
1,4-Dichlorobenzene	ND		1.0		ug/L			04/28/21 17:53	4
2,2-Dichloropropane	ND		5.0		ug/L			04/28/21 17:53	4
2-Butanone (MEK)	ND		8.0		ug/L			04/28/21 17:53	4
2-Chlorotoluene	ND		1.0		ug/L			04/28/21 17:53	4
2-Hexanone	ND		6.8		ug/L			04/28/21 17:53	4
4-Chlorotoluene	ND		1.0		ug/L			04/28/21 17:53	4
4-Isopropyltoluene	ND		1.0		ug/L			04/28/21 17:53	4
4-Methyl-2-pentanone	ND		5.0		ug/L			04/28/21 17:53	4
Acetone	ND		10		ug/L			04/28/21 17:53	4
Benzene	ND		1.0		ug/L			04/28/21 17:53	4
Bromobenzene	ND		1.0		ug/L			04/28/21 17:53	4
Bromochloromethane	ND		1.0		ug/L			04/28/21 17:53	4
Bromodichloromethane	ND		1.0		ug/L			04/28/21 17:53	4
Bromoform	ND		1.8		ug/L			04/28/21 17:53	4
Bromomethane	ND		2.0		ug/L			04/28/21 17:53	4
Carbon disulfide	ND		2.0		ug/L			04/28/21 17:53	4
Carbon tetrachloride	ND		1.0		ug/L			04/28/21 17:53	4
Chlorobenzene	ND		1.0		ug/L			04/28/21 17:53	4
Chloroethane	ND		2.0		ug/L			04/28/21 17:53	4
Chloroform	ND		1.0		ug/L			04/28/21 17:53	4
Chloromethane	ND		2.0		ug/L			04/28/21 17:53	4
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/28/21 17:53	4
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/28/21 17:53	4
Dibromochloromethane	ND		1.0		ug/L			04/28/21 17:53	4
Dibromomethane	ND		1.0		ug/L			04/28/21 17:53	4
Dichlorodifluoromethane	ND		2.0		ug/L			04/28/21 17:53	4
Ethylbenzene	ND		1.0		ug/L			04/28/21 17:53	4
Hexachlorobutadiene	ND		1.4		ug/L			04/28/21 17:53	4
Isopropylbenzene	ND		1.0		ug/L			04/28/21 17:53	4
Methylene Chloride	ND		5.0		ug/L			04/28/21 17:53	4

Client Sample ID: LPOND LDS
Lab Sample ID: 280-147589-3

Date Collected: 04/15/21 10:00
Matrix: Water
Date Received: 04/17/21 09:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0		ug/L			04/28/21 17:53	4
n-Butylbenzene	ND		1.0		ug/L			04/28/21 17:53	4
N-Propylbenzene	ND		1.0		ug/L			04/28/21 17:53	4
sec-Butylbenzene	ND		1.0		ug/L			04/28/21 17:53	4
Styrene	ND		1.4		ug/L			04/28/21 17:53	4
tert-Butylbenzene	ND		1.0		ug/L			04/28/21 17:53	4
Tetrachloroethene	ND		1.0		ug/L			04/28/21 17:53	4
Toluene	ND		1.0		ug/L			04/28/21 17:53	4
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/28/21 17:53	4
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/28/21 17:53	4
Trichloroethene	ND		1.0		ug/L			04/28/21 17:53	4
Trichlorofluoromethane	ND		2.0		ug/L			04/28/21 17:53	4
Vinyl chloride	ND		1.0		ug/L			04/28/21 17:53	4
Xylenes (total)	ND		2.0		ug/L			04/28/21 17:53	4

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrahydrofuran	*8.7*		*ug/L*		*4.32*	*109-99-9*		*04/28/21 17:53*	*4*
Tentatively Identified Compound	*None*		*ug/L*					*04/28/21 17:53*	*4*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 127*		*04/28/21 17:53*	*4*
4-Bromofluorobenzene (Surr)	*94*		*78 - 120*		*04/28/21 17:53*	*4*
Dibromofluoromethane (Surr)	*101*		*77 - 120*		*04/28/21 17:53*	*4*
Toluene-d8 (Surr)	*97*		*80 - 125*		*04/28/21 17:53*	*4*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**7600**		100		ug/L		04/23/21 15:45	04/25/21 18:58	1
Molybdenum	ND		20		ug/L		04/26/21 15:45	04/27/21 14:25	1
Silicon	**18000**		100		ug/L		04/26/21 15:45	04/27/21 14:25	1
Silver	ND		3.0		ug/L		04/23/21 15:45	04/25/21 18:58	1
Zinc	**38**		26		ug/L		04/23/21 15:45	04/25/21 18:58	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**65000**		500		ug/L		04/28/21 08:38	04/28/21 18:52	1
Iron	**6200**		30		ug/L		04/28/21 08:38	04/28/21 18:52	1
Magnesium	**87000**		200		ug/L		04/28/21 08:38	04/28/21 18:52	1
Manganese	**1900**		3.0		ug/L		04/28/21 08:38	04/28/21 18:52	1
Potassium	**240000**		500		ug/L		04/28/21 08:38	04/28/21 18:52	1
Sodium	**1200000**		1000		ug/L		04/28/21 08:38	04/28/21 18:52	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**13**		0.60		ug/L		04/23/21 09:05	04/28/21 15:56	1
Arsenic	**18**		1.0		ug/L		04/23/21 09:05	04/27/21 20:49	1
Barium	**210**		1.0		ug/L		04/23/21 09:05	04/28/21 15:56	1
Beryllium	ND		0.40		ug/L		04/23/21 09:05	04/27/21 20:49	1
Cadmium	ND		0.30		ug/L		04/23/21 09:05	04/28/21 15:56	1
Chromium	**80**		2.0		ug/L		04/23/21 09:05	04/27/21 20:49	1
Cobalt	**47**		0.20		ug/L		04/23/21 09:05	04/27/21 20:49	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Leachate Lagoon

Job ID: 280-147589-1

Client Sample ID: LPOND LDS

Date Collected: 04/15/21 10:00
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147589-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	30		2.8		ug/L		04/23/21 09:05	04/29/21 17:11	5
Lead	0.87		0.50		ug/L		04/23/21 09:05	04/28/21 15:56	1
Nickel	92		1.0		ug/L		04/23/21 09:05	04/27/21 20:49	1
Selenium	1.8		1.0		ug/L		04/23/21 09:05	04/27/21 20:49	1
Thallium	ND		0.20		ug/L		04/23/21 09:05	04/28/21 15:56	1
Vanadium	28		3.0		ug/L		04/23/21 09:05	04/27/21 20:49	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20		ug/L		04/30/21 12:30	04/30/21 17:09	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	67				meq/L			05/13/21 08:11	1
Total Cations	86				meq/L			05/13/21 08:11	1
Percent Difference	13				%			05/13/21 08:11	1
Calcium	65				mg/L			05/13/21 08:11	1
Magnesium	87				mg/L			05/13/21 08:11	1
Potassium	240				mg/L			05/13/21 08:11	1
Sodium	1200				mg/L			05/13/21 08:11	1
Ammonia as N	240				mg/L			05/13/21 08:11	1
Chloride	1000				mg/L			05/13/21 08:11	1
Sulfate	230				mg/L			05/13/21 08:11	1
Carbonate Alkalinity	0.00				mg/L			05/13/21 08:11	1
Bicarbonate Alkalinity	1700				mg/L			05/13/21 08:11	1
Total Alkalinity	1700				mg/L			05/13/21 08:11	1
Nitrate/Nitrite	0.57				mg/L			05/13/21 08:11	1
Anion/Cation Balance	13				%			05/13/21 08:11	1
Calculated TDS	3900				mg/L			05/13/21 08:11	1
TDS Ratio	1.2				NONE			05/13/21 08:11	1
Total Dissolved Solids	4500				mg/L			05/13/21 08:11	1
Iron	6.2				mg/L			05/13/21 08:11	1
Calcium	3.2				meq/L			05/13/21 08:11	1
Magnesium	7.2				meq/L			05/13/21 08:11	1
Potassium	6.1				meq/L			05/13/21 08:11	1
Sodium	52				meq/L			05/13/21 08:11	1
Iron	0.33				meq/L			05/13/21 08:11	1
Ammonia	17				meq/L			05/13/21 08:11	1
Chloride	28				meq/L			05/13/21 08:11	1
Sulfate	4.8				meq/L			05/13/21 08:11	1
Nitrate Nitrite as N	0.041				meq/L			05/13/21 08:11	1
Alkalinity	34				meq/L			05/13/21 08:11	1
Carbonate Alkalinity as CaCO3	0.00				meq/L			05/13/21 08:11	1
Bicarbonate Alkalinity as CaCO3	34				meq/L			05/13/21 08:11	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1000		10		mg/L			05/11/21 05:41	10
Sulfate	230		10		mg/L			05/12/21 03:34	10
Ammonia as N	240		11		mg/L			05/03/21 18:38	500
Total Kjeldahl Nitrogen	190		34		mg/L		05/03/21 15:49	05/04/21 17:43	1
Nitrate Nitrite as N	0.57		0.10		mg/L			05/04/21 18:18	1

Client Sample ID: LPOND LDS
Lab Sample ID: 280-147589-3
Date Collected: 04/15/21 10:00
Matrix: Water
Date Received: 04/17/21 09:45

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (COD)	730		87		mg/L			04/29/21 08:54	10
Total Organic Carbon - Average	230		3.5		mg/L			05/04/21 18:39	10
Total Alkalinity	1700	B	10		mg/L			04/23/21 14:51	1
Bicarbonate Alkalinity	1700	B	10		mg/L			04/23/21 14:51	1
Carbonate Alkalinity	ND		10		mg/L			04/23/21 14:51	1
Hardness, as CaCO3	560		3.0		mg/L			04/22/21 14:03	5
Total Dissolved Solids	4500		19		mg/L			04/22/21 16:29	1
Total Suspended Solids	ND		4.0		mg/L			04/21/21 10:54	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH adj. to 25 deg C	7.3	HF	0.1		SU			04/19/21 20:40	1
Specific Conductance	7800		2.0		umhos/cm			04/21/21 12:16	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.97				SU			04/15/21 11:00	1
Field Conductivity	8221				umhos/cm			04/15/21 11:00	1
Field Temperature	14.4				Degrees C			04/15/21 11:00	1
Field Dissolved Oxygen	0.84				mg/L			04/15/21 11:00	1
Field EH/ORP	4.5				millivolts			04/15/21 11:00	1

Client Sample ID: FB3
Lab Sample ID: 280-147589-4
Date Collected: 04/15/21 09:45
Matrix: Water
Date Received: 04/17/21 09:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/28/21 11:23	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/28/21 11:23	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/28/21 11:23	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/28/21 11:23	1
1,1-Dichloroethane	ND		1.0		ug/L			04/28/21 11:23	1
1,1-Dichloroethene	ND		1.0		ug/L			04/28/21 11:23	1
1,1-Dichloropropene	ND		1.0		ug/L			04/28/21 11:23	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/28/21 11:23	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/28/21 11:23	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/28/21 11:23	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/28/21 11:23	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			04/28/21 11:23	1
1,2-Dibromoethane	ND		1.0		ug/L			04/28/21 11:23	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/28/21 11:23	1
1,2-Dichloroethane	ND		1.0		ug/L			04/28/21 11:23	1
1,2-Dichloropropane	ND		1.0		ug/L			04/28/21 11:23	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/28/21 11:23	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/28/21 11:23	1
1,3-Dichloropropane	ND		1.0		ug/L			04/28/21 11:23	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/28/21 11:23	1
2,2-Dichloropropane	ND		5.0		ug/L			04/28/21 11:23	1
2-Butanone (MEK)	ND		6.0		ug/L			04/28/21 11:23	1
2-Chlorotoluene	ND		1.0		ug/L			04/28/21 11:23	1
2-Hexanone	ND		5.0		ug/L			04/28/21 11:23	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Leachate Lagoon

Job ID: 280-147589-1

Client Sample ID: FB3
Date Collected: 04/15/21 09:45
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147589-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0		ug/L			04/28/21 11:23	1
4-Isopropyltoluene	ND		1.0		ug/L			04/28/21 11:23	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/28/21 11:23	1
Acetone	ND		10		ug/L			04/28/21 11:23	1
Benzene	ND		1.0		ug/L			04/28/21 11:23	1
Bromobenzene	ND		1.0		ug/L			04/28/21 11:23	1
Bromochloromethane	ND		1.0		ug/L			04/28/21 11:23	1
Bromodichloromethane	ND		1.0		ug/L			04/28/21 11:23	1
Bromoform	ND		1.0		ug/L			04/28/21 11:23	1
Bromomethane	ND		2.0		ug/L			04/28/21 11:23	1
Carbon disulfide	ND		2.0		ug/L			04/28/21 11:23	1
Carbon tetrachloride	ND		1.0		ug/L			04/28/21 11:23	1
Chlorobenzene	ND		1.0		ug/L			04/28/21 11:23	1
Chloroethane	ND		2.0		ug/L			04/28/21 11:23	1
Chloroform	ND		1.0		ug/L			04/28/21 11:23	1
Chloromethane	ND		2.0		ug/L			04/28/21 11:23	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/28/21 11:23	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/28/21 11:23	1
Dibromochloromethane	ND		1.0		ug/L			04/28/21 11:23	1
Dibromomethane	ND		1.0		ug/L			04/28/21 11:23	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/28/21 11:23	1
Ethylbenzene	ND		1.0		ug/L			04/28/21 11:23	1
Hexachlorobutadiene	ND		1.0		ug/L			04/28/21 11:23	1
Isopropylbenzene	ND		1.0		ug/L			04/28/21 11:23	1
Methylene Chloride	ND		5.0		ug/L			04/28/21 11:23	1
Naphthalene	ND		1.0		ug/L			04/28/21 11:23	1
n-Butylbenzene	ND		1.0		ug/L			04/28/21 11:23	1
N-Propylbenzene	ND		1.0		ug/L			04/28/21 11:23	1
sec-Butylbenzene	ND		1.0		ug/L			04/28/21 11:23	1
Styrene	ND		1.0		ug/L			04/28/21 11:23	1
tert-Butylbenzene	ND		1.0		ug/L			04/28/21 11:23	1
Tetrachloroethene	ND		1.0		ug/L			04/28/21 11:23	1
Toluene	ND		1.0		ug/L			04/28/21 11:23	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/28/21 11:23	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/28/21 11:23	1
Trichloroethene	ND		1.0		ug/L			04/28/21 11:23	1
Trichlorofluoromethane	ND		2.0		ug/L			04/28/21 11:23	1
Vinyl chloride	ND		1.0		ug/L			04/28/21 11:23	1
Xylenes (total)	ND		2.0		ug/L			04/28/21 11:23	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/28/21 11:23*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 127*		*04/28/21 11:23*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*04/28/21 11:23*	*1*
Dibromofluoromethane (Surr)	*101*		*77 - 120*		*04/28/21 11:23*	*1*
Toluene-d8 (Surr)	*99*		*80 - 125*		*04/28/21 11:23*	*1*

Client Sample ID: FB3

Date Collected: 04/15/21 09:45
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147589-4

Matrix: Water

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100		ug/L		04/23/21 15:45	04/25/21 19:02	1
Molybdenum	ND		20		ug/L		04/23/21 15:45	04/25/21 19:02	1
Silicon	**490**		100		ug/L		04/26/21 15:45	04/27/21 14:39	1
Silver	ND		3.0		ug/L		04/23/21 15:45	04/25/21 19:02	1
Zinc	ND		26		ug/L		04/23/21 15:45	04/25/21 19:02	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		500		ug/L		04/28/21 08:38	04/28/21 17:16	1
Iron	ND		30		ug/L		04/28/21 08:38	04/28/21 17:16	1
Magnesium	ND		200		ug/L		04/28/21 08:38	04/28/21 17:16	1
Manganese	ND		3.0		ug/L		04/28/21 08:38	04/28/21 17:16	1
Potassium	ND		500		ug/L		04/28/21 08:38	04/28/21 17:16	1
Sodium	ND		1000		ug/L		04/28/21 08:38	04/28/21 17:16	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.60		ug/L		04/23/21 09:05	04/28/21 15:59	1
Arsenic	ND		1.0		ug/L		04/23/21 09:05	04/27/21 20:53	1
Barium	ND		1.0		ug/L		04/23/21 09:05	04/28/21 15:59	1
Beryllium	ND		0.40		ug/L		04/23/21 09:05	04/27/21 20:53	1
Cadmium	ND		0.30		ug/L		04/23/21 09:05	04/28/21 15:59	1
Chromium	ND		2.0		ug/L		04/23/21 09:05	04/27/21 20:53	1
Cobalt	ND		0.20		ug/L		04/23/21 09:05	04/27/21 20:53	1
Copper	ND		1.0		ug/L		04/23/21 09:05	04/29/21 17:15	1
Lead	ND		0.50		ug/L		04/23/21 09:05	04/28/21 15:59	1
Nickel	ND		1.0		ug/L		04/23/21 09:05	04/27/21 20:53	1
Selenium	ND		1.0		ug/L		04/23/21 09:05	04/29/21 17:15	1
Thallium	ND		0.20		ug/L		04/23/21 09:05	04/28/21 15:59	1
Vanadium	ND		3.0		ug/L		04/23/21 09:05	04/27/21 20:53	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20		ug/L		04/30/21 12:30	04/30/21 17:11	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	**0.00**				meq/L			05/13/21 08:11	1
Total Cations	**0.00**				meq/L			05/13/21 08:11	1
Percent Difference	**NC**				%			05/13/21 08:11	1
Calcium	**0.00**				mg/L			05/13/21 08:11	1
Magnesium	**0.00**				mg/L			05/13/21 08:11	1
Potassium	**0.00**				mg/L			05/13/21 08:11	1
Sodium	**0.00**				mg/L			05/13/21 08:11	1
Ammonia as N	**0.00**				mg/L			05/13/21 08:11	1
Chloride	**0.00**				mg/L			05/13/21 08:11	1
Sulfate	**0.00**				mg/L			05/13/21 08:11	1
Carbonate Alkalinity	**0.00**				mg/L			05/13/21 08:11	1
Bicarbonate Alkalinity	**0.00**				mg/L			05/13/21 08:11	1
Total Alkalinity	**0.00**				mg/L			05/13/21 08:11	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Leachate Lagoon

Job ID: 280-147589-1

Client Sample ID: FB3
Date Collected: 04/15/21 09:45
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147589-4
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate/Nitrite	0.00				mg/L			05/13/21 08:11	1
Anion/Cation Balance	NC				%			05/13/21 08:11	1
Calculated TDS	0.00				mg/L			05/13/21 08:11	1
TDS Ratio	NC				NONE			05/13/21 08:11	1
Total Dissolved Solids	17				mg/L			05/13/21 08:11	1
Iron	0.00				mg/L			05/13/21 08:11	1
Calcium	0.00				meq/L			05/13/21 08:11	1
Magnesium	0.00				meq/L			05/13/21 08:11	1
Potassium	0.00				meq/L			05/13/21 08:11	1
Sodium	0.00				meq/L			05/13/21 08:11	1
Iron	0.00				meq/L			05/13/21 08:11	1
Ammonia	0.00				meq/L			05/13/21 08:11	1
Chloride	0.00				meq/L			05/13/21 08:11	1
Sulfate	0.00				meq/L			05/13/21 08:11	1
Nitrate Nitrite as N	0.00				meq/L			05/13/21 08:11	1
Alkalinity	0.00				meq/L			05/13/21 08:11	1
Carbonate Alkalinity as CaCO3	0.00				meq/L			05/13/21 08:11	1
Bicarbonate Alkalinity as CaCO3	0.00				meq/L			05/13/21 08:11	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0		mg/L			05/11/21 05:55	1
Sulfate	ND		5.0		mg/L			05/12/21 03:51	1
Ammonia as N	ND		0.040		mg/L			04/28/21 13:47	1
Total Kjeldahl Nitrogen	ND		1.0		mg/L		04/28/21 17:08	04/29/21 18:34	1
Nitrate Nitrite as N	ND		0.10		mg/L			05/04/21 18:20	1
Chemical Oxygen Demand (COD)	ND		20		mg/L			04/29/21 08:54	1
Total Organic Carbon - Average	ND		1.0		mg/L			05/04/21 19:00	1
Total Alkalinity	ND		10		mg/L			04/21/21 04:35	1
Bicarbonate Alkalinity	ND		10		mg/L			04/21/21 04:35	1
Carbonate Alkalinity	ND		10		mg/L			04/21/21 04:35	1
Hardness, as CaCO3	ND		3.0		mg/L			04/22/21 14:03	1
Total Dissolved Solids	17		10		mg/L			04/22/21 16:29	1
Total Suspended Solids	ND		4.0		mg/L			04/21/21 10:54	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH adj. to 25 deg C	8.4	HF	0.1		SU			04/20/21 15:32	1
Specific Conductance	2.4		2.0		umhos/cm			04/21/21 12:16	1

Surrogate Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Leachate Lagoon

Job ID: 280-147589-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-127)	(78-120)	(77-120)	(80-125)
280-147589-1	TRIP BLANK	98	96	101	98
280-147589-2	LEACH-POND-	98	95	102	99
280-147589-3	LPOND LDS	98	94	101	97
280-147589-4	FB3	98	96	101	99
LCS 280-534118/5	Lab Control Sample	98	96	100	99
LCSD 280-534118/6	Lab Control Sample Dup	97	96	101	100
MB 280-534118/10	Method Blank	99	96	100	99

Surrogate Legend

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

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

Lab Sample ID: MB 280-534118/10
Matrix: Water
Analysis Batch: 534118

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/28/21 09:52	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/28/21 09:52	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/28/21 09:52	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/28/21 09:52	1
1,1-Dichloroethane	ND		1.0		ug/L			04/28/21 09:52	1
1,1-Dichloroethene	ND		1.0		ug/L			04/28/21 09:52	1
1,1-Dichloropropene	ND		1.0		ug/L			04/28/21 09:52	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/28/21 09:52	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/28/21 09:52	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/28/21 09:52	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/28/21 09:52	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			04/28/21 09:52	1
1,2-Dibromoethane	ND		1.0		ug/L			04/28/21 09:52	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/28/21 09:52	1
1,2-Dichloroethane	ND		1.0		ug/L			04/28/21 09:52	1
1,2-Dichloropropane	ND		1.0		ug/L			04/28/21 09:52	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/28/21 09:52	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/28/21 09:52	1
1,3-Dichloropropane	ND		1.0		ug/L			04/28/21 09:52	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/28/21 09:52	1
2,2-Dichloropropane	ND		5.0		ug/L			04/28/21 09:52	1
2-Butanone (MEK)	ND		6.0		ug/L			04/28/21 09:52	1
2-Chlorotoluene	ND		1.0		ug/L			04/28/21 09:52	1
2-Hexanone	ND		5.0		ug/L			04/28/21 09:52	1
4-Chlorotoluene	ND		1.0		ug/L			04/28/21 09:52	1
4-Isopropyltoluene	ND		1.0		ug/L			04/28/21 09:52	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/28/21 09:52	1
Acetone	ND		10		ug/L			04/28/21 09:52	1
Benzene	ND		1.0		ug/L			04/28/21 09:52	1
Bromobenzene	ND		1.0		ug/L			04/28/21 09:52	1
Bromochloromethane	ND		1.0		ug/L			04/28/21 09:52	1
Bromodichloromethane	ND		1.0		ug/L			04/28/21 09:52	1
Bromoform	ND		1.0		ug/L			04/28/21 09:52	1
Bromomethane	ND		2.0		ug/L			04/28/21 09:52	1
Carbon disulfide	ND		2.0		ug/L			04/28/21 09:52	1
Carbon tetrachloride	ND		1.0		ug/L			04/28/21 09:52	1
Chlorobenzene	ND		1.0		ug/L			04/28/21 09:52	1
Chloroethane	ND		2.0		ug/L			04/28/21 09:52	1
Chloroform	ND		1.0		ug/L			04/28/21 09:52	1
Chloromethane	ND		2.0		ug/L			04/28/21 09:52	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/28/21 09:52	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/28/21 09:52	1
Dibromochloromethane	ND		1.0		ug/L			04/28/21 09:52	1
Dibromomethane	ND		1.0		ug/L			04/28/21 09:52	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/28/21 09:52	1
Ethylbenzene	ND		1.0		ug/L			04/28/21 09:52	1
Hexachlorobutadiene	ND		1.0		ug/L			04/28/21 09:52	1
Isopropylbenzene	ND		1.0		ug/L			04/28/21 09:52	1

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

Lab Sample ID: MB 280-534118/10
Matrix: Water
Analysis Batch: 534118

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		5.0		ug/L			04/28/21 09:52	1
Naphthalene	ND		1.0		ug/L			04/28/21 09:52	1
n-Butylbenzene	ND		1.0		ug/L			04/28/21 09:52	1
N-Propylbenzene	ND		1.0		ug/L			04/28/21 09:52	1
sec-Butylbenzene	ND		1.0		ug/L			04/28/21 09:52	1
Styrene	ND		1.0		ug/L			04/28/21 09:52	1
tert-Butylbenzene	ND		1.0		ug/L			04/28/21 09:52	1
Tetrachloroethene	ND		1.0		ug/L			04/28/21 09:52	1
Toluene	ND		1.0		ug/L			04/28/21 09:52	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/28/21 09:52	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/28/21 09:52	1
Trichloroethene	ND		1.0		ug/L			04/28/21 09:52	1
Trichlorofluoromethane	ND		2.0		ug/L			04/28/21 09:52	1
Vinyl chloride	ND		1.0		ug/L			04/28/21 09:52	1
Xylenes (total)	ND		2.0		ug/L			04/28/21 09:52	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/28/21 09:52*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 127*		*04/28/21 09:52*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*04/28/21 09:52*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 120*		*04/28/21 09:52*	*1*
Toluene-d8 (Surr)	*99*		*80 - 125*		*04/28/21 09:52*	*1*

Lab Sample ID: LCS 280-534118/5
Matrix: Water
Analysis Batch: 534118

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	24.4		ug/L		98	65 - 135
1,1,1-Trichloroethane	25.0	24.2		ug/L		97	65 - 135
1,1,2,2-Tetrachloroethane	25.0	23.4		ug/L		94	58 - 135
1,1,2-Trichloroethane	25.0	24.7		ug/L		99	64 - 135
1,1-Dichloroethane	25.0	25.4		ug/L		101	65 - 135
1,1-Dichloroethene	25.0	24.0		ug/L		96	65 - 136
1,1-Dichloropropene	25.0	24.2		ug/L		97	65 - 135
1,2,3-Trichlorobenzene	25.0	23.6		ug/L		94	60 - 135
1,2,3-Trichloropropane	25.0	22.2		ug/L		89	65 - 135
1,2,4-Trichlorobenzene	25.0	23.2		ug/L		93	58 - 135
1,2,4-Trimethylbenzene	25.0	24.9		ug/L		100	65 - 135
1,2-Dibromo-3-Chloropropane	25.0	20.9		ug/L		84	57 - 135
1,2-Dibromoethane	25.0	23.9		ug/L		96	65 - 135
1,2-Dichlorobenzene	25.0	24.1		ug/L		97	65 - 135
1,2-Dichloroethane	25.0	22.8		ug/L		91	65 - 135
1,2-Dichloropropane	25.0	25.5		ug/L		102	64 - 135
1,3,5-Trimethylbenzene	25.0	24.9		ug/L		100	65 - 135
1,3-Dichlorobenzene	25.0	24.5		ug/L		98	65 - 135

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

Lab Sample ID: LCS 280-534118/5
Matrix: Water
Analysis Batch: 534118

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichloropropane	25.0	24.4		ug/L		98	64 - 135
1,4-Dichlorobenzene	25.0	23.6		ug/L		94	65 - 135
2,2-Dichloropropane	25.0	25.4		ug/L		102	65 - 135
2-Butanone (MEK)	100	85.3		ug/L		85	44 - 177
2-Chlorotoluene	25.0	24.6		ug/L		99	65 - 135
2-Hexanone	100	81.1		ug/L		81	57 - 139
4-Chlorotoluene	25.0	24.0		ug/L		96	65 - 135
4-Isopropyltoluene	25.0	24.9		ug/L		100	65 - 135
4-Methyl-2-pentanone	100	84.0		ug/L		84	60 - 150
Acetone	100	80.9		ug/L		81	39 - 156
Benzene	25.0	24.7		ug/L		99	65 - 135
Bromobenzene	25.0	24.2		ug/L		97	65 - 135
Bromochloromethane	25.0	27.5		ug/L		110	65 - 135
Bromodichloromethane	25.0	25.0		ug/L		100	65 - 135
Bromoform	25.0	22.1		ug/L		88	62 - 135
Bromomethane	25.0	29.4		ug/L		118	45 - 135
Carbon disulfide	25.0	24.1		ug/L		96	55 - 143
Carbon tetrachloride	25.0	25.0		ug/L		100	65 - 135
Chlorobenzene	25.0	24.6		ug/L		99	65 - 135
Chloroethane	25.0	26.8		ug/L		107	46 - 136
Chloroform	25.0	25.0		ug/L		100	65 - 135
Chloromethane	25.0	27.0		ug/L		108	34 - 145
cis-1,2-Dichloroethene	25.0	24.3		ug/L		97	65 - 135
cis-1,3-Dichloropropene	25.0	25.0		ug/L		100	65 - 135
Dibromochloromethane	25.0	25.9		ug/L		104	65 - 135
Dibromomethane	25.0	23.8		ug/L		95	65 - 135
Dichlorodifluoromethane	25.0	28.1		ug/L		112	43 - 142
Ethylbenzene	25.0	25.1		ug/L		100	65 - 135
Hexachlorobutadiene	25.0	24.4		ug/L		98	65 - 135
Isopropylbenzene	25.0	24.2		ug/L		97	65 - 135
Methylene Chloride	25.0	24.5		ug/L		98	54 - 141
Naphthalene	25.0	22.0		ug/L		88	42 - 135
n-Butylbenzene	25.0	24.2		ug/L		97	64 - 135
N-Propylbenzene	25.0	24.9		ug/L		100	65 - 135
sec-Butylbenzene	25.0	24.9		ug/L		100	64 - 135
Styrene	25.0	25.4		ug/L		102	65 - 135
tert-Butylbenzene	25.0	24.5		ug/L		98	65 - 135
Tetrachloroethene	25.0	24.5		ug/L		98	65 - 135
Toluene	25.0	24.9		ug/L		99	65 - 135
trans-1,2-Dichloroethene	25.0	24.3		ug/L		97	65 - 135
trans-1,3-Dichloropropene	25.0	25.2		ug/L		101	65 - 135
Trichloroethene	25.0	23.3		ug/L		93	65 - 135
Trichlorofluoromethane	25.0	24.5		ug/L		98	53 - 137
Vinyl chloride	25.0	24.0		ug/L		96	40 - 137

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 127*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*

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

Lab Sample ID: LCS 280-534118/5
Matrix: Water
Analysis Batch: 534118

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

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*100*		*77 - 120*
Toluene-d8 (Surr)	*99*		*80 - 125*

Lab Sample ID: LCSD 280-534118/6
Matrix: Water
Analysis Batch: 534118

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane			25.0	24.3		ug/L		97	65 - 135	0	20
1,1,1-Trichloroethane			25.0	23.9		ug/L		96	65 - 135	1	20
1,1,2,2-Tetrachloroethane			25.0	23.0		ug/L		92	58 - 135	2	20
1,1,2-Trichloroethane			25.0	24.3		ug/L		97	64 - 135	2	27
1,1-Dichloroethane			25.0	24.7		ug/L		99	65 - 135	3	21
1,1-Dichloroethene			25.0	23.5		ug/L		94	65 - 136	2	20
1,1-Dichloropropene			25.0	23.4		ug/L		94	65 - 135	3	21
1,2,3-Trichlorobenzene			25.0	23.8		ug/L		95	60 - 135	1	36
1,2,3-Trichloropropane			25.0	22.7		ug/L		91	65 - 135	2	23
1,2,4-Trichlorobenzene			25.0	23.0		ug/L		92	58 - 135	1	25
1,2,4-Trimethylbenzene			25.0	24.6		ug/L		98	65 - 135	1	20
1,2-Dibromo-3-Chloropropane			25.0	20.8		ug/L		83	57 - 135	1	22
1,2-Dibromoethane			25.0	23.8		ug/L		95	65 - 135	1	27
1,2-Dichlorobenzene			25.0	24.1		ug/L		96	65 - 135	0	20
1,2-Dichloroethane			25.0	22.6		ug/L		90	65 - 135	1	20
1,2-Dichloropropane			25.0	24.8		ug/L		99	64 - 135	3	20
1,3,5-Trimethylbenzene			25.0	24.4		ug/L		98	65 - 135	2	20
1,3-Dichlorobenzene			25.0	24.2		ug/L		97	65 - 135	1	20
1,3-Dichloropropane			25.0	24.2		ug/L		97	64 - 135	1	20
1,4-Dichlorobenzene			25.0	23.5		ug/L		94	65 - 135	0	23
2,2-Dichloropropane			25.0	24.7		ug/L		99	65 - 135	3	20
2-Butanone (MEK)			100	84.1		ug/L		84	44 - 177	1	32
2-Chlorotoluene			25.0	24.4		ug/L		98	65 - 135	1	20
2-Hexanone			100	80.5		ug/L		80	57 - 139	1	25
4-Chlorotoluene			25.0	23.9		ug/L		96	65 - 135	0	20
4-Isopropyltoluene			25.0	24.3		ug/L		97	65 - 135	2	20
4-Methyl-2-pentanone			100	82.1		ug/L		82	60 - 150	2	22
Acetone			100	80.3		ug/L		80	39 - 156	1	23
Benzene			25.0	24.1		ug/L		96	65 - 135	2	20
Bromobenzene			25.0	23.7		ug/L		95	65 - 135	2	26
Bromochloromethane			25.0	27.4		ug/L		110	65 - 135	0	29
Bromodichloromethane			25.0	24.8		ug/L		99	65 - 135	1	20
Bromoform			25.0	21.6		ug/L		86	62 - 135	2	27
Bromomethane			25.0	28.9		ug/L		115	45 - 135	2	33
Carbon disulfide			25.0	23.6		ug/L		94	55 - 143	2	20
Carbon tetrachloride			25.0	23.7		ug/L		95	65 - 135	5	21
Chlorobenzene			25.0	24.4		ug/L		98	65 - 135	1	20
Chloroethane			25.0	26.8		ug/L		107	46 - 136	0	25
Chloroform			25.0	24.4		ug/L		98	65 - 135	3	20
Chloromethane			25.0	26.5		ug/L		106	34 - 145	2	24

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

Lab Sample ID: LCSD 280-534118/6
Matrix: Water
Analysis Batch: 534118

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,2-Dichloroethene			25.0	24.0		ug/L		96	65 - 135	2	20
cis-1,3-Dichloropropene			25.0	24.8		ug/L		99	65 - 135	1	26
Dibromochloromethane			25.0	26.0		ug/L		104	65 - 135	1	20
Dibromomethane			25.0	23.3		ug/L		93	65 - 135	2	26
Dichlorodifluoromethane			25.0	26.8		ug/L		107	43 - 142	5	30
Ethylbenzene			25.0	24.3		ug/L		97	65 - 135	3	20
Hexachlorobutadiene			25.0	24.5		ug/L		98	65 - 135	0	25
Isopropylbenzene			25.0	23.7		ug/L		95	65 - 135	2	20
Methylene Chloride			25.0	24.1		ug/L		96	54 - 141	2	26
Naphthalene			25.0	21.4		ug/L		86	42 - 135	3	23
n-Butylbenzene			25.0	23.6		ug/L		94	64 - 135	3	21
N-Propylbenzene			25.0	24.2		ug/L		97	65 - 135	3	20
sec-Butylbenzene			25.0	24.5		ug/L		98	64 - 135	2	21
Styrene			25.0	25.1		ug/L		100	65 - 135	1	26
tert-Butylbenzene			25.0	23.8		ug/L		95	65 - 135	3	21
Tetrachloroethene			25.0	24.4		ug/L		97	65 - 135	1	20
Toluene			25.0	24.4		ug/L		98	65 - 135	2	20
trans-1,2-Dichloroethene			25.0	23.0		ug/L		92	65 - 135	5	24
trans-1,3-Dichloropropene			25.0	24.9		ug/L		99	65 - 135	1	26
Trichloroethene			25.0	23.0		ug/L		92	65 - 135	1	20
Trichlorofluoromethane			25.0	23.9		ug/L		96	53 - 137	2	27
Vinyl chloride			25.0	24.0		ug/L		96	40 - 137	0	24

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 127*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*
Dibromofluoromethane (Surr)	*101*		*77 - 120*
Toluene-d8 (Surr)	*100*		*80 - 125*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 280-533562/1-A
Matrix: Water
Analysis Batch: 533867

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 533562

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100		ug/L		04/23/21 15:45	04/25/21 17:23	1
Molybdenum	ND		20		ug/L		04/23/21 15:45	04/25/21 17:23	1
Silver	ND		3.0		ug/L		04/23/21 15:45	04/25/21 17:23	1
Zinc	ND		26		ug/L		04/23/21 15:45	04/25/21 17:23	1

Lab Sample ID: LCS 280-533562/2-A
Matrix: Water
Analysis Batch: 533867

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 533562

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Boron			1000	990		ug/L		99	86 - 110		
Molybdenum			1000	1010		ug/L		101	90 - 110		
Silver			50.0	53.8		ug/L		108	86 - 115		

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 280-533562/2-A
Matrix: Water
Analysis Batch: 533867

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 533562

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Zinc	500	508		ug/L		102	85 - 111

Lab Sample ID: 280-147667-A-1-B MS
Matrix: Water
Analysis Batch: 533867

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 533562

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	ND		1000	1090		ug/L		104	87 - 113
Molybdenum	15000		1000	15600	4	ug/L		106	83 - 109
Silver	ND		50.0	54.5		ug/L		109	75 - 141
Zinc	ND		500	504		ug/L		99	60 - 137

Lab Sample ID: 280-147667-A-1-C MSD
Matrix: Water
Analysis Batch: 533867

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 533562

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	ND		1000	1050		ug/L		100	87 - 113	3	20
Molybdenum	15000		1000	14800	4	ug/L		32	83 - 109	5	20
Silver	ND		50.0	52.7		ug/L		105	75 - 141	3	20
Zinc	ND		500	486		ug/L		96	60 - 137	4	20

Lab Sample ID: MB 280-533806/1-A
Matrix: Water
Analysis Batch: 534364

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 533806

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		500		ug/L		04/28/21 08:38	04/28/21 16:25	1
Iron	ND		30		ug/L		04/28/21 08:38	04/28/21 16:25	1
Magnesium	ND		200		ug/L		04/28/21 08:38	04/28/21 16:25	1
Manganese	ND		3.0		ug/L		04/28/21 08:38	04/28/21 16:25	1
Potassium	ND		500		ug/L		04/28/21 08:38	04/28/21 16:25	1
Sodium	ND		1000		ug/L		04/28/21 08:38	04/28/21 16:25	1

Lab Sample ID: LCS 280-533806/2-A
Matrix: Water
Analysis Batch: 534364

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 533806

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	50000	49200		ug/L		98	90 - 111
Iron	10000	9900		ug/L		99	89 - 115
Magnesium	50000	49200		ug/L		98	90 - 113
Manganese	1000	1020		ug/L		102	90 - 110
Potassium	50000	50000		ug/L		100	89 - 114
Sodium	50000	45900		ug/L		92	90 - 115

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 280-533933/1-A
Matrix: Water
Analysis Batch: 534122

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 533933

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	ND		20		ug/L		04/26/21 15:45	04/27/21 14:19	1
Silicon	ND		100		ug/L		04/26/21 15:45	04/27/21 14:19	1

Lab Sample ID: LCS 280-533933/2-A
Matrix: Water
Analysis Batch: 534122

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 533933

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Molybdenum	1000	992		ug/L		99	90 - 110
Silicon	2000	2050		ug/L		103	90 - 110

Lab Sample ID: 280-147589-3 MS
Matrix: Water
Analysis Batch: 534122

Client Sample ID: LPOND LDS
Prep Type: Total Recoverable
Prep Batch: 533933

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Molybdenum	ND		1000	937		ug/L		92	83 - 109
Silicon	18000		2000	14100	4	ug/L		-212	79 - 140

Lab Sample ID: 280-147589-3 MSD
Matrix: Water
Analysis Batch: 534122

Client Sample ID: LPOND LDS
Prep Type: Total Recoverable
Prep Batch: 533933

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Molybdenum	ND		1000	947		ug/L		93	83 - 109	1	20
Silicon	18000		2000	13600	4	ug/L		-237	79 - 140	4	20

Lab Sample ID: MB 280-534306/1-A
Matrix: Water
Analysis Batch: 534780

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 534306

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100		ug/L		04/30/21 08:21	05/03/21 17:06	1
Molybdenum	ND		20		ug/L		04/30/21 08:21	05/03/21 17:06	1
Silicon	ND		100		ug/L		04/30/21 08:21	05/03/21 17:06	1
Silver	ND		3.0		ug/L		04/30/21 08:21	05/03/21 17:06	1
Zinc	ND		26		ug/L		04/30/21 08:21	05/03/21 17:06	1

Lab Sample ID: LCS 280-534306/2-A
Matrix: Water
Analysis Batch: 534780

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 534306

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	1000	1100		ug/L		110	86 - 110
Molybdenum	1000	1100		ug/L		110	90 - 110
Silicon	2000	2160		ug/L		108	90 - 110
Silver	50.0	57.3		ug/L		115	86 - 115
Zinc	500	541		ug/L		108	85 - 111

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 280-147789-A-2-B MS
Matrix: Water
Analysis Batch: 534780

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 534306

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	270	F1	1000	1420	F1	ug/L		115	87 - 113
Molybdenum	ND	F1	1000	1130	F1	ug/L		112	83 - 109
Silicon	12000		2000	15500	4	ug/L		192	79 - 140
Silver	ND		50.0	60.2		ug/L		120	75 - 141
Zinc	ND		500	551		ug/L		110	60 - 137

Lab Sample ID: 280-147789-A-2-C MSD
Matrix: Water
Analysis Batch: 534780

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 534306

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	270	F1	1000	1410	F1	ug/L		114	87 - 113	1	20
Molybdenum	ND	F1	1000	1120	F1	ug/L		111	83 - 109	0	20
Silicon	12000		2000	15000	4	ug/L		171	79 - 140	3	20
Silver	ND		50.0	59.7		ug/L		119	75 - 141	1	20
Zinc	ND		500	551		ug/L		110	60 - 137	0	20

Lab Sample ID: 280-147511-N-1-B MS
Matrix: Water
Analysis Batch: 534364

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 533806

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	28000	^2	50000	78600		ug/L		101	48 - 153
Iron	35		10000	10200		ug/L		102	52 - 155
Magnesium	12000		50000	63300		ug/L		102	62 - 146
Manganese	330		1000	1340		ug/L		101	79 - 121
Potassium	5400		50000	57100		ug/L		103	76 - 132
Sodium	42000		50000	91200		ug/L		98	70 - 203

Lab Sample ID: 280-147511-N-1-C MSD
Matrix: Water
Analysis Batch: 534364

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 533806

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium	28000	^2	50000	79800		ug/L		104	48 - 153	2	20
Iron	35		10000	10300		ug/L		103	52 - 155	1	20
Magnesium	12000		50000	64200		ug/L		104	62 - 146	1	20
Manganese	330		1000	1350		ug/L		101	79 - 121	0	20
Potassium	5400		50000	58200		ug/L		105	76 - 132	2	20
Sodium	42000		50000	92900		ug/L		102	70 - 203	2	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 280-533106/1-A
Matrix: Water
Analysis Batch: 534125

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 533106

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.60		ug/L		04/23/21 09:05	04/27/21 19:28	1
Arsenic	ND		1.0		ug/L		04/23/21 09:05	04/27/21 19:28	1

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

Lab Sample ID: MB 280-533106/1-A
Matrix: Water
Analysis Batch: 534125

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 533106

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	ND		1.0		ug/L		04/23/21 09:05	04/27/21 19:28	1
Beryllium	ND		0.40		ug/L		04/23/21 09:05	04/27/21 19:28	1
Cadmium	ND		0.30		ug/L		04/23/21 09:05	04/27/21 19:28	1
Chromium	ND		2.0		ug/L		04/23/21 09:05	04/27/21 19:28	1
Cobalt	ND		0.20		ug/L		04/23/21 09:05	04/27/21 19:28	1
Copper	ND		1.0		ug/L		04/23/21 09:05	04/27/21 19:28	1
Lead	ND		0.50		ug/L		04/23/21 09:05	04/27/21 19:28	1
Nickel	ND		1.0		ug/L		04/23/21 09:05	04/27/21 19:28	1
Selenium	ND		1.0		ug/L		04/23/21 09:05	04/27/21 19:28	1
Thallium	ND		0.20		ug/L		04/23/21 09:05	04/27/21 19:28	1
Vanadium	ND		3.0		ug/L		04/23/21 09:05	04/27/21 19:28	1

Lab Sample ID: LCS 280-533106/2-A
Matrix: Water
Analysis Batch: 534125

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 533106

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	40.0	34.3		ug/L		86	85 - 115
Arsenic	40.0	36.9		ug/L		92	85 - 117
Barium	40.0	38.8		ug/L		97	85 - 118
Beryllium	40.0	39.2		ug/L		98	80 - 125
Cadmium	40.0	36.4		ug/L		91	85 - 115
Chromium	40.0	40.1		ug/L		100	84 - 121
Cobalt	40.0	39.2		ug/L		98	85 - 120
Copper	40.0	38.5		ug/L		96	85 - 119
Lead	40.0	36.0		ug/L		90	85 - 118
Nickel	40.0	39.6		ug/L		99	85 - 119
Selenium	40.0	36.5		ug/L		91	77 - 122
Thallium	40.0	35.3		ug/L		88	85 - 118
Vanadium	40.0	39.2		ug/L		98	85 - 120

Lab Sample ID: 280-147511-M-1-B MS
Matrix: Water
Analysis Batch: 534125

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 533106

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	1.0		40.0	38.5		ug/L		94	85 - 115
Arsenic	ND		40.0	36.9		ug/L		92	85 - 117
Barium	57		40.0	98.4		ug/L		105	85 - 118
Beryllium	ND		40.0	36.7		ug/L		92	80 - 125
Cadmium	ND		40.0	36.9		ug/L		92	85 - 115
Chromium	ND		40.0	38.0		ug/L		94	84 - 121
Cobalt	ND		40.0	38.7		ug/L		96	85 - 120
Copper	ND		40.0	37.2		ug/L		91	85 - 119
Lead	ND		40.0	35.7		ug/L		88	85 - 118
Nickel	ND		40.0	36.4		ug/L		91	85 - 119
Selenium	ND		40.0	34.7		ug/L		87	77 - 122
Thallium	ND		40.0	34.5		ug/L		86	85 - 118
Vanadium	ND		40.0	38.2		ug/L		96	85 - 120

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

Lab Sample ID: 280-147511-M-1-C MSD
Matrix: Water
Analysis Batch: 534125

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 533106

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	1.0		40.0	37.2		ug/L		90	85 - 115	3	20
Arsenic	ND		40.0	36.6		ug/L		92	85 - 117	1	20
Barium	57		40.0	100		ug/L		109	85 - 118	2	20
Beryllium	ND		40.0	39.0		ug/L		98	80 - 125	6	20
Cadmium	ND		40.0	35.7		ug/L		89	85 - 115	3	20
Chromium	ND		40.0	37.9		ug/L		93	84 - 121	0	20
Cobalt	ND		40.0	37.9		ug/L		94	85 - 120	2	20
Copper	ND		40.0	36.7		ug/L		90	85 - 119	1	20
Lead	ND		40.0	36.6		ug/L		90	85 - 118	2	20
Nickel	ND		40.0	37.4		ug/L		93	85 - 119	3	20
Selenium	ND		40.0	35.5		ug/L		89	77 - 122	2	20
Thallium	ND		40.0	35.6		ug/L		89	85 - 118	3	20
Vanadium	ND		40.0	39.0		ug/L		98	85 - 120	2	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 280-534239/1-A
Matrix: Water
Analysis Batch: 534546

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 534239

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20		ug/L		04/30/21 12:30	04/30/21 16:29	1

Lab Sample ID: LCS 280-534239/2-A
Matrix: Water
Analysis Batch: 534546

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 534239

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	5.02		ug/L		100	84 - 120

Lab Sample ID: LCSD 280-534239/3-A
Matrix: Water
Analysis Batch: 534546

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 534239

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	5.00	5.10		ug/L		102	84 - 120	2	15

Lab Sample ID: 280-147585-F-1-D MS
Matrix: Water
Analysis Batch: 534546

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 534239

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		5.00	4.92		ug/L		98	75 - 125

Lab Sample ID: 280-147585-F-1-E MSD
Matrix: Water
Analysis Batch: 534546

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 534239

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		5.00	5.10		ug/L		102	75 - 125	4	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 280-535623/13
Matrix: Water
Analysis Batch: 535623

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0		mg/L			05/10/21 20:47	1

Lab Sample ID: LCS 280-535623/11
Matrix: Water
Analysis Batch: 535623

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			100	99.3		mg/L		99	90 - 110		

Lab Sample ID: LCSD 280-535623/12
Matrix: Water
Analysis Batch: 535623

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			100	97.5		mg/L		98	90 - 110	2	10

Lab Sample ID: MRL 280-535623/10
Matrix: Water
Analysis Batch: 535623

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

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			5.00	5.09		mg/L		102	50 - 150		

Lab Sample ID: 280-147530-A-1 MS
Matrix: Water
Analysis Batch: 535623

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	540		500	1070		mg/L		106	80 - 120		

Lab Sample ID: 280-147530-A-1 MSD
Matrix: Water
Analysis Batch: 535623

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	540		500	1030		mg/L		98	80 - 120	4	20

Lab Sample ID: 280-147530-A-7 MS
Matrix: Water
Analysis Batch: 535623

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	110		50.0	158		mg/L		99	80 - 120		

Lab Sample ID: 280-147530-A-7 MSD
Matrix: Water
Analysis Batch: 535623

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	110		50.0	154		mg/L		91	80 - 120	3	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 280-147530-A-1 DU
Matrix: Water
Analysis Batch: 535623

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Chloride	540			529		mg/L				2	15

Lab Sample ID: 280-147530-A-7 DU
Matrix: Water
Analysis Batch: 535623

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Chloride	110			108		mg/L				0.2	15

Lab Sample ID: MB 280-535719/6
Matrix: Water
Analysis Batch: 535719

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0		mg/L			05/11/21 13:52	1

Lab Sample ID: LCS 280-535719/4
Matrix: Water
Analysis Batch: 535719

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			100	103		mg/L		103	90 - 110		

Lab Sample ID: LCSD 280-535719/5
Matrix: Water
Analysis Batch: 535719

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate			100	102		mg/L		102	90 - 110	0	10

Lab Sample ID: MRL 280-535719/3
Matrix: Water
Analysis Batch: 535719

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

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			5.00	ND		mg/L		84	50 - 150		

Lab Sample ID: 280-147530-A-9 MS
Matrix: Water
Analysis Batch: 535719

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate	13		50.0	64.3		mg/L		103	80 - 120		

Lab Sample ID: 280-147530-A-9 MSD
Matrix: Water
Analysis Batch: 535719

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	13		50.0	64.4		mg/L		103	80 - 120	0	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 280-147530-A-9 DU
Matrix: Water
Analysis Batch: 535719

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Sulfate	13			12.8		mg/L				0.9	15

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-534285/19
Matrix: Water
Analysis Batch: 534285

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.040		mg/L			04/28/21 13:29	1

Lab Sample ID: LCS 280-534285/18
Matrix: Water
Analysis Batch: 534285

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia as N			2.50	2.51		mg/L		100	90 - 110		

Lab Sample ID: 280-147514-D-1 MS
Matrix: Water
Analysis Batch: 534285

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

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

Lab Sample ID: 280-147514-D-1 MSD
Matrix: Water
Analysis Batch: 534285

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N	ND		1.00	1.02		mg/L		102	90 - 110	1	10

Lab Sample ID: MB 280-534560/66
Matrix: Water
Analysis Batch: 534560

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.040		mg/L			04/30/21 15:32	1

Lab Sample ID: LCS 280-534560/64
Matrix: Water
Analysis Batch: 534560

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia as N			2.50	2.41		mg/L		97	90 - 110		

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: LCSD 280-534560/65
Matrix: Water
Analysis Batch: 534560

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N			2.50	2.45		mg/L		98	90 - 110	2	10

Lab Sample ID: 280-147585-G-2 MS
Matrix: Water
Analysis Batch: 534560

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N	0.60	F2 F1	1.00	1.62		mg/L		102	90 - 110

Lab Sample ID: 280-147585-G-2 MSD
Matrix: Water
Analysis Batch: 534560

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N	0.60	F2 F1	1.00	1.41	F2 F1	mg/L		81	90 - 110	14	10

Lab Sample ID: MB 280-534766/91
Matrix: Water
Analysis Batch: 534766

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.040		mg/L			05/03/21 18:20	1

Lab Sample ID: LCS 280-534766/89
Matrix: Water
Analysis Batch: 534766

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N			2.50	2.47		mg/L		99	90 - 110

Lab Sample ID: LCSD 280-534766/90
Matrix: Water
Analysis Batch: 534766

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N			2.50	2.51		mg/L		100	90 - 110	2	10

Lab Sample ID: 280-147847-D-9 MS
Matrix: Water
Analysis Batch: 534766

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N	0.12	F1	1.00	1.01	F1	mg/L		89	90 - 110

Lab Sample ID: 280-147847-D-9 MSD
Matrix: Water
Analysis Batch: 534766

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N	0.12	F1	1.00	0.990	F1	mg/L		87	90 - 110	2	10

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 280-534224/2-A
Matrix: Water
Analysis Batch: 534388

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 534224

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen	ND		1.0		mg/L		04/28/21 17:08	04/29/21 18:22	1

Lab Sample ID: LCS 280-534224/1-A
Matrix: Water
Analysis Batch: 534388

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 534224

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Kjeldahl Nitrogen	6.00	5.92		mg/L		99	90 - 110

Lab Sample ID: 280-147514-C-1-B MS
Matrix: Water
Analysis Batch: 534388

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 534224

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Kjeldahl Nitrogen	ND	F1	3.00	2.66	F1	mg/L		89	90 - 110

Lab Sample ID: 280-147514-C-1-C MSD
Matrix: Water
Analysis Batch: 534388

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 534224

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Kjeldahl Nitrogen	ND	F1	3.00	2.47	F1	mg/L		82	90 - 110	7	25

Lab Sample ID: MB 280-534740/12-A
Matrix: Water
Analysis Batch: 534901

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 534740

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen	ND		1.0		mg/L		05/03/21 15:49	05/04/21 17:22	1

Lab Sample ID: LCS 280-534740/11-A
Matrix: Water
Analysis Batch: 534901

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 534740

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Kjeldahl Nitrogen	6.00	6.23		mg/L		104	90 - 110

Lab Sample ID: 280-147726-B-2-B MS
Matrix: Water
Analysis Batch: 534901

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 534740

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Kjeldahl Nitrogen	ND	F1	3.00	3.35	F1	mg/L		88	90 - 110

Lab Sample ID: 280-147726-B-2-C MSD
Matrix: Water
Analysis Batch: 534901

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 534740

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Kjeldahl Nitrogen	ND	F1	3.00	2.97	F1	mg/L		75	90 - 110	12	25

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-534909/22
Matrix: Water
Analysis Batch: 534909

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	ND		0.10		mg/L			05/04/21 17:08	1

Lab Sample ID: LCS 280-534909/21
Matrix: Water
Analysis Batch: 534909

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate Nitrite as N			5.00	5.05		mg/L		101	90 - 110		

Lab Sample ID: 280-147597-D-2 MS
Matrix: Water
Analysis Batch: 534909

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate Nitrite as N	2.3	F1 F2	4.00	5.60	F1	mg/L		82	90 - 110		

Lab Sample ID: 280-147597-D-2 MSD
Matrix: Water
Analysis Batch: 534909

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate Nitrite as N	2.3	F1 F2	4.00	6.48	F2	mg/L		104	90 - 110	15	10

Method: 410.4 - COD

Lab Sample ID: MB 280-534289/5
Matrix: Water
Analysis Batch: 534289

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (COD)	ND		20		mg/L			04/29/21 08:54	1

Lab Sample ID: LCS 280-534289/3
Matrix: Water
Analysis Batch: 534289

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chemical Oxygen Demand (COD)			100	91.7		mg/L		92	90 - 110		

Lab Sample ID: LCSD 280-534289/4
Matrix: Water
Analysis Batch: 534289

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chemical Oxygen Demand (COD)			100	93.5		mg/L		93	90 - 110	2	11

Method: 410.4 - COD (Continued)

Lab Sample ID: 280-147511-K-1 MS
Matrix: Water
Analysis Batch: 534289

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chemical Oxygen Demand (COD)	ND		50.0	49.9		mg/L		100	90 - 110		

Lab Sample ID: 280-147511-K-1 MSD
Matrix: Water
Analysis Batch: 534289

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chemical Oxygen Demand (COD)	ND		50.0	46.3		mg/L		93	90 - 110	7	11

Method: 9040B - pH

Lab Sample ID: LCS 280-533185/4
Matrix: Water
Analysis Batch: 533185

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
pH adj. to 25 deg C			7.00	7.1		SU		101	99 - 101		

Lab Sample ID: 280-147396-B-1 DU
Matrix: Water
Analysis Batch: 533185

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH adj. to 25 deg C	8.3			8.3		SU				0	5

Lab Sample ID: LCS 280-533238/4
Matrix: Water
Analysis Batch: 533238

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
pH adj. to 25 deg C			7.00	7.1		SU		101	99 - 101		

Lab Sample ID: 280-147426-D-4 DU
Matrix: Water
Analysis Batch: 533238

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH adj. to 25 deg C	6.2			5.8	F3	SU				6	5

Method: 9050A - Specific Conductance

Lab Sample ID: MB 280-533352/5
Matrix: Water
Analysis Batch: 533352

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	ND		2.0		umhos/cm			04/21/21 12:16	1

Method: 9050A - Specific Conductance (Continued)

Lab Sample ID: LCS 280-533352/3
Matrix: Water
Analysis Batch: 533352

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Specific Conductance			1410	1440		umhos/cm		102	90 - 110		

Lab Sample ID: LCSD 280-533352/4
Matrix: Water
Analysis Batch: 533352

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Specific Conductance			1410	1430		umhos/cm		102	90 - 110	1	10

Lab Sample ID: 280-147467-J-2 DU
Matrix: Water
Analysis Batch: 533352

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Specific Conductance	97			96.4		umhos/cm				0.3	10

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 280-535008/4
Matrix: Water
Analysis Batch: 535008

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Average	ND		1.0		mg/L			05/04/21 15:57	1

Lab Sample ID: LCS 280-535008/3
Matrix: Water
Analysis Batch: 535008

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon - Average			25.0	24.8		mg/L		99	88 - 112		

Lab Sample ID: 280-147596-B-2 MS
Matrix: Water
Analysis Batch: 535008

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon - Average	ND		25.0	26.3		mg/L		103	88 - 112		

Lab Sample ID: 280-147596-B-2 MSD
Matrix: Water
Analysis Batch: 535008

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Average	ND		25.0	26.3		mg/L		103	88 - 112	0	15

Method: SM 1030E (meq) - Cation Anion Balance

Lab Sample ID: MB 280-535981/1
Matrix: Water
Analysis Batch: 535981

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

Analyte	MB Result	MB Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	0.000				meq/L			05/13/21 08:11	1
Magnesium	0.000				meq/L			05/13/21 08:11	1
Potassium	0.000				meq/L			05/13/21 08:11	1
Sodium	0.000				meq/L			05/13/21 08:11	1
Iron	0.000				meq/L			05/13/21 08:11	1
Ammonia	0.000				meq/L			05/13/21 08:11	1
Ammonia as N	0.000				meq/L			05/13/21 08:11	1
Chloride	0.000				meq/L			05/13/21 08:11	1
Sulfate	0.000				meq/L			05/13/21 08:11	1
Nitrate Nitrite as N	0.000				meq/L			05/13/21 08:11	1
Nitrate/Nitrite	0.000				meq/L			05/13/21 08:11	1
Alkalinity	0.000				meq/L			05/13/21 08:11	1
Total Alkalinity	0.000				meq/L			05/13/21 08:11	1
Carbonate Alkalinity	0.000				meq/L			05/13/21 08:11	1
Carbonate Alkalinity as CaCO3	0.000				meq/L			05/13/21 08:11	1
Bicarbonate Alkalinity	0.000				meq/L			05/13/21 08:11	1
Bicarbonate Alkalinity as CaCO3	0.000				meq/L			05/13/21 08:11	1

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-533319/87
Matrix: Water
Analysis Batch: 533319

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	ND		10		mg/L			04/21/21 03:02	1
Bicarbonate Alkalinity	ND		10		mg/L			04/21/21 03:02	1
Carbonate Alkalinity	ND		10		mg/L			04/21/21 03:02	1

Lab Sample ID: LCS 280-533319/85
Matrix: Water
Analysis Batch: 533319

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Alkalinity			200	201		mg/L		100	89 - 109		

Lab Sample ID: LCSD 280-533319/86
Matrix: Water
Analysis Batch: 533319

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Alkalinity			200	202		mg/L		101	89 - 109	1	10

Lab Sample ID: 280-147609-A-2 DU
Matrix: Water
Analysis Batch: 533319

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Alkalinity	200			204		mg/L				3	10

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: MB 280-533325/7
Matrix: Water
Analysis Batch: 533325

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	ND		10		mg/L			04/20/21 17:54	1
Bicarbonate Alkalinity	ND		10		mg/L			04/20/21 17:54	1
Carbonate Alkalinity	ND		10		mg/L			04/20/21 17:54	1

Lab Sample ID: LCS 280-533325/6
Matrix: Water
Analysis Batch: 533325

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Alkalinity			1000	928		mg/L		93	89 - 109		

Lab Sample ID: 280-147589-2 DU
Matrix: Water
Analysis Batch: 533325

Client Sample ID: LEACH-POND-
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Alkalinity	2900			2990		mg/L				2	10

Lab Sample ID: MB 280-533680/5
Matrix: Water
Analysis Batch: 533680

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	11.3		10		mg/L			04/23/21 14:08	1
Bicarbonate Alkalinity	10.1		10		mg/L			04/23/21 14:08	1
Carbonate Alkalinity	ND		10		mg/L			04/23/21 14:08	1

Lab Sample ID: LCS 280-533680/4
Matrix: Water
Analysis Batch: 533680

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Alkalinity			1000	937		mg/L		94	89 - 109		

Lab Sample ID: 280-147670-C-1 DU
Matrix: Water
Analysis Batch: 533680

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Alkalinity	11000	B		10300		mg/L				4	10

Method: SM 2340C - Hardness, Total (mg/l as CaC03)

Lab Sample ID: MB 280-533520/2
Matrix: Water
Analysis Batch: 533520

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness, as CaCO3	ND		3.0		mg/L			04/22/21 14:03	1

Method: SM 2340C - Hardness, Total (mg/l as CaC03) (Continued)

Lab Sample ID: LCS 280-533520/1
Matrix: Water
Analysis Batch: 533520

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Hardness, as CaCO3			398	394		mg/L		99	90 - 110		

Lab Sample ID: 280-147467-E-4 MS
Matrix: Water
Analysis Batch: 533520

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Hardness, as CaCO3	33		398	431		mg/L		100	90 - 110		

Lab Sample ID: 280-147467-E-4 MSD
Matrix: Water
Analysis Batch: 533520

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Hardness, as CaCO3	33		398	428		mg/L		99	90 - 110	1	10

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

Lab Sample ID: MB 280-533540/1
Matrix: Water
Analysis Batch: 533540

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10		mg/L			04/22/21 16:29	1

Lab Sample ID: LCS 280-533540/2
Matrix: Water
Analysis Batch: 533540

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			501	506		mg/L		101	88 - 114		

Lab Sample ID: 280-147511-I-2 DU
Matrix: Water
Analysis Batch: 533540

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	260			269		mg/L				2	10

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 280-533343/1
Matrix: Water
Analysis Batch: 533343

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0		mg/L			04/21/21 10:54	1

Method: SM 2540D - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: LCS 280-533343/2
Matrix: Water
Analysis Batch: 533343

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Suspended Solids			100	91.2		mg/L		91	79 - 114		

Lab Sample ID: LCSD 280-533343/3
Matrix: Water
Analysis Batch: 533343

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Suspended Solids			100	94.0		mg/L		94	79 - 114	3	20

Lab Sample ID: 280-147654-A-1 DU
Matrix: Water
Analysis Batch: 533343

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Suspended Solids	ND			ND		mg/L				NC	10

GC/MS VOA

Analysis Batch: 534118

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147589-1	TRIP BLANK	Total/NA	Water	8260B	
280-147589-2	LEACH-POND-	Total/NA	Water	8260B	
280-147589-3	LPOND LDS	Total/NA	Water	8260B	
280-147589-4	FB3	Total/NA	Water	8260B	
MB 280-534118/10	Method Blank	Total/NA	Water	8260B	
LCS 280-534118/5	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-534118/6	Lab Control Sample Dup	Total/NA	Water	8260B	

Metals

Prep Batch: 533106

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147589-2	LEACH-POND-	Total Recoverable	Water	3005A	
280-147589-3	LPOND LDS	Total Recoverable	Water	3005A	
280-147589-4	FB3	Total Recoverable	Water	3005A	
MB 280-533106/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-533106/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-147511-M-1-B MS	Matrix Spike	Total Recoverable	Water	3005A	
280-147511-M-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Prep Batch: 533562

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147589-3	LPOND LDS	Total Recoverable	Water	3005A	
280-147589-4	FB3	Total Recoverable	Water	3005A	
MB 280-533562/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-533562/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-147667-A-1-B MS	Matrix Spike	Total Recoverable	Water	3005A	
280-147667-A-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Prep Batch: 533806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147589-2	LEACH-POND-	Dissolved	Water	3005A	
280-147589-3	LPOND LDS	Dissolved	Water	3005A	
280-147589-4	FB3	Dissolved	Water	3005A	
MB 280-533806/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-533806/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-147511-N-1-B MS	Matrix Spike	Dissolved	Water	3005A	
280-147511-N-1-C MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	

Analysis Batch: 533867

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147589-3	LPOND LDS	Total Recoverable	Water	6010B	533562
280-147589-4	FB3	Total Recoverable	Water	6010B	533562
MB 280-533562/1-A	Method Blank	Total Recoverable	Water	6010B	533562
LCS 280-533562/2-A	Lab Control Sample	Total Recoverable	Water	6010B	533562
280-147667-A-1-B MS	Matrix Spike	Total Recoverable	Water	6010B	533562
280-147667-A-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	6010B	533562

Prep Batch: 533933

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147589-3	LPOND LDS	Total Recoverable	Water	3005A	

Metals (Continued)

Prep Batch: 533933 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147589-4	FB3	Total Recoverable	Water	3005A	
MB 280-533933/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-533933/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-147589-3 MS	LPOND LDS	Total Recoverable	Water	3005A	
280-147589-3 MSD	LPOND LDS	Total Recoverable	Water	3005A	

Analysis Batch: 534122

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147589-3	LPOND LDS	Total Recoverable	Water	6010B	533933
280-147589-4	FB3	Total Recoverable	Water	6010B	533933
MB 280-533933/1-A	Method Blank	Total Recoverable	Water	6010B	533933
LCS 280-533933/2-A	Lab Control Sample	Total Recoverable	Water	6010B	533933
280-147589-3 MS	LPOND LDS	Total Recoverable	Water	6010B	533933
280-147589-3 MSD	LPOND LDS	Total Recoverable	Water	6010B	533933

Analysis Batch: 534125

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147589-2	LEACH-POND-	Total Recoverable	Water	6020	533106
280-147589-3	LPOND LDS	Total Recoverable	Water	6020	533106
280-147589-4	FB3	Total Recoverable	Water	6020	533106
MB 280-533106/1-A	Method Blank	Total Recoverable	Water	6020	533106
LCS 280-533106/2-A	Lab Control Sample	Total Recoverable	Water	6020	533106
280-147511-M-1-B MS	Matrix Spike	Total Recoverable	Water	6020	533106
280-147511-M-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	6020	533106

Prep Batch: 534239

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147589-2	LEACH-POND-	Total/NA	Water	7470A	
280-147589-3	LPOND LDS	Total/NA	Water	7470A	
280-147589-4	FB3	Total/NA	Water	7470A	
MB 280-534239/1-A	Method Blank	Total/NA	Water	7470A	
LCS 280-534239/2-A	Lab Control Sample	Total/NA	Water	7470A	
LCSD 280-534239/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	
280-147585-F-1-D MS	Matrix Spike	Total/NA	Water	7470A	
280-147585-F-1-E MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Analysis Batch: 534277

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147589-2	LEACH-POND-	Total Recoverable	Water	6020	533106
280-147589-3	LPOND LDS	Total Recoverable	Water	6020	533106
280-147589-4	FB3	Total Recoverable	Water	6020	533106

Prep Batch: 534306

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147589-2	LEACH-POND-	Total Recoverable	Water	3005A	
MB 280-534306/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-534306/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-147789-A-2-B MS	Matrix Spike	Total Recoverable	Water	3005A	
280-147789-A-2-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Metals

Analysis Batch: 534364

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147589-2	LEACH-POND-	Dissolved	Water	6010B	533806
280-147589-3	LPOND LDS	Dissolved	Water	6010B	533806
280-147589-4	FB3	Dissolved	Water	6010B	533806
MB 280-533806/1-A	Method Blank	Total Recoverable	Water	6010B	533806
LCS 280-533806/2-A	Lab Control Sample	Total Recoverable	Water	6010B	533806
280-147511-N-1-B MS	Matrix Spike	Dissolved	Water	6010B	533806
280-147511-N-1-C MSD	Matrix Spike Duplicate	Dissolved	Water	6010B	533806

Analysis Batch: 534475

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147589-2	LEACH-POND-	Total Recoverable	Water	6020	533106
280-147589-3	LPOND LDS	Total Recoverable	Water	6020	533106
280-147589-4	FB3	Total Recoverable	Water	6020	533106

Analysis Batch: 534546

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147589-2	LEACH-POND-	Total/NA	Water	7470A	534239
280-147589-3	LPOND LDS	Total/NA	Water	7470A	534239
280-147589-4	FB3	Total/NA	Water	7470A	534239
MB 280-534239/1-A	Method Blank	Total/NA	Water	7470A	534239
LCS 280-534239/2-A	Lab Control Sample	Total/NA	Water	7470A	534239
LCSD 280-534239/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	534239
280-147585-F-1-D MS	Matrix Spike	Total/NA	Water	7470A	534239
280-147585-F-1-E MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	534239

Analysis Batch: 534780

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147589-2	LEACH-POND-	Total Recoverable	Water	6010B	534306
MB 280-534306/1-A	Method Blank	Total Recoverable	Water	6010B	534306
LCS 280-534306/2-A	Lab Control Sample	Total Recoverable	Water	6010B	534306
280-147789-A-2-B MS	Matrix Spike	Total Recoverable	Water	6010B	534306
280-147789-A-2-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	6010B	534306

General Chemistry

Analysis Batch: 533185

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147589-2	LEACH-POND-	Total/NA	Water	9040B	
280-147589-3	LPOND LDS	Total/NA	Water	9040B	
LCS 280-533185/4	Lab Control Sample	Total/NA	Water	9040B	
280-147396-B-1 DU	Duplicate	Total/NA	Water	9040B	

Analysis Batch: 533238

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147589-4	FB3	Total/NA	Water	9040B	
LCS 280-533238/4	Lab Control Sample	Total/NA	Water	9040B	
280-147426-D-4 DU	Duplicate	Total/NA	Water	9040B	

Analysis Batch: 533319

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147589-4	FB3	Total/NA	Water	SM 2320B	

General Chemistry (Continued)

Analysis Batch: 533319 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-533319/87	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-533319/85	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 280-533319/86	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
280-147609-A-2 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 533325

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147589-2	LEACH-POND-	Total/NA	Water	SM 2320B	
MB 280-533325/7	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-533325/6	Lab Control Sample	Total/NA	Water	SM 2320B	
280-147589-2 DU	LEACH-POND-	Total/NA	Water	SM 2320B	

Analysis Batch: 533343

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147589-2	LEACH-POND-	Total/NA	Water	SM 2540D	
280-147589-3	LPOND LDS	Total/NA	Water	SM 2540D	
280-147589-4	FB3	Total/NA	Water	SM 2540D	
MB 280-533343/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 280-533343/2	Lab Control Sample	Total/NA	Water	SM 2540D	
LCSD 280-533343/3	Lab Control Sample Dup	Total/NA	Water	SM 2540D	
280-147654-A-1 DU	Duplicate	Total/NA	Water	SM 2540D	

Analysis Batch: 533352

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147589-2	LEACH-POND-	Total/NA	Water	9050A	
280-147589-3	LPOND LDS	Total/NA	Water	9050A	
280-147589-4	FB3	Total/NA	Water	9050A	
MB 280-533352/5	Method Blank	Total/NA	Water	9050A	
LCS 280-533352/3	Lab Control Sample	Total/NA	Water	9050A	
LCSD 280-533352/4	Lab Control Sample Dup	Total/NA	Water	9050A	
280-147467-J-2 DU	Duplicate	Total/NA	Water	9050A	

Analysis Batch: 533520

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147589-2	LEACH-POND-	Total/NA	Water	SM 2340C	
280-147589-3	LPOND LDS	Total/NA	Water	SM 2340C	
280-147589-4	FB3	Total/NA	Water	SM 2340C	
MB 280-533520/2	Method Blank	Total/NA	Water	SM 2340C	
LCS 280-533520/1	Lab Control Sample	Total/NA	Water	SM 2340C	
280-147467-E-4 MS	Matrix Spike	Total/NA	Water	SM 2340C	
280-147467-E-4 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 2340C	

Analysis Batch: 533540

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147589-2	LEACH-POND-	Total/NA	Water	SM 2540C	
280-147589-3	LPOND LDS	Total/NA	Water	SM 2540C	
280-147589-4	FB3	Total/NA	Water	SM 2540C	
MB 280-533540/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-533540/2	Lab Control Sample	Total/NA	Water	SM 2540C	
280-147511-I-2 DU	Duplicate	Total/NA	Water	SM 2540C	

General Chemistry

Analysis Batch: 533680

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147589-3	LPOND LDS	Total/NA	Water	SM 2320B	
MB 280-533680/5	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-533680/4	Lab Control Sample	Total/NA	Water	SM 2320B	
280-147670-C-1 DU	Duplicate	Total/NA	Water	SM 2320B	

Prep Batch: 534224

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147589-2	LEACH-POND-	Total/NA	Water	351.2	
280-147589-4	FB3	Total/NA	Water	351.2	
MB 280-534224/2-A	Method Blank	Total/NA	Water	351.2	
LCS 280-534224/1-A	Lab Control Sample	Total/NA	Water	351.2	
280-147514-C-1-B MS	Matrix Spike	Total/NA	Water	351.2	
280-147514-C-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	351.2	

Analysis Batch: 534285

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147589-4	FB3	Total/NA	Water	350.1	
MB 280-534285/19	Method Blank	Total/NA	Water	350.1	
LCS 280-534285/18	Lab Control Sample	Total/NA	Water	350.1	
280-147514-D-1 MS	Matrix Spike	Total/NA	Water	350.1	
280-147514-D-1 MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	

Analysis Batch: 534289

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147589-2	LEACH-POND-	Total/NA	Water	410.4	
280-147589-3	LPOND LDS	Total/NA	Water	410.4	
280-147589-4	FB3	Total/NA	Water	410.4	
MB 280-534289/5	Method Blank	Total/NA	Water	410.4	
LCS 280-534289/3	Lab Control Sample	Total/NA	Water	410.4	
LCSD 280-534289/4	Lab Control Sample Dup	Total/NA	Water	410.4	
280-147511-K-1 MS	Matrix Spike	Total/NA	Water	410.4	
280-147511-K-1 MSD	Matrix Spike Duplicate	Total/NA	Water	410.4	

Analysis Batch: 534388

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147589-2	LEACH-POND-	Total/NA	Water	351.2	534224
280-147589-4	FB3	Total/NA	Water	351.2	534224
MB 280-534224/2-A	Method Blank	Total/NA	Water	351.2	534224
LCS 280-534224/1-A	Lab Control Sample	Total/NA	Water	351.2	534224
280-147514-C-1-B MS	Matrix Spike	Total/NA	Water	351.2	534224
280-147514-C-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	351.2	534224

Analysis Batch: 534560

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147589-2	LEACH-POND-	Total/NA	Water	350.1	
MB 280-534560/66	Method Blank	Total/NA	Water	350.1	
LCS 280-534560/64	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-534560/65	Lab Control Sample Dup	Total/NA	Water	350.1	
280-147585-G-2 MS	Matrix Spike	Total/NA	Water	350.1	
280-147585-G-2 MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	

General Chemistry

Prep Batch: 534740

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147589-3	LPOND LDS	Total/NA	Water	351.2	
MB 280-534740/12-A	Method Blank	Total/NA	Water	351.2	
LCS 280-534740/11-A	Lab Control Sample	Total/NA	Water	351.2	
280-147726-B-2-B MS	Matrix Spike	Total/NA	Water	351.2	
280-147726-B-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	351.2	

Analysis Batch: 534766

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147589-3	LPOND LDS	Total/NA	Water	350.1	
MB 280-534766/91	Method Blank	Total/NA	Water	350.1	
LCS 280-534766/89	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-534766/90	Lab Control Sample Dup	Total/NA	Water	350.1	
280-147847-D-9 MS	Matrix Spike	Total/NA	Water	350.1	
280-147847-D-9 MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	

Analysis Batch: 534901

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147589-3	LPOND LDS	Total/NA	Water	351.2	534740
MB 280-534740/12-A	Method Blank	Total/NA	Water	351.2	534740
LCS 280-534740/11-A	Lab Control Sample	Total/NA	Water	351.2	534740
280-147726-B-2-B MS	Matrix Spike	Total/NA	Water	351.2	534740
280-147726-B-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	351.2	534740

Analysis Batch: 534909

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147589-2	LEACH-POND-	Total/NA	Water	353.2	
280-147589-3	LPOND LDS	Total/NA	Water	353.2	
280-147589-4	FB3	Total/NA	Water	353.2	
MB 280-534909/22	Method Blank	Total/NA	Water	353.2	
LCS 280-534909/21	Lab Control Sample	Total/NA	Water	353.2	
280-147597-D-2 MS	Matrix Spike	Total/NA	Water	353.2	
280-147597-D-2 MSD	Matrix Spike Duplicate	Total/NA	Water	353.2	

Analysis Batch: 535008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147589-2	LEACH-POND-	Total/NA	Water	9060	
280-147589-3	LPOND LDS	Total/NA	Water	9060	
280-147589-4	FB3	Total/NA	Water	9060	
MB 280-535008/4	Method Blank	Total/NA	Water	9060	
LCS 280-535008/3	Lab Control Sample	Total/NA	Water	9060	
280-147596-B-2 MS	Matrix Spike	Total/NA	Water	9060	
280-147596-B-2 MSD	Matrix Spike Duplicate	Total/NA	Water	9060	

Analysis Batch: 535623

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147589-2	LEACH-POND-	Total/NA	Water	300.0	
280-147589-3	LPOND LDS	Total/NA	Water	300.0	
280-147589-4	FB3	Total/NA	Water	300.0	
MB 280-535623/13	Method Blank	Total/NA	Water	300.0	
LCS 280-535623/11	Lab Control Sample	Total/NA	Water	300.0	
LCSD 280-535623/12	Lab Control Sample Dup	Total/NA	Water	300.0	

General Chemistry (Continued)

Analysis Batch: 535623 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MRL 280-535623/10	Lab Control Sample	Total/NA	Water	300.0	
280-147530-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
280-147530-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
280-147530-A-7 MS	Matrix Spike	Total/NA	Water	300.0	
280-147530-A-7 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
280-147530-A-1 DU	Duplicate	Total/NA	Water	300.0	
280-147530-A-7 DU	Duplicate	Total/NA	Water	300.0	

Analysis Batch: 535719

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147589-2	LEACH-POND-	Total/NA	Water	300.0	
280-147589-3	LPOND LDS	Total/NA	Water	300.0	
280-147589-4	FB3	Total/NA	Water	300.0	
MB 280-535719/6	Method Blank	Total/NA	Water	300.0	
LCS 280-535719/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 280-535719/5	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 280-535719/3	Lab Control Sample	Total/NA	Water	300.0	
280-147530-A-9 MS	Matrix Spike	Total/NA	Water	300.0	
280-147530-A-9 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
280-147530-A-9 DU	Duplicate	Total/NA	Water	300.0	

Analysis Batch: 535981

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147589-2	LEACH-POND-	Total/NA	Water	SM 1030E	
280-147589-2	LEACH-POND-	Total/NA	Water	SM 1030E (meq)	
280-147589-3	LPOND LDS	Total/NA	Water	SM 1030E	
280-147589-3	LPOND LDS	Total/NA	Water	SM 1030E (meq)	
280-147589-4	FB3	Total/NA	Water	SM 1030E	
280-147589-4	FB3	Total/NA	Water	SM 1030E (meq)	
MB 280-535981/1	Method Blank	Total/NA	Water	SM 1030E (meq)	

Field Service / Mobile Lab

Analysis Batch: 533841

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147589-2	LEACH-POND-	Total/NA	Water	Field Sampling	
280-147589-3	LPOND LDS	Total/NA	Water	Field Sampling	

Lab Chronicle

Client: Waste Management
Job ID: 280-147589-1
Project/Site: 1003|Riverbend Landfill - Leachate Lagoon

Client Sample ID: TRIP BLANK
Lab Sample ID: 280-147589-1
Date Collected: 04/15/21 09:00
Matrix: Water
Date Received: 04/17/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	534118	04/28/21 10:38	TAW	TAL DEN

Client Sample ID: LEACH-POND-
Lab Sample ID: 280-147589-2
Date Collected: 04/15/21 09:10
Matrix: Water
Date Received: 04/17/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		4	5 mL	5 mL	534118	04/28/21 17:30	TAW	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	533806	04/28/21 08:38	MAB	TAL DEN
Dissolved	Analysis	6010B		1			534364	04/28/21 16:49	LMT	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	534306	04/30/21 08:21	MAB	TAL DEN
Total Recoverable	Analysis	6010B		1			534780	05/03/21 17:55	LMT	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	533106	04/23/21 09:05	MAB	TAL DEN
Total Recoverable	Analysis	6020		1			534125	04/27/21 20:46	LMT	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	533106	04/23/21 09:05	MAB	TAL DEN
Total Recoverable	Analysis	6020		1			534277	04/28/21 15:52	LMT	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	533106	04/23/21 09:05	MAB	TAL DEN
Total Recoverable	Analysis	6020		5			534475	04/29/21 17:08	LMT	TAL DEN
Total/NA	Prep	7470A			30 mL	50 mL	534239	04/30/21 12:30	NK	TAL DEN
Total/NA	Analysis	7470A		1			534546	04/30/21 17:07	NK	TAL DEN
Total/NA	Analysis	300.0		10	5 mL	5 mL	535623	05/11/21 04:44	JMB	TAL DEN
Total/NA	Analysis	300.0		1	5 mL	5 mL	535719	05/12/21 03:18	JMB	TAL DEN
Total/NA	Analysis	350.1		100	10 mL	10 mL	534560	04/30/21 16:08	QJB	TAL DEN
Total/NA	Prep	351.2			0.5 mL	25 mL	534224	04/28/21 17:08	SVC	TAL DEN
Total/NA	Analysis	351.2		1			534388	04/29/21 18:37	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	534909	05/04/21 18:16	SVC	TAL DEN
Total/NA	Analysis	410.4		20	2 mL	2 mL	534289	04/29/21 08:54	SPG	TAL DEN
Total/NA	Analysis	9040B		1			533185	04/19/21 20:36	QJB	TAL DEN
Total/NA	Analysis	9050A		1			533352	04/21/21 12:16	QJB	TAL DEN
Total/NA	Analysis	9060		20	20 mL	20 mL	535008	05/04/21 18:12	RAF	TAL DEN
Total/NA	Analysis	SM 1030E		1			535981	05/13/21 08:11	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			535981	05/13/21 08:11	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			533325	04/20/21 18:02	QJB	TAL DEN
Total/NA	Analysis	SM 2340C		5	25 mL	25 mL	533520	04/22/21 14:03	RAF	TAL DEN
Total/NA	Analysis	SM 2540C		1	25 mL	100 mL	533540	04/22/21 16:29	JMH	TAL DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	533343	04/21/21 10:54	LEB	TAL DEN
Total/NA	Analysis	Field Sampling		1			533841	04/15/21 10:10	A1S	TAL DEN

Client Sample ID: LPOND LDS

Lab Sample ID: 280-147589-3

Date Collected: 04/15/21 10:00

Matrix: Water

Date Received: 04/17/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		4	5 mL	5 mL	534118	04/28/21 17:53	TAW	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	533806	04/28/21 08:38	MAB	TAL DEN
Dissolved	Analysis	6010B		1			534364	04/28/21 18:52	LMT	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	533933	04/26/21 15:45	EC	TAL DEN
Total Recoverable	Analysis	6010B		1			534122	04/27/21 14:25	LMT	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	533562	04/23/21 15:45	EAS	TAL DEN
Total Recoverable	Analysis	6010B		1			533867	04/25/21 18:58	LMT	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	533106	04/23/21 09:05	MAB	TAL DEN
Total Recoverable	Analysis	6020		1			534125	04/27/21 20:49	LMT	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	533106	04/23/21 09:05	MAB	TAL DEN
Total Recoverable	Analysis	6020		1			534277	04/28/21 15:56	LMT	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	533106	04/23/21 09:05	MAB	TAL DEN
Total Recoverable	Analysis	6020		5			534475	04/29/21 17:11	LMT	TAL DEN
Total/NA	Prep	7470A			30 mL	50 mL	534239	04/30/21 12:30	NK	TAL DEN
Total/NA	Analysis	7470A		1			534546	04/30/21 17:09	NK	TAL DEN
Total/NA	Analysis	300.0		10	5 mL	5 mL	535623	05/11/21 05:41	JMB	TAL DEN
Total/NA	Analysis	300.0		10	5 mL	5 mL	535719	05/12/21 03:34	JMB	TAL DEN
Total/NA	Analysis	350.1		500	10 mL	10 mL	534766	05/03/21 18:38	QJB	TAL DEN
Total/NA	Prep	351.2			0.5 mL	25 mL	534740	05/03/21 15:49	SVC	TAL DEN
Total/NA	Analysis	351.2		1			534901	05/04/21 17:43	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	534909	05/04/21 18:18	SVC	TAL DEN
Total/NA	Analysis	410.4		10	2 mL	2 mL	534289	04/29/21 08:54	SPG	TAL DEN
Total/NA	Analysis	9040B		1			533185	04/19/21 20:40	QJB	TAL DEN
Total/NA	Analysis	9050A		1			533352	04/21/21 12:16	QJB	TAL DEN
Total/NA	Analysis	9060		10	20 mL	20 mL	535008	05/04/21 18:39	RAF	TAL DEN
Total/NA	Analysis	SM 1030E		1			535981	05/13/21 08:11	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			535981	05/13/21 08:11	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			533680	04/23/21 14:51	QJB	TAL DEN
Total/NA	Analysis	SM 2340C		5	25 mL	25 mL	533520	04/22/21 14:03	RAF	TAL DEN
Total/NA	Analysis	SM 2540C		1	25 mL	100 mL	533540	04/22/21 16:29	JMH	TAL DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	533343	04/21/21 10:54	LEB	TAL DEN
Total/NA	Analysis	Field Sampling		1			533841	04/15/21 11:00	A1S	TAL DEN

Client Sample ID: FB3

Lab Sample ID: 280-147589-4

Date Collected: 04/15/21 09:45

Matrix: Water

Date Received: 04/17/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	534118	04/28/21 11:23	TAW	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	533806	04/28/21 08:38	MAB	TAL DEN
Dissolved	Analysis	6010B		1			534364	04/28/21 17:16	LMT	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	533933	04/26/21 15:45	EC	TAL DEN
Total Recoverable	Analysis	6010B		1			534122	04/27/21 14:39	LMT	TAL DEN

Lab Chronicle

Client: Waste Management
Job ID: 280-147589-1
Project/Site: 1003|Riverbend Landfill - Leachate Lagoon

Client Sample ID: FB3
Lab Sample ID: 280-147589-4
Date Collected: 04/15/21 09:45
Matrix: Water
Date Received: 04/17/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	533562	04/23/21 15:45	EAS	TAL DEN
Total Recoverable	Analysis	6010B		1			533867	04/25/21 19:02	LMT	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	533106	04/23/21 09:05	MAB	TAL DEN
Total Recoverable	Analysis	6020		1			534125	04/27/21 20:53	LMT	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	533106	04/23/21 09:05	MAB	TAL DEN
Total Recoverable	Analysis	6020		1			534277	04/28/21 15:59	LMT	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	533106	04/23/21 09:05	MAB	TAL DEN
Total Recoverable	Analysis	6020		1			534475	04/29/21 17:15	LMT	TAL DEN
Total/NA	Prep	7470A			30 mL	50 mL	534239	04/30/21 12:30	NK	TAL DEN
Total/NA	Analysis	7470A		1			534546	04/30/21 17:11	NK	TAL DEN
Total/NA	Analysis	300.0		1	5 mL	5 mL	535623	05/11/21 05:55	JMB	TAL DEN
Total/NA	Analysis	300.0		1	5 mL	5 mL	535719	05/12/21 03:51	JMB	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	534285	04/28/21 13:47	QJB	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	534224	04/28/21 17:08	SVC	TAL DEN
Total/NA	Analysis	351.2		1			534388	04/29/21 18:34	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	534909	05/04/21 18:20	SVC	TAL DEN
Total/NA	Analysis	410.4		1	2 mL	2 mL	534289	04/29/21 08:54	SPG	TAL DEN
Total/NA	Analysis	9040B		1			533238	04/20/21 15:32	QJB	TAL DEN
Total/NA	Analysis	9050A		1			533352	04/21/21 12:16	QJB	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	535008	05/04/21 19:00	RAF	TAL DEN
Total/NA	Analysis	SM 1030E		1			535981	05/13/21 08:11	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			535981	05/13/21 08:11	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			533319	04/21/21 04:35	QJB	TAL DEN
Total/NA	Analysis	SM 2340C		1	25 mL	25 mL	533520	04/22/21 14:03	RAF	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	533540	04/22/21 16:29	JMH	TAL DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	533343	04/21/21 10:54	LEB	TAL DEN

Laboratory References:
TAL DEN = Eurofins TestAmerica, Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

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

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: I. Hultquist	Lab PM: Sara, Betsy A	Carrier Tracking No(s):	COC No: 280-16516-869.1
Client Contact:	Phone: 503-716-6320	E-Mail: Betsy.Sara@Eurofinset.com		Page: Page 1 of 1
Company: Waste Management				Job #:
Address: 13469 SW Highway 18	Due Date Requested:			
City: McMinnville	TAT Requested (days):			
State, Zip: OR, 97128				
Phone:	PO #:			
Email:	WO #:			
Project Name: 1003|Riverbend Landfill SCS Engineers Event Desc: Semiannual Leachate Lagoon - Apr Nov	Project #: 28002786			
Site: Oregon	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	TDS/Alks/EC/pH/Cl/SO4	Hardness/Total Metals	Ammonia/COD/TKN/TOC/NOXT	8260B	TSS	Dissolved Metals	Cation/Anion Balance	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	N	D	S	A	N	D		X	
TRIPBLK	4/15/2021	0900	G	W						X				2	Short Holds: pH
Leach Pond	4/15/2021	0910	G	W	X		X	X	X	X	X	X	X	9	
FB3	4/15/2021	0945	G	W	X		X	X	X	X	X	X	X	9	
LPondLDS	4/15/2021	1000	G	W	X		X	X	X	X	X	X	X	9	

280-147589 Chain of Custody

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

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

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

Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	4/16/2021 1630	SCS		4/17/2021 945	EEN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.: 1398507	Cooler Temperature(s) °C and Other Remarks: 0.6 IR9 CF+0.1

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** Leach Pond
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)	CLOUDY	RAIN		?				**TEMPERATURE:**	(F) 53.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW	[Water Column x Gal/ft]	Volume (gal)
/ /	:	.	.	.	.	.	X 1	.
/ /	:	.	.	.	.	.	X 3	.

Gal/ft = $(dia./2)^2 \times 0.163$ | 1" = 0.041 | 2" = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other = Grab

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	[√ if used] √
VOA Glass	4/15/21	09:10	G	3	40 ml	(HCl)	(YES)	NO		
VOA Glass	/ /	:			40 ml	$Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/15/21	09:10	G	2	250, 500, (1L)	None	(YES)	NO	NA	
Yellow Glass	4/15/21	09:10	G	2	250, (500), 1L	(H_2SO_4)	(YES)	NO		
Red Total Poly	4/15/21	09:10	G	1	125, 250, (500)	(HNO_3)	(YES)	NO		
Red Diss. Poly	4/15/21	09:10	G	1	250, (500), 1L	(HNO_3)	(YES)	(YES)		
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — 9 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (C)	DTW	Diss O_2 (mg/l)	Water Quality
0	G (Grab)	0.00	8.35	161.6	10043	14.2	-	0.73	Clear/Dark brown
1		.	.			.	.	.	Mild odor
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Grab from truck hauling pipe port
Pond liquid level 14.9"

SAMPLER: I. Hulting (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** FB3
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)	CLOUDY	RAIN	?	**TEMPERATURE:**	°F (58.0) °C					

(Circle appropriate units)

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
/ /	:	.	.	.	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other = Turcster

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	√
VOA Glass	4/15/21	09:45	G	3	(40 ml)	(HCl)	YES	NO		
VOA Glass	/ /	:			40 ml	$Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/15/21	09:45	G	2	250, 500, (1L)	(None)	YES	NO	NA	
Yellow Glass	4/15/21	09:45	G	2	250, (500), 1L	(H_2SO_4)	YES	NO		
Red Total Poly	4/15/21	09:45	G	1	125, 250, (500)	(HNO_3)	YES	NO		
Red Diss. Poly	4/15/21	09:45	G	1	250, (500), 1L	(HNO_3)	YES	YES		
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — 9 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	(G 0945)	0.00	~	~	~	~ .	~	~	~
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Collected near LPond LDS using lab supplied DI water

SAMPLER: T. Hultquist (PRINTED NAME) (SIGNATURE)

12/2/2021

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** (Pond LDS
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	~~LIGHT~~	MEDIUM	HEAVY
WEATHER:	~~SUNNY~~		CLOUDY		RAIN		?		**TEMPERATURE:**	(F) 55 . 0	°C

(Circle appropriate units)

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
/ /	:	.	.	.	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)^2 x 0.163	1" =	0.041	2" =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	√
VOA Glass	4/15/21	10:00	A	3	(40 ml)	(HCl)	(YES)	(NO)		
VOA Glass	/ /	:			40 ml	$Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/15/21	10:00	A	2	250, 500, (1L)	(None)	(YES)	(NO)	NA	
Yellow Glass	4/15/21	10:00	A	2	250, (500), 1L	(H_2SO_4)	~~YES~~	~~NO~~		
Red Total Poly	4/15/21	10:00	A	1	125, 250, (500)	(HNO_3)	(YES)	(NO)		
Red Diss. Poly	4/15/21	10:00	A	1	250, (500), 1L	(HNO_3)	~~YES~~	~~YES~~		
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — 9 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O_2 (mg/l)	Water Quality
0	A(1000)	0.00	6.97	4.5	822	141.4	-	0 .84	Clear/Amber
1		.	.			.	.	.	Mild odor
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Liquid level 7.5"

SAMPLER: I Hultquist (PRINTED NAME) (SIGNATURE)



280-147589 Waybill

ORIGIN ID:SAVA (503) 534-[illegible]
TIFFANY ANDREWS
SCS ENGINEERS
15940 SW 72ND AVE

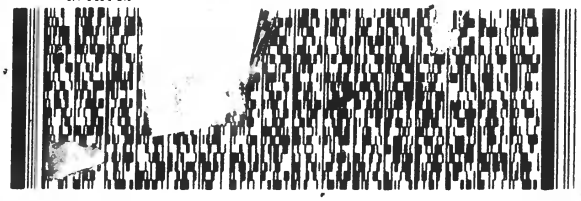
PORTLAND, OR 97224
UNITED STATES US

SHIP DATE: 02APR21
ACTWGT: 15.00 LB MAN
CAD: 0886563/CAFE3409
DIMS: 24x15x15 IN

TO

EUROFINS TEST AMERICA DENVER
495 YARROW STREET

ARVADA CO 80[illegible]0024517
(303) 736-01
REF: S280-[illegible]585
RMA:



56DC2/5EF2/05A2

FedEx
Express
E

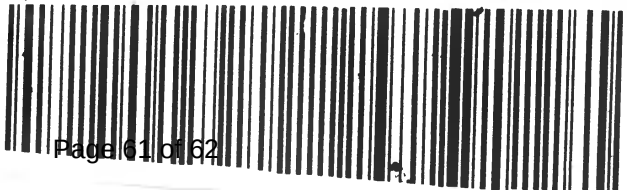
J201120121801uv

RETURNS MON - SAT
SATURDAY 12:00P
PRIORITY OVERNIGHT

FedEx
TRK# 0221 9508 8924 2501

XO LAAA

80002
CO-US DEN



Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-147589-1

Login Number: 147589

List Source: Eurofins TestAmerica, Denver

List Number: 1

Creator: O'Hara, Jake F

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	
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	

eurofins | Environment Testing America



ANALYTICAL REPORT

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

Laboratory Job ID: 280-147602-1
Client Project/Site: 1003|Riverbend Landfill SCS Engineers
Sampling Event: LF Module Sumps - Apr

For:
Waste Management
13469 SW Highway 18
McMinnville, Oregon 97128

Attn: Mr. Jim Denson

Betsy Sara

Authorized for release by:
12/2/2021 9:09:11 AM

Betsy Sara, Project Manager II
(303)736-0189
Betsy.Sara@Eurofinset.com

LINKS

Review your project results through TotalAccess

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

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Definitions/Glossary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-147602-1

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits

General Chemistry

Qualifier	Qualifier Description
E	Result exceeded calibration range.
F1	MS and/or MSD recovery exceeds control limits.
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

Glossary

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

Job ID: 280-147602-1

Laboratory: Eurofins TestAmerica, Denver

Narrative

CASE NARRATIVE

Client: Waste Management

Project: 1003|Riverbend Landfill SCS Engineers

Report Number: 280-147602-1

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

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

Sample Receiving

The samples were received on 04/17/2021; the samples arrived in good condition and on ice. The temperature of the cooler at receipt was 0.7 C.

Holding Times

The analysis for pH should be performed in the field immediately following sampling, and therefore the laboratory pH result was flagged with an "HF" flag.

All other holding times were met.

Method Blanks

All Method Blanks met method criteria.

Laboratory Control Samples (LCS)

All Laboratory Control Sample recoveries were within control limits.

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

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) for Method 8260B, however, an LCS/LCSD pair was analyzed to demonstrate method precision and accuracy.

The percent recoveries and/or relative percent difference of the MS/MSD performed on a sample from another client were outside control limits for Total Silicon 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 1/5P were outside control limits for Total Arsenic and Total Barium 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 1/5P 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 Thallium, Total Vanadium and Total Beryllium below the lower control limits. In

Job ID: 280-147602-1 (Continued)

Laboratory: Eurofins TestAmerica, Denver (Continued)

addition, the RPD result was outside the RPD limit for Total Beryllium. 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 Matrix Spikes and Matrix Spike Duplicates performed on samples from other clients exhibited recoveries outside control limits for Ammonia Method 350.1 and Chemical Oxygen Demand (COD) Method 410.4. 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.

Sample 4/5S was selected to fulfill the laboratory batch quality control requirements for Method 410.4. Analysis of the laboratory generated MS/MSD for this sample exhibited recoveries of Chemical Oxygen Demand (COD) 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 results were within established control limits.

Organics

The samples 1/5P, 6/7P, 8P and 9P were analyzed at a dilution for Method 8260B due to a high concentration of target compounds and/or foamy matrix. As a result, the reporting limits were elevated.

The prepreserved hydrochloric acid preserved vials for Method 8260B analysis for the samples 1/5P, 6/7P, 8P and 9P exhibited pH values greater than 2. This is non-compliant with Method 8260B which requires samples to be preserved with hydrochloric acid to a pH of less than 2.

General Chemistry

The original Total Dissolved Solids (TDS) result for the sample 1/5P was over the calibration range and was flagged with an “E”. Reanalysis was performed outside of the 7-day holding time with a similar result, and therefore the TDS result from the original analysis performed within the holding time was reported in this submission.

General Comments

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.

Detection Summary

Client: Waste Management
Job ID: 280-147602-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Client Sample ID: TB3 — Lab Sample ID: 280-147602-1

No Detections.

Client Sample ID: 1/5P — Lab Sample ID: 280-147602-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	3.1		1.0		ug/L	5		8260B	Total/NA
1,4-Dichlorobenzene	2.8		1.0		ug/L	5		8260B	Total/NA
4-Isopropyltoluene	1.0		1.0		ug/L	5		8260B	Total/NA
4-Methyl-2-pentanone	5.9		5.0		ug/L	5		8260B	Total/NA
Acetone	24		10		ug/L	5		8260B	Total/NA
Benzene	2.7		1.0		ug/L	5		8260B	Total/NA
cis-1,2-Dichloroethene	1.6		1.0		ug/L	5		8260B	Total/NA
Ethylbenzene	9.0		1.0		ug/L	5		8260B	Total/NA
Naphthalene	4.8		1.1		ug/L	5		8260B	Total/NA
Toluene	5.5		1.0		ug/L	5		8260B	Total/NA
Xylenes (total)	17		2.0		ug/L	5		8260B	Total/NA
Silicon	45000		100		ug/L	1		6010B	Total Recoverable
Calcium	100000		500		ug/L	1		6010B	Dissolved
Iron	5700		30		ug/L	1		6010B	Dissolved
Magnesium	150000		200		ug/L	1		6010B	Dissolved
Manganese	1800		3.0		ug/L	1		6010B	Dissolved
Potassium	550000		2400		ug/L	10		6010B	Dissolved
Sodium	2200000		3700		ug/L	10		6010B	Dissolved
Antimony	4.4		0.60		ug/L	1		6020	Total Recoverable
Arsenic	230		1.7		ug/L	5		6020	Total Recoverable
Barium	690		1.5		ug/L	5		6020	Total Recoverable
Chromium	100		2.0		ug/L	1		6020	Total Recoverable
Cobalt	37		0.20		ug/L	1		6020	Total Recoverable
Lead	1.3		0.90		ug/L	5		6020	Total Recoverable
Nickel	91		1.0		ug/L	1		6020	Total Recoverable
Selenium	2.0		1.9		ug/L	5		6020	Total Recoverable
Vanadium	120	F1	6.2		ug/L	5		6020	Total Recoverable
Chloride	2800		100		mg/L	100		300.0	Total/NA
Ammonia as N	1100		11		mg/L	500		350.1	Total/NA
Chemical Oxygen Demand (COD)	2600		430		mg/L	50		410.4	Total/NA
pH adj. to 25 deg C	7.7	HF	0.1		SU	1		9040B	Total/NA
Specific Conductance	19000		2.0		umhos/cm	1		9050A	Total/NA
Total Organic Carbon - Average	890		6.9		mg/L	20		9060	Total/NA
Total Anions	190				meq/L	1		SM 1030E	Total/NA
Total Cations	210				meq/L	1		SM 1030E	Total/NA
Percent Difference	4.3				%	1		SM 1030E	Total/NA
Calcium	100				mg/L	1		SM 1030E	Total/NA
Magnesium	150				mg/L	1		SM 1030E	Total/NA
Potassium	550				mg/L	1		SM 1030E	Total/NA
Sodium	2200				mg/L	1		SM 1030E	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Denver

Detection Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-147602-1

Client Sample ID: 1/5P (Continued)

Lab Sample ID: 280-147602-2

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Ammonia as N	1100				mg/L	1		SM 1030E	Total/NA
Chloride	2800				mg/L	1		SM 1030E	Total/NA
Sulfate	0.00				mg/L	1		SM 1030E	Total/NA
Carbonate Alkalinity	0.00				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	5500				mg/L	1		SM 1030E	Total/NA
Total Alkalinity	5500				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.00				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	4.3				%	1		SM 1030E	Total/NA
Calculated TDS	10000				mg/L	1		SM 1030E	Total/NA
TDS Ratio	0.86				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	8800				mg/L	1		SM 1030E	Total/NA
Iron	5.7				mg/L	1		SM 1030E	Total/NA
Calcium	5.0				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	12				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	14				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	96				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	79				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	79				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Carbonate Alkalinity	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	110				meq/L	1		SM 1030E (meq)	Total/NA
Total Alkalinity	110				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.31				meq/L	1		SM 1030E (meq)	Total/NA
Total Alkalinity	5500		10		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity	5500		10		mg/L	1		SM 2320B	Total/NA
Hardness, as CaCO3	890		3.0		mg/L	5		SM 2340C	Total/NA
Total Dissolved Solids	8800	E	19		mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	9.6		4.0		mg/L	1		SM 2540D	Total/NA
Field pH	7.60				SU	1		Field Sampling	Total/NA
Field Conductivity	21172				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	31.9				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	1.31				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	29.7				millivolts	1		Field Sampling	Total/NA

Client Sample ID: 4/5S

Lab Sample ID: 280-147602-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Silicon	30000		100		ug/L	1		6010B	Total Recoverable
Calcium	120000		500		ug/L	1		6010B	Dissolved
Iron	4300		30		ug/L	1		6010B	Dissolved
Magnesium	55000		200		ug/L	1		6010B	Dissolved
Manganese	6900		3.0		ug/L	1		6010B	Dissolved
Potassium	11000		500		ug/L	1		6010B	Dissolved
Sodium	100000		1000		ug/L	1		6010B	Dissolved
Antimony	2.5		0.60		ug/L	1		6020	Total Recoverable
Arsenic	24		1.0		ug/L	1		6020	Total Recoverable
Barium	260		1.0		ug/L	1		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: 4/5S (Continued)

Lab Sample ID: 280-147602-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	4.4		2.0		ug/L	1		6020	Total Recoverable
Cobalt	1.6		0.20		ug/L	1		6020	Total Recoverable
Nickel	5.0		1.0		ug/L	1		6020	Total Recoverable
Vanadium	3.5		3.0		ug/L	1		6020	Total Recoverable
Chloride	81		3.0		mg/L	1		300.0	Total/NA
Ammonia as N	41		0.22		mg/L	10		350.1	Total/NA
Chemical Oxygen Demand (COD)	66	F1	20		mg/L	1		410.4	Total/NA
pH adj. to 25 deg C	6.8	HF	0.1		SU	1		9040B	Total/NA
Specific Conductance	1700		2.0		umhos/cm	1		9050A	Total/NA
Total Organic Carbon - Average	20		1.0		mg/L	1		9060	Total/NA
Total Anions	19				meq/L	1		SM 1030E	Total/NA
Total Cations	18				meq/L	1		SM 1030E	Total/NA
Percent Difference	-1.5				%	1		SM 1030E	Total/NA
Calcium	120				mg/L	1		SM 1030E	Total/NA
Magnesium	55				mg/L	1		SM 1030E	Total/NA
Potassium	11				mg/L	1		SM 1030E	Total/NA
Sodium	100				mg/L	1		SM 1030E	Total/NA
Ammonia as N	41				mg/L	1		SM 1030E	Total/NA
Chloride	81				mg/L	1		SM 1030E	Total/NA
Sulfate	0.00				mg/L	1		SM 1030E	Total/NA
Carbonate Alkalinity	0.00				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	830				mg/L	1		SM 1030E	Total/NA
Total Alkalinity	830				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.00				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	-1.5				%	1		SM 1030E	Total/NA
Calculated TDS	910				mg/L	1		SM 1030E	Total/NA
TDS Ratio	0.92				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	840				mg/L	1		SM 1030E	Total/NA
Iron	4.3				mg/L	1		SM 1030E	Total/NA
Calcium	6.0				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	4.5				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.28				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	4.3				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	2.9				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	2.3				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Carbonate Alkalinity	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	17				meq/L	1		SM 1030E (meq)	Total/NA
Total Alkalinity	17				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.23				meq/L	1		SM 1030E (meq)	Total/NA
Total Alkalinity	830		10		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity	830		10		mg/L	1		SM 2320B	Total/NA
Hardness, as CaCO3	570		3.0		mg/L	1		SM 2340C	Total/NA
Total Dissolved Solids	840		10		mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	23		4.0		mg/L	1		SM 2540D	Total/NA
Field pH	6.51				SU	1		Field Sampling	Total/NA
Field Conductivity	1955				umhos/cm	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 4/5S (Continued)

Lab Sample ID: 280-147602-3

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Field Temperature	32.0				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	1.83				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	-65.1				millivolts	1		Field Sampling	Total/NA

Client Sample ID: 6/7P

Lab Sample ID: 280-147602-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	7.5		3.0		ug/L	20		8260B	Total/NA
1,4-Dichlorobenzene	3.9		3.2		ug/L	20		8260B	Total/NA
2-Butanone (MEK)	2600		40		ug/L	20		8260B	Total/NA
4-Isopropyltoluene	7.6		4.0		ug/L	20		8260B	Total/NA
4-Methyl-2-pentanone	150		20		ug/L	20		8260B	Total/NA
Acetone	2900		38		ug/L	20		8260B	Total/NA
Benzene	13		3.2		ug/L	20		8260B	Total/NA
Ethylbenzene	16		3.2		ug/L	20		8260B	Total/NA
Naphthalene	34		4.4		ug/L	20		8260B	Total/NA
Toluene	24		3.4		ug/L	20		8260B	Total/NA
Xylenes (total)	34		3.8		ug/L	20		8260B	Total/NA
Silicon	25000		100		ug/L	1		6010B	Total Recoverable
Calcium	130000		500		ug/L	1		6010B	Dissolved
Iron	8700		30		ug/L	1		6010B	Dissolved
Magnesium	150000		200		ug/L	1		6010B	Dissolved
Manganese	1000		3.0		ug/L	1		6010B	Dissolved
Potassium	300000		500		ug/L	1		6010B	Dissolved
Sodium	1900000		1000		ug/L	1		6010B	Dissolved
Antimony	45		0.60		ug/L	1		6020	Total Recoverable
Arsenic	190		1.0		ug/L	1		6020	Total Recoverable
Barium	820		1.0		ug/L	1		6020	Total Recoverable
Chromium	43		2.0		ug/L	1		6020	Total Recoverable
Cobalt	29		0.20		ug/L	1		6020	Total Recoverable
Nickel	93		1.0		ug/L	1		6020	Total Recoverable
Vanadium	61		3.0		ug/L	1		6020	Total Recoverable
Chloride	2100		100		mg/L	100		300.0	Total/NA
Ammonia as N	1100		11		mg/L	500		350.1	Total/NA
Nitrate/Nitrite	0.38		0.050		mg/L	1		353.2	Total/NA
Chemical Oxygen Demand (COD)	1400		170		mg/L	20		410.4	Total/NA
pH adj. to 25 deg C	7.5	HF	0.1		SU	1		9040B	Total/NA
Specific Conductance	14000		2.0		umhos/cm	1		9050A	Total/NA
Total Organic Carbon - Average	420		3.5		mg/L	10		9060	Total/NA
Total Anions	130				meq/L	1		SM 1030E	Total/NA
Total Cations	190				meq/L	1		SM 1030E	Total/NA
Percent Difference	17				%	1		SM 1030E	Total/NA
Calcium	130				mg/L	1		SM 1030E	Total/NA
Magnesium	150				mg/L	1		SM 1030E	Total/NA
Potassium	300				mg/L	1		SM 1030E	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 6/7P (Continued)

Lab Sample ID: 280-147602-4

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Sodium	1900				mg/L	1		SM 1030E	Total/NA
Ammonia as N	1100				mg/L	1		SM 1030E	Total/NA
Chloride	2100				mg/L	1		SM 1030E	Total/NA
Sulfate	0.00				mg/L	1		SM 1030E	Total/NA
Carbonate Alkalinity	0.00				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	3700				mg/L	1		SM 1030E	Total/NA
Total Alkalinity	3700				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.38				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	17				%	1		SM 1030E	Total/NA
Calculated TDS	7900				mg/L	1		SM 1030E	Total/NA
TDS Ratio	0.81				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	6400				mg/L	1		SM 1030E	Total/NA
Iron	8.7				mg/L	1		SM 1030E	Total/NA
Calcium	6.5				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	12				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	7.7				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	83				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	79				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	59				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Carbonate Alkalinity	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	74				meq/L	1		SM 1030E (meq)	Total/NA
Total Alkalinity	74				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.027				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.47				meq/L	1		SM 1030E (meq)	Total/NA
Total Alkalinity	3700		10		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity	3700		10		mg/L	1		SM 2320B	Total/NA
Hardness, as CaCO3	970		3.0		mg/L	5		SM 2340C	Total/NA
Total Dissolved Solids	6400		19		mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	22		4.0		mg/L	1		SM 2540D	Total/NA
Field pH	7.12				SU	1		Field Sampling	Total/NA
Field Conductivity	14983				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	31.6				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	0.52				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	-44.5				millivolts	1		Field Sampling	Total/NA

Client Sample ID: 6/7S

Lab Sample ID: 280-147602-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	3.9		1.0		ug/L	1		8260B	Total/NA
Silicon	25000		100		ug/L	1		6010B	Total Recoverable
Calcium	190000		500		ug/L	1		6010B	Dissolved
Iron	4000		30		ug/L	1		6010B	Dissolved
Magnesium	130000		200		ug/L	1		6010B	Dissolved
Manganese	6300		3.0		ug/L	1		6010B	Dissolved
Potassium	60000		500		ug/L	1		6010B	Dissolved
Sodium	530000		1000		ug/L	1		6010B	Dissolved
Antimony	1.3		0.60		ug/L	1		6020	Total Recoverable
Arsenic	17		1.0		ug/L	1		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: 6/7S (Continued)

Lab Sample ID: 280-147602-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	570		1.0		ug/L	1		6020	Total Recoverable
Chromium	10		2.0		ug/L	1		6020	Total Recoverable
Cobalt	8.5		0.20		ug/L	1		6020	Total Recoverable
Copper	2.5		1.0		ug/L	1		6020	Total Recoverable
Nickel	57		1.0		ug/L	1		6020	Total Recoverable
Vanadium	9.7		3.0		ug/L	1		6020	Total Recoverable
Chloride	680		20		mg/L	20		300.0	Total/NA
Ammonia as N	79		1.1		mg/L	50		350.1	Total/NA
Nitrate/Nitrite	0.74		0.050		mg/L	1		353.2	Total/NA
Chemical Oxygen Demand (COD)	280		43		mg/L	5		410.4	Total/NA
pH adj. to 25 deg C	6.9	HF	0.1		SU	1		9040B	Total/NA
Specific Conductance	4800		2.0		umhos/cm	1		9050A	Total/NA
Total Organic Carbon - Average	96		1.7		mg/L	5		9060	Total/NA
Total Anions	49				meq/L	1		SM 1030E	Total/NA
Total Cations	51				meq/L	1		SM 1030E	Total/NA
Percent Difference	1.4				%	1		SM 1030E	Total/NA
Calcium	190				mg/L	1		SM 1030E	Total/NA
Magnesium	130				mg/L	1		SM 1030E	Total/NA
Potassium	60				mg/L	1		SM 1030E	Total/NA
Sodium	530				mg/L	1		SM 1030E	Total/NA
Ammonia as N	79				mg/L	1		SM 1030E	Total/NA
Chloride	680				mg/L	1		SM 1030E	Total/NA
Sulfate	0.00				mg/L	1		SM 1030E	Total/NA
Carbonate Alkalinity	0.00				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	1500				mg/L	1		SM 1030E	Total/NA
Total Alkalinity	1500				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.74				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	1.4				%	1		SM 1030E	Total/NA
Calculated TDS	2600				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.0				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	2600				mg/L	1		SM 1030E	Total/NA
Iron	4.0				mg/L	1		SM 1030E	Total/NA
Calcium	9.5				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	11				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	1.5				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	23				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	5.6				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	19				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Carbonate Alkalinity	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	30				meq/L	1		SM 1030E (meq)	Total/NA
Total Alkalinity	30				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.053				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.21				meq/L	1		SM 1030E (meq)	Total/NA
Total Alkalinity	1500		10		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity	1500		10		mg/L	1		SM 2320B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 6/7S (Continued) — Lab Sample ID: 280-147602-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Hardness, as CaCO3	1100		3.0		mg/L	5		SM 2340C	Total/NA
Total Dissolved Solids	2600		19		mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	25		4.0		mg/L	1		SM 2540D	Total/NA
Field pH	6.63				SU	1		Field Sampling	Total/NA
Field Conductivity	5071				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	29.9				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	1.98				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	-50.7				millivolts	1		Field Sampling	Total/NA

Client Sample ID: 8P — Lab Sample ID: 280-147602-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	1.9		1.0		ug/L	5		8260B	Total/NA
1,4-Dichlorobenzene	1.8		1.0		ug/L	5		8260B	Total/NA
2-Butanone (MEK)	1300		10		ug/L	5		8260B	Total/NA
4-Isopropyltoluene	4.2		1.0		ug/L	5		8260B	Total/NA
4-Methyl-2-pentanone	44		5.0		ug/L	5		8260B	Total/NA
Acetone	1400		10		ug/L	5		8260B	Total/NA
Benzene	3.3		1.0		ug/L	5		8260B	Total/NA
Carbon disulfide	6.5		2.0		ug/L	5		8260B	Total/NA
Ethylbenzene	5.5		1.0		ug/L	5		8260B	Total/NA
Naphthalene	2.4		1.1		ug/L	5		8260B	Total/NA
Toluene	11		1.0		ug/L	5		8260B	Total/NA
Xylenes (total)	12		2.0		ug/L	5		8260B	Total/NA
Silicon	24000		100		ug/L	1		6010B	Total Recoverable
Calcium	97000		500		ug/L	1		6010B	Dissolved
Iron	1300		30		ug/L	1		6010B	Dissolved
Magnesium	120000		200		ug/L	1		6010B	Dissolved
Manganese	880		3.0		ug/L	1		6010B	Dissolved
Potassium	480000		2400		ug/L	10		6010B	Dissolved
Sodium	1900000		1000		ug/L	1		6010B	Dissolved
Antimony	12		0.60		ug/L	1		6020	Total Recoverable
Arsenic	97		1.0		ug/L	1		6020	Total Recoverable
Barium	470		1.0		ug/L	1		6020	Total Recoverable
Chromium	150		2.0		ug/L	1		6020	Total Recoverable
Cobalt	28		0.20		ug/L	1		6020	Total Recoverable
Nickel	95		1.0		ug/L	1		6020	Total Recoverable
Selenium	1.0		1.0		ug/L	1		6020	Total Recoverable
Vanadium	150		3.0		ug/L	1		6020	Total Recoverable
Chloride	1700		100		mg/L	100		300.0	Total/NA
Sulfate	9.0		5.0		mg/L	1		300.0	Total/NA
Ammonia as N	860		110		mg/L	5000		350.1	Total/NA
Nitrate/Nitrite	0.088		0.050		mg/L	1		353.2	Total/NA
Chemical Oxygen Demand (COD)	2700		430		mg/L	50		410.4	Total/NA
pH adj. to 25 deg C	7.7	HF	0.1		SU	1		9040B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 8P (Continued)

Lab Sample ID: 280-147602-6

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Specific Conductance	15000		2.0		umhos/cm	1		9050A	Total/NA
Total Organic Carbon - Average	930		8.6		mg/L	25		9060	Total/NA
Total Anions	140				meq/L	1		SM 1030E	Total/NA
Total Cations	170				meq/L	1		SM 1030E	Total/NA
Percent Difference	8.6				%	1		SM 1030E	Total/NA
Calcium	97				mg/L	1		SM 1030E	Total/NA
Magnesium	120				mg/L	1		SM 1030E	Total/NA
Potassium	480				mg/L	1		SM 1030E	Total/NA
Sodium	1900				mg/L	1		SM 1030E	Total/NA
Ammonia as N	860				mg/L	1		SM 1030E	Total/NA
Chloride	1700				mg/L	1		SM 1030E	Total/NA
Sulfate	9.0				mg/L	1		SM 1030E	Total/NA
Carbonate Alkalinity	0.00				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	4800				mg/L	1		SM 1030E	Total/NA
Total Alkalinity	4800				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.088				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	8.6				%	1		SM 1030E	Total/NA
Calculated TDS	8000				mg/L	1		SM 1030E	Total/NA
TDS Ratio	0.92				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	7400				mg/L	1		SM 1030E	Total/NA
Iron	1.3				mg/L	1		SM 1030E	Total/NA
Calcium	4.8				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	9.9				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	12				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	83				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	61				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	48				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.19				meq/L	1		SM 1030E (meq)	Total/NA
Carbonate Alkalinity	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	96				meq/L	1		SM 1030E (meq)	Total/NA
Total Alkalinity	96				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.0063				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.070				meq/L	1		SM 1030E (meq)	Total/NA
Total Alkalinity	4800		10		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity	4800		10		mg/L	1		SM 2320B	Total/NA
Hardness, as CaCO3	710		3.0		mg/L	5		SM 2340C	Total/NA
Total Dissolved Solids	7400		470		mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	170		4.0		mg/L	1		SM 2540D	Total/NA
Field pH	7.48				SU	1		Field Sampling	Total/NA
Field Conductivity	16835				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	31.1				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	1.01				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	-224.1				millivolts	1		Field Sampling	Total/NA

Client Sample ID: 8S

Lab Sample ID: 280-147602-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Silicon	20000		100		ug/L	1		6010B	Total Recoverable
Calcium	75000		500		ug/L	1		6010B	Dissolved
Magnesium	38000		200		ug/L	1		6010B	Dissolved
Manganese	20		3.0		ug/L	1		6010B	Dissolved

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-147602-1

Client Sample ID: 8S (Continued)

Lab Sample ID: 280-147602-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	3100		500		ug/L	1		6010B	Dissolved
Sodium	380000		1000		ug/L	1		6010B	Dissolved
Arsenic	2.5		1.0		ug/L	1		6020	Total Recoverable
Barium	64		1.0		ug/L	1		6020	Total Recoverable
Cobalt	0.78		0.20		ug/L	1		6020	Total Recoverable
Copper	5.6		1.0		ug/L	1		6020	Total Recoverable
Nickel	8.3		1.0		ug/L	1		6020	Total Recoverable
Vanadium	10		3.0		ug/L	1		6020	Total Recoverable
Chloride	93		3.0		mg/L	1		300.0	Total/NA
Sulfate	170		5.2		mg/L	5		300.0	Total/NA
Nitrate/Nitrite	0.11		0.050		mg/L	1		353.2	Total/NA
Chemical Oxygen Demand (COD)	26		20		mg/L	1		410.4	Total/NA
pH adj. to 25 deg C	7.7	HF	0.1		SU	1		9040B	Total/NA
Specific Conductance	2100		2.0		umhos/cm	1		9050A	Total/NA
Total Organic Carbon - Average	9.2		1.0		mg/L	1		9060	Total/NA
Total Anions	23				meq/L	1		SM 1030E	Total/NA
Total Cations	23				meq/L	1		SM 1030E	Total/NA
Percent Difference	0.69				%	1		SM 1030E	Total/NA
Calcium	75				mg/L	1		SM 1030E	Total/NA
Magnesium	38				mg/L	1		SM 1030E	Total/NA
Potassium	3.1				mg/L	1		SM 1030E	Total/NA
Sodium	380				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.00				mg/L	1		SM 1030E	Total/NA
Chloride	93				mg/L	1		SM 1030E	Total/NA
Sulfate	170				mg/L	1		SM 1030E	Total/NA
Carbonate Alkalinity	0.00				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	850				mg/L	1		SM 1030E	Total/NA
Total Alkalinity	850				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.11				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	0.69				%	1		SM 1030E	Total/NA
Calculated TDS	1100				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.2				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	1300				mg/L	1		SM 1030E	Total/NA
Iron	0.00				mg/L	1		SM 1030E	Total/NA
Calcium	3.7				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	3.1				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.079				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	17				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	2.6				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	3.5				meq/L	1		SM 1030E (meq)	Total/NA
Carbonate Alkalinity	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	17				meq/L	1		SM 1030E (meq)	Total/NA
Total Alkalinity	17				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.0079				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.00				meq/L	1		SM 1030E (meq)	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 8S (Continued)

Lab Sample ID: 280-147602-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Alkalinity	850		10		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity	850		10		mg/L	1		SM 2320B	Total/NA
Hardness, as CaCO3	330		3.0		mg/L	1		SM 2340C	Total/NA
Total Dissolved Solids	1300		19		mg/L	1		SM 2540C	Total/NA
Field pH	7.11				SU	1		Field Sampling	Total/NA
Field Conductivity	2220				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	28.7				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	2.65				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	29.7				millivolts	1		Field Sampling	Total/NA

Client Sample ID: 9P

Lab Sample ID: 280-147602-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	18		10		ug/L	5		8260B	Total/NA
Benzene	1.5		1.0		ug/L	5		8260B	Total/NA
Ethylbenzene	4.1		1.0		ug/L	5		8260B	Total/NA
Toluene	6.2		1.0		ug/L	5		8260B	Total/NA
Xylenes (total)	12		2.0		ug/L	5		8260B	Total/NA
Silicon	27000		100		ug/L	1		6010B	Total Recoverable
Zinc	39		26		ug/L	1		6010B	Total Recoverable
Calcium	250000		500		ug/L	1		6010B	Dissolved
Iron	4700		30		ug/L	1		6010B	Dissolved
Magnesium	160000		200		ug/L	1		6010B	Dissolved
Manganese	2700		3.0		ug/L	1		6010B	Dissolved
Potassium	260000		500		ug/L	1		6010B	Dissolved
Sodium	1200000		1000		ug/L	1		6010B	Dissolved
Antimony	1.9		0.60		ug/L	1		6020	Total Recoverable
Arsenic	34		1.0		ug/L	1		6020	Total Recoverable
Barium	980		1.0		ug/L	1		6020	Total Recoverable
Chromium	96		2.0		ug/L	1		6020	Total Recoverable
Cobalt	40		0.20		ug/L	1		6020	Total Recoverable
Copper	10		1.0		ug/L	1		6020	Total Recoverable
Lead	4.3		0.50		ug/L	1		6020	Total Recoverable
Nickel	140		1.0		ug/L	1		6020	Total Recoverable
Selenium	1.4		1.0		ug/L	1		6020	Total Recoverable
Vanadium	150		3.0		ug/L	1		6020	Total Recoverable
Chloride	1200		100		mg/L	100		300.0	Total/NA
Sulfate	43		5.0		mg/L	1		300.0	Total/NA
Ammonia as N	490		2.2		mg/L	100		350.1	Total/NA
Nitrate/Nitrite	0.20		0.050		mg/L	1		353.2	Total/NA
Chemical Oxygen Demand (COD)	1500		170		mg/L	20		410.4	Total/NA
pH adj. to 25 deg C	7.4	HF	0.1		SU	1		9040B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 9P (Continued)

Lab Sample ID: 280-147602-8

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Specific Conductance	11000		2.0		umhos/cm	1		9050A	Total/NA
Total Organic Carbon - Average	400		6.9		mg/L	20		9060	Total/NA
Total Anions	100				meq/L	1		SM 1030E	Total/NA
Total Cations	120				meq/L	1		SM 1030E	Total/NA
Percent Difference	6.7				%	1		SM 1030E	Total/NA
Calcium	250				mg/L	1		SM 1030E	Total/NA
Magnesium	160				mg/L	1		SM 1030E	Total/NA
Potassium	260				mg/L	1		SM 1030E	Total/NA
Sodium	1200				mg/L	1		SM 1030E	Total/NA
Ammonia as N	490				mg/L	1		SM 1030E	Total/NA
Chloride	1200				mg/L	1		SM 1030E	Total/NA
Sulfate	43				mg/L	1		SM 1030E	Total/NA
Carbonate Alkalinity	0.00				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	3500				mg/L	1		SM 1030E	Total/NA
Total Alkalinity	3500				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.20				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	6.7				%	1		SM 1030E	Total/NA
Calculated TDS	5700				mg/L	1		SM 1030E	Total/NA
TDS Ratio	0.92				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	5200				mg/L	1		SM 1030E	Total/NA
Iron	4.7				mg/L	1		SM 1030E	Total/NA
Calcium	12				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	13				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	6.6				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	52				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	35				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	34				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.90				meq/L	1		SM 1030E (meq)	Total/NA
Carbonate Alkalinity	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	70				meq/L	1		SM 1030E (meq)	Total/NA
Total Alkalinity	70				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.014				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.25				meq/L	1		SM 1030E (meq)	Total/NA
Total Alkalinity	3500		10		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity	3500		10		mg/L	1		SM 2320B	Total/NA
Hardness, as CaCO3	1500		3.0		mg/L	5		SM 2340C	Total/NA
Total Dissolved Solids	5200		19		mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	67		4.0		mg/L	1		SM 2540D	Total/NA
Field pH	7.15				SU	1		Field Sampling	Total/NA
Field Conductivity	11507				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	26.6				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	0.42				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	-86.6				millivolts	1		Field Sampling	Total/NA

Client Sample ID: 9S

Lab Sample ID: 280-147602-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.1		1.0		ug/L	1		8260B	Total/NA
Ethylbenzene	1.6		1.0		ug/L	1		8260B	Total/NA
Xylenes (total)	4.4		2.0		ug/L	1		8260B	Total/NA
Silicon	26000		100		ug/L	1		6010B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: 9S (Continued)

Lab Sample ID: 280-147602-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	180000		500		ug/L	1		6010B	Dissolved
Iron	7600		30		ug/L	1		6010B	Dissolved
Magnesium	92000		200		ug/L	1		6010B	Dissolved
Manganese	3300		3.0		ug/L	1		6010B	Dissolved
Potassium	33000		500		ug/L	1		6010B	Dissolved
Sodium	430000		1000		ug/L	1		6010B	Dissolved
Arsenic	15		1.0		ug/L	1		6020	Total Recoverable
Barium	470		1.0		ug/L	1		6020	Total Recoverable
Chromium	4.4		2.0		ug/L	1		6020	Total Recoverable
Cobalt	5.6		0.20		ug/L	1		6020	Total Recoverable
Copper	1.7		1.0		ug/L	1		6020	Total Recoverable
Nickel	29		1.0		ug/L	1		6020	Total Recoverable
Selenium	1.3		1.0		ug/L	1		6020	Total Recoverable
Vanadium	7.1		3.0		ug/L	1		6020	Total Recoverable
Chloride	430		20		mg/L	20		300.0	Total/NA
Sulfate	78		5.0		mg/L	1		300.0	Total/NA
Ammonia as N	57		1.1		mg/L	50		350.1	Total/NA
Chemical Oxygen Demand (COD)	220		20		mg/L	2		410.4	Total/NA
pH adj. to 25 deg C	7.2	HF	0.1		SU	1		9040B	Total/NA
Specific Conductance	3800		2.0		umhos/cm	1		9050A	Total/NA
Total Organic Carbon - Average	74		1.7		mg/L	5		9060	Total/NA
Total Anions	42				meq/L	1		SM 1030E	Total/NA
Total Cations	41				meq/L	1		SM 1030E	Total/NA
Percent Difference	-1.4				%	1		SM 1030E	Total/NA
Calcium	180				mg/L	1		SM 1030E	Total/NA
Magnesium	92				mg/L	1		SM 1030E	Total/NA
Potassium	33				mg/L	1		SM 1030E	Total/NA
Sodium	430				mg/L	1		SM 1030E	Total/NA
Ammonia as N	57				mg/L	1		SM 1030E	Total/NA
Chloride	430				mg/L	1		SM 1030E	Total/NA
Sulfate	78				mg/L	1		SM 1030E	Total/NA
Carbonate Alkalinity	0.00				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	1400				mg/L	1		SM 1030E	Total/NA
Total Alkalinity	1400				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.00				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	-1.4				%	1		SM 1030E	Total/NA
Calculated TDS	2100				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.1				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	2200				mg/L	1		SM 1030E	Total/NA
Iron	7.6				mg/L	1		SM 1030E	Total/NA
Calcium	9.0				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	7.6				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.84				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	19				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	4.1				meq/L	1		SM 1030E (meq)	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 9S (Continued)

Lab Sample ID: 280-147602-9

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Chloride	12				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	1.6				meq/L	1		SM 1030E (meq)	Total/NA
Carbonate Alkalinity	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	28				meq/L	1		SM 1030E (meq)	Total/NA
Total Alkalinity	28				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.41				meq/L	1		SM 1030E (meq)	Total/NA
Total Alkalinity	1400		10		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity	1400		10		mg/L	1		SM 2320B	Total/NA
Hardness, as CaCO3	850		3.0		mg/L	5		SM 2340C	Total/NA
Total Dissolved Solids	2200		10		mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	26		4.0		mg/L	1		SM 2540D	Total/NA
Field pH	6.57				SU	1		Field Sampling	Total/NA
Field Conductivity	4005				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	23.9				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	1.06				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	-68.7				millivolts	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-147602-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-147602-1	TB3	Water	04/15/21 07:00	04/17/21 09:45
280-147602-2	1/5P	Water	04/15/21 10:30	04/17/21 09:45
280-147602-3	4/5S	Water	04/15/21 11:00	04/17/21 09:45
280-147602-4	6/7P	Water	04/15/21 12:30	04/17/21 09:45
280-147602-5	6/7S	Water	04/15/21 13:00	04/17/21 09:45
280-147602-6	8P	Water	04/15/21 11:30	04/17/21 09:45
280-147602-7	8S	Water	04/15/21 12:00	04/17/21 09:45
280-147602-8	9P	Water	04/15/21 14:15	04/17/21 09:45
280-147602-9	9S	Water	04/15/21 14:45	04/17/21 09:45

Method Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-147602-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL DEN
6010B	Metals (ICP)	SW846	TAL DEN
6020	Metals (ICP/MS)	SW846	TAL DEN
300.0	Anions, Ion Chromatography	MCAWW	TAL DEN
350.1	Nitrogen, Ammonia	MCAWW	TAL DEN
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	TAL DEN
410.4	COD	MCAWW	TAL DEN
9040B	pH	SW846	TAL DEN
9050A	Specific Conductance	SW846	TAL DEN
9060	Organic Carbon, Total (TOC)	SW846	TAL DEN
SM 1030E	Cation Anion Balance	SM	TAL DEN
SM 1030E (meq)	Cation Anion Balance	SM	TAL DEN
SM 2320B	Alkalinity	SM	TAL DEN
SM 2340C	Hardness, Total (mg/l as CaC03)	SM	TAL DEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL DEN
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL DEN
Field Sampling	Field Sampling	EPA	TAL DEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL DEN
5030B	Purge and Trap	SW846	TAL DEN

Protocol 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.

Laboratory References:

TAL DEN = Eurofins TestAmerica, Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-147602-1

Client Sample ID: TB3
Date Collected: 04/15/21 07:00
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147602-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/28/21 10:15	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/28/21 10:15	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/28/21 10:15	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/28/21 10:15	1
1,1-Dichloroethane	ND		1.0		ug/L			04/28/21 10:15	1
1,1-Dichloroethene	ND		1.0		ug/L			04/28/21 10:15	1
1,1-Dichloropropene	ND		1.0		ug/L			04/28/21 10:15	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/28/21 10:15	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/28/21 10:15	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/28/21 10:15	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/28/21 10:15	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			04/28/21 10:15	1
1,2-Dibromoethane	ND		1.0		ug/L			04/28/21 10:15	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/28/21 10:15	1
1,2-Dichloroethane	ND		1.0		ug/L			04/28/21 10:15	1
1,2-Dichloropropane	ND		1.0		ug/L			04/28/21 10:15	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/28/21 10:15	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/28/21 10:15	1
1,3-Dichloropropane	ND		1.0		ug/L			04/28/21 10:15	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/28/21 10:15	1
2,2-Dichloropropane	ND		5.0		ug/L			04/28/21 10:15	1
2-Butanone (MEK)	ND		6.0		ug/L			04/28/21 10:15	1
2-Chlorotoluene	ND		1.0		ug/L			04/28/21 10:15	1
2-Hexanone	ND		5.0		ug/L			04/28/21 10:15	1
4-Chlorotoluene	ND		1.0		ug/L			04/28/21 10:15	1
4-Isopropyltoluene	ND		1.0		ug/L			04/28/21 10:15	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/28/21 10:15	1
Acetone	ND		10		ug/L			04/28/21 10:15	1
Benzene	ND		1.0		ug/L			04/28/21 10:15	1
Bromobenzene	ND		1.0		ug/L			04/28/21 10:15	1
Bromochloromethane	ND		1.0		ug/L			04/28/21 10:15	1
Bromodichloromethane	ND		1.0		ug/L			04/28/21 10:15	1
Bromoform	ND		1.0		ug/L			04/28/21 10:15	1
Bromomethane	ND		2.0		ug/L			04/28/21 10:15	1
Carbon disulfide	ND		2.0		ug/L			04/28/21 10:15	1
Carbon tetrachloride	ND		1.0		ug/L			04/28/21 10:15	1
Chlorobenzene	ND		1.0		ug/L			04/28/21 10:15	1
Chloroethane	ND		2.0		ug/L			04/28/21 10:15	1
Chloroform	ND		1.0		ug/L			04/28/21 10:15	1
Chloromethane	ND		2.0		ug/L			04/28/21 10:15	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/28/21 10:15	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/28/21 10:15	1
Dibromochloromethane	ND		1.0		ug/L			04/28/21 10:15	1
Dibromomethane	ND		1.0		ug/L			04/28/21 10:15	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/28/21 10:15	1
Ethylbenzene	ND		1.0		ug/L			04/28/21 10:15	1
Hexachlorobutadiene	ND		1.0		ug/L			04/28/21 10:15	1
Isopropylbenzene	ND		1.0		ug/L			04/28/21 10:15	1
Methylene Chloride	ND		5.0		ug/L			04/28/21 10:15	1

Client Sample ID: TB3

Date Collected: 04/15/21 07:00
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147602-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0		ug/L			04/28/21 10:15	1
n-Butylbenzene	ND		1.0		ug/L			04/28/21 10:15	1
N-Propylbenzene	ND		1.0		ug/L			04/28/21 10:15	1
sec-Butylbenzene	ND		1.0		ug/L			04/28/21 10:15	1
Styrene	ND		1.0		ug/L			04/28/21 10:15	1
tert-Butylbenzene	ND		1.0		ug/L			04/28/21 10:15	1
Tetrachloroethene	ND		1.0		ug/L			04/28/21 10:15	1
Toluene	ND		1.0		ug/L			04/28/21 10:15	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/28/21 10:15	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/28/21 10:15	1
Trichloroethene	ND		1.0		ug/L			04/28/21 10:15	1
Trichlorofluoromethane	ND		2.0		ug/L			04/28/21 10:15	1
Vinyl chloride	ND		1.0		ug/L			04/28/21 10:15	1
Xylenes (total)	ND		2.0		ug/L			04/28/21 10:15	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/28/21 10:15*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 127*		*04/28/21 10:15*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*04/28/21 10:15*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 120*		*04/28/21 10:15*	*1*
Toluene-d8 (Surr)	*99*		*80 - 125*		*04/28/21 10:15*	*1*

Client Sample ID: 1/5P

Date Collected: 04/15/21 10:30
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147602-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.1		ug/L			04/28/21 14:26	5
1,1,1-Trichloroethane	ND		1.0		ug/L			04/28/21 14:26	5
1,1,2,2-Tetrachloroethane	ND		1.1		ug/L			04/28/21 14:26	5
1,1,2-Trichloroethane	ND		1.4		ug/L			04/28/21 14:26	5
1,1-Dichloroethane	ND		1.1		ug/L			04/28/21 14:26	5
1,1-Dichloroethene	ND		1.2		ug/L			04/28/21 14:26	5
1,1-Dichloropropene	ND		1.0		ug/L			04/28/21 14:26	5
1,2,3-Trichlorobenzene	ND		1.1		ug/L			04/28/21 14:26	5
1,2,3-Trichloropropane	ND		1.7		ug/L			04/28/21 14:26	5
1,2,4-Trichlorobenzene	ND		1.1		ug/L			04/28/21 14:26	5
1,2,4-Trimethylbenzene	**3.1**		1.0		ug/L			04/28/21 14:26	5
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			04/28/21 14:26	5
1,2-Dibromoethane	ND		1.0		ug/L			04/28/21 14:26	5
1,2-Dichlorobenzene	ND		1.0		ug/L			04/28/21 14:26	5
1,2-Dichloroethane	ND		1.0		ug/L			04/28/21 14:26	5
1,2-Dichloropropane	ND		1.0		ug/L			04/28/21 14:26	5
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/28/21 14:26	5
1,3-Dichlorobenzene	ND		1.0		ug/L			04/28/21 14:26	5
1,3-Dichloropropane	ND		1.0		ug/L			04/28/21 14:26	5
1,4-Dichlorobenzene	**2.8**		1.0		ug/L			04/28/21 14:26	5

Client Sample ID: 1/5P
Date Collected: 04/15/21 10:30
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147602-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,2-Dichloropropane	ND		5.0		ug/L			04/28/21 14:26	5
2-Butanone (MEK)	ND		10		ug/L			04/28/21 14:26	5
2-Chlorotoluene	ND		1.0		ug/L			04/28/21 14:26	5
2-Hexanone	ND		8.5		ug/L			04/28/21 14:26	5
4-Chlorotoluene	ND		1.1		ug/L			04/28/21 14:26	5
4-Isopropyltoluene	**1.0**		1.0		ug/L			04/28/21 14:26	5
4-Methyl-2-pentanone	**5.9**		5.0		ug/L			04/28/21 14:26	5
Acetone	**24**		10		ug/L			04/28/21 14:26	5
Benzene	**2.7**		1.0		ug/L			04/28/21 14:26	5
Bromobenzene	ND		1.0		ug/L			04/28/21 14:26	5
Bromochloromethane	ND		1.0		ug/L			04/28/21 14:26	5
Bromodichloromethane	ND		1.0		ug/L			04/28/21 14:26	5
Bromoform	ND		2.3		ug/L			04/28/21 14:26	5
Bromomethane	ND		2.0		ug/L			04/28/21 14:26	5
Carbon disulfide	ND		2.0		ug/L			04/28/21 14:26	5
Carbon tetrachloride	ND		1.0		ug/L			04/28/21 14:26	5
Chlorobenzene	ND		1.0		ug/L			04/28/21 14:26	5
Chloroethane	ND		2.1		ug/L			04/28/21 14:26	5
Chloroform	ND		1.0		ug/L			04/28/21 14:26	5
Chloromethane	ND		2.0		ug/L			04/28/21 14:26	5
cis-1,2-Dichloroethene	**1.6**		1.0		ug/L			04/28/21 14:26	5
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/28/21 14:26	5
Dibromochloromethane	ND		1.0		ug/L			04/28/21 14:26	5
Dibromomethane	ND		1.0		ug/L			04/28/21 14:26	5
Dichlorodifluoromethane	ND		2.0		ug/L			04/28/21 14:26	5
Ethylbenzene	**9.0**		1.0		ug/L			04/28/21 14:26	5
Hexachlorobutadiene	ND		1.8		ug/L			04/28/21 14:26	5
Isopropylbenzene	ND		1.0		ug/L			04/28/21 14:26	5
Methylene Chloride	ND		5.0		ug/L			04/28/21 14:26	5
Naphthalene	**4.8**		1.1		ug/L			04/28/21 14:26	5
n-Butylbenzene	ND		1.0		ug/L			04/28/21 14:26	5
N-Propylbenzene	ND		1.0		ug/L			04/28/21 14:26	5
sec-Butylbenzene	ND		1.0		ug/L			04/28/21 14:26	5
Styrene	ND		1.8		ug/L			04/28/21 14:26	5
tert-Butylbenzene	ND		1.0		ug/L			04/28/21 14:26	5
Tetrachloroethene	ND		1.0		ug/L			04/28/21 14:26	5
Toluene	**5.5**		1.0		ug/L			04/28/21 14:26	5
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/28/21 14:26	5
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/28/21 14:26	5
Trichloroethene	ND		1.0		ug/L			04/28/21 14:26	5
Trichlorofluoromethane	ND		2.0		ug/L			04/28/21 14:26	5
Vinyl chloride	ND		1.0		ug/L			04/28/21 14:26	5
Xylenes (total)	**17**		2.0		ug/L			04/28/21 14:26	5

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrahydrofuran	*150*		*ug/L*		*4.32*	*109-99-9*		*04/28/21 14:26*	*5*
m-Xylene & p-Xylene	*12*		*ug/L*		*7.72*	*179601-23-1*		*04/28/21 14:26*	*5*
o-Xylene	*4.8*		*ug/L*		*8.08*	*95-47-6*		*04/28/21 14:26*	*5*
Tentatively Identified Compound	*None*		*ug/L*					*04/28/21 14:26*	*5*

Client Sample ID: 1/5P

Date Collected: 04/15/21 10:30
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147602-2

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 127*		*04/28/21 14:26*	*5*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*04/28/21 14:26*	*5*
Dibromofluoromethane (Surr)	*100*		*77 - 120*		*04/28/21 14:26*	*5*
Toluene-d8 (Surr)	*100*		*80 - 125*		*04/28/21 14:26*	*5*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	**45000**		100		ug/L		04/27/21 16:15	04/28/21 09:27	1
Silver	ND		3.0		ug/L		04/27/21 16:15	04/28/21 09:27	1
Zinc	ND		26		ug/L		04/27/21 16:15	04/28/21 09:27	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**100000**		500		ug/L		04/28/21 08:38	04/28/21 18:05	1
Iron	**5700**		30		ug/L		04/28/21 08:38	04/28/21 18:05	1
Magnesium	**150000**		200		ug/L		04/28/21 08:38	04/28/21 18:05	1
Manganese	**1800**		3.0		ug/L		04/28/21 08:38	04/28/21 18:05	1
Potassium	**550000**		2400		ug/L		04/28/21 08:38	04/30/21 01:02	10
Sodium	**2200000**		3700		ug/L		04/28/21 08:38	04/30/21 01:02	10

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**4.4**		0.60		ug/L		04/23/21 09:05	04/28/21 21:24	1
Arsenic	**230**		1.7		ug/L		04/23/21 09:05	05/04/21 13:46	5
Barium	**690**		1.5		ug/L		04/23/21 09:05	05/04/21 13:46	5
Beryllium	ND	F1 F2	0.40		ug/L		04/23/21 09:05	04/28/21 21:24	1
Cadmium	ND		0.30		ug/L		04/23/21 09:05	04/28/21 21:24	1
Chromium	**100**		2.0		ug/L		04/23/21 09:05	04/28/21 21:24	1
Cobalt	**37**		0.20		ug/L		04/23/21 09:05	04/28/21 21:24	1
Copper	ND		2.8		ug/L		04/23/21 09:05	05/04/21 13:46	5
Lead	**1.3**		0.90		ug/L		04/23/21 09:05	05/04/21 13:46	5
Nickel	**91**		1.0		ug/L		04/23/21 09:05	04/28/21 21:24	1
Selenium	**2.0**		1.9		ug/L		04/23/21 09:05	05/04/21 13:46	5
Thallium	ND	F1	0.45		ug/L		04/23/21 09:05	05/04/21 13:46	5
Vanadium	**120**	**F1**	6.2		ug/L		04/23/21 09:05	05/04/21 13:46	5

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	**190**				meq/L			05/13/21 08:11	1
Total Cations	**210**				meq/L			05/13/21 08:11	1
Percent Difference	**4.3**				%			05/13/21 08:11	1
Calcium	**100**				mg/L			05/13/21 08:11	1
Magnesium	**150**				mg/L			05/13/21 08:11	1
Potassium	**550**				mg/L			05/13/21 08:11	1
Sodium	**2200**				mg/L			05/13/21 08:11	1
Ammonia as N	**1100**				mg/L			05/13/21 08:11	1
Chloride	**2800**				mg/L			05/13/21 08:11	1
Sulfate	**0.00**				mg/L			05/13/21 08:11	1
Carbonate Alkalinity	**0.00**				mg/L			05/13/21 08:11	1
Bicarbonate Alkalinity	**5500**				mg/L			05/13/21 08:11	1
Total Alkalinity	**5500**				mg/L			05/13/21 08:11	1

Client Sample ID: 1/5P

Date Collected: 04/15/21 10:30
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147602-2

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate/Nitrite	0.00				mg/L			05/13/21 08:11	1
Anion/Cation Balance	4.3				%			05/13/21 08:11	1
Calculated TDS	10000				mg/L			05/13/21 08:11	1
TDS Ratio	0.86				NONE			05/13/21 08:11	1
Total Dissolved Solids	8800				mg/L			05/13/21 08:11	1
Iron	5.7				mg/L			05/13/21 08:11	1
Calcium	5.0				meq/L			05/13/21 08:11	1
Magnesium	12				meq/L			05/13/21 08:11	1
Potassium	14				meq/L			05/13/21 08:11	1
Sodium	96				meq/L			05/13/21 08:11	1
Ammonia as N	79				meq/L			05/13/21 08:11	1
Chloride	79				meq/L			05/13/21 08:11	1
Sulfate	0.00				meq/L			05/13/21 08:11	1
Carbonate Alkalinity	0.00				meq/L			05/13/21 08:11	1
Bicarbonate Alkalinity	110				meq/L			05/13/21 08:11	1
Total Alkalinity	110				meq/L			05/13/21 08:11	1
Nitrate/Nitrite	0.00				meq/L			05/13/21 08:11	1
Iron	0.31				meq/L			05/13/21 08:11	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2800		100		mg/L			05/11/21 18:50	100
Sulfate	ND		5.0		mg/L			05/11/21 18:36	1
Ammonia as N	1100		11		mg/L			04/30/21 14:38	500
Nitrate/Nitrite	ND		0.050		mg/L			05/04/21 18:26	1
Chemical Oxygen Demand (COD)	2600		430		mg/L			05/03/21 10:49	50
Total Organic Carbon - Average	890		6.9		mg/L			05/04/21 23:29	20
Total Alkalinity	5500		10		mg/L			04/20/21 18:22	1
Bicarbonate Alkalinity	5500		10		mg/L			04/20/21 18:22	1
Carbonate Alkalinity	ND		10		mg/L			04/20/21 18:22	1
Hardness, as CaCO3	890		3.0		mg/L			04/22/21 14:03	5
Total Dissolved Solids	8800	E	19		mg/L			04/22/21 16:27	1
Total Suspended Solids	9.6		4.0		mg/L			04/20/21 16:42	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH adj. to 25 deg C	7.7	HF	0.1		SU			04/19/21 20:50	1
Specific Conductance	19000		2.0		umhos/cm			04/21/21 12:16	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.60				SU			04/15/21 11:30	1
Field Conductivity	21172				umhos/cm			04/15/21 11:30	1
Field Temperature	31.9				Degrees C			04/15/21 11:30	1
Field Dissolved Oxygen	1.31				mg/L			04/15/21 11:30	1
Field EH/ORP	29.7				millivolts			04/15/21 11:30	1

Client Sample ID: 4/5S

Date Collected: 04/15/21 11:00
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147602-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/28/21 14:49	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-147602-1

Client Sample ID: 4/5S
Date Collected: 04/15/21 11:00
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147602-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			04/28/21 14:49	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/28/21 14:49	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/28/21 14:49	1
1,1-Dichloroethane	ND		1.0		ug/L			04/28/21 14:49	1
1,1-Dichloroethene	ND		1.0		ug/L			04/28/21 14:49	1
1,1-Dichloropropene	ND		1.0		ug/L			04/28/21 14:49	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/28/21 14:49	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/28/21 14:49	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/28/21 14:49	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/28/21 14:49	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			04/28/21 14:49	1
1,2-Dibromoethane	ND		1.0		ug/L			04/28/21 14:49	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/28/21 14:49	1
1,2-Dichloroethane	ND		1.0		ug/L			04/28/21 14:49	1
1,2-Dichloropropane	ND		1.0		ug/L			04/28/21 14:49	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/28/21 14:49	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/28/21 14:49	1
1,3-Dichloropropane	ND		1.0		ug/L			04/28/21 14:49	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/28/21 14:49	1
2,2-Dichloropropane	ND		5.0		ug/L			04/28/21 14:49	1
2-Butanone (MEK)	ND		6.0		ug/L			04/28/21 14:49	1
2-Chlorotoluene	ND		1.0		ug/L			04/28/21 14:49	1
2-Hexanone	ND		5.0		ug/L			04/28/21 14:49	1
4-Chlorotoluene	ND		1.0		ug/L			04/28/21 14:49	1
4-Isopropyltoluene	ND		1.0		ug/L			04/28/21 14:49	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/28/21 14:49	1
Acetone	ND		10		ug/L			04/28/21 14:49	1
Benzene	ND		1.0		ug/L			04/28/21 14:49	1
Bromobenzene	ND		1.0		ug/L			04/28/21 14:49	1
Bromochloromethane	ND		1.0		ug/L			04/28/21 14:49	1
Bromodichloromethane	ND		1.0		ug/L			04/28/21 14:49	1
Bromoform	ND		1.0		ug/L			04/28/21 14:49	1
Bromomethane	ND		2.0		ug/L			04/28/21 14:49	1
Carbon disulfide	ND		2.0		ug/L			04/28/21 14:49	1
Carbon tetrachloride	ND		1.0		ug/L			04/28/21 14:49	1
Chlorobenzene	ND		1.0		ug/L			04/28/21 14:49	1
Chloroethane	ND		2.0		ug/L			04/28/21 14:49	1
Chloroform	ND		1.0		ug/L			04/28/21 14:49	1
Chloromethane	ND		2.0		ug/L			04/28/21 14:49	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/28/21 14:49	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/28/21 14:49	1
Dibromochloromethane	ND		1.0		ug/L			04/28/21 14:49	1
Dibromomethane	ND		1.0		ug/L			04/28/21 14:49	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/28/21 14:49	1
Ethylbenzene	ND		1.0		ug/L			04/28/21 14:49	1
Hexachlorobutadiene	ND		1.0		ug/L			04/28/21 14:49	1
Isopropylbenzene	ND		1.0		ug/L			04/28/21 14:49	1
Methylene Chloride	ND		5.0		ug/L			04/28/21 14:49	1
Naphthalene	ND		1.0		ug/L			04/28/21 14:49	1

Client Sample ID: 4/5S

Date Collected: 04/15/21 11:00
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147602-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		1.0		ug/L			04/28/21 14:49	1
N-Propylbenzene	ND		1.0		ug/L			04/28/21 14:49	1
sec-Butylbenzene	ND		1.0		ug/L			04/28/21 14:49	1
Styrene	ND		1.0		ug/L			04/28/21 14:49	1
tert-Butylbenzene	ND		1.0		ug/L			04/28/21 14:49	1
Tetrachloroethene	ND		1.0		ug/L			04/28/21 14:49	1
Toluene	ND		1.0		ug/L			04/28/21 14:49	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/28/21 14:49	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/28/21 14:49	1
Trichloroethene	ND		1.0		ug/L			04/28/21 14:49	1
Trichlorofluoromethane	ND		2.0		ug/L			04/28/21 14:49	1
Vinyl chloride	ND		1.0		ug/L			04/28/21 14:49	1
Xylenes (total)	ND		2.0		ug/L			04/28/21 14:49	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrahydrofuran	*22*		*ug/L*		*4.32*	*109-99-9*		*04/28/21 14:49*	*1*
Tentatively Identified Compound	*None*		*ug/L*					*04/28/21 14:49*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 127*		*04/28/21 14:49*	*1*
4-Bromofluorobenzene (Surr)	*95*		*78 - 120*		*04/28/21 14:49*	*1*
Dibromofluoromethane (Surr)	*101*		*77 - 120*		*04/28/21 14:49*	*1*
Toluene-d8 (Surr)	*98*		*80 - 125*		*04/28/21 14:49*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	**30000**		100		ug/L		04/27/21 16:15	04/28/21 09:30	1
Silver	ND		3.0		ug/L		04/27/21 16:15	04/28/21 09:30	1
Zinc	ND		26		ug/L		04/27/21 16:15	04/28/21 09:30	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**120000**		500		ug/L		04/28/21 08:38	04/28/21 18:09	1
Iron	**4300**		30		ug/L		04/28/21 08:38	04/28/21 18:09	1
Magnesium	**55000**		200		ug/L		04/28/21 08:38	04/28/21 18:09	1
Manganese	**6900**		3.0		ug/L		04/28/21 08:38	04/28/21 18:09	1
Potassium	**11000**		500		ug/L		04/28/21 08:38	04/28/21 18:09	1
Sodium	**100000**		1000		ug/L		04/28/21 08:38	04/28/21 18:09	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**2.5**		0.60		ug/L		04/23/21 09:05	04/27/21 22:28	1
Arsenic	**24**		1.0		ug/L		04/23/21 09:05	04/27/21 22:28	1
Barium	**260**		1.0		ug/L		04/23/21 09:05	04/27/21 22:28	1
Beryllium	ND		0.40		ug/L		04/23/21 09:05	04/27/21 22:28	1
Cadmium	ND		0.30		ug/L		04/23/21 09:05	04/27/21 22:28	1
Chromium	**4.4**		2.0		ug/L		04/23/21 09:05	04/27/21 22:28	1
Cobalt	**1.6**		0.20		ug/L		04/23/21 09:05	04/27/21 22:28	1
Copper	ND		1.0		ug/L		04/23/21 09:05	04/27/21 22:28	1
Lead	ND		0.50		ug/L		04/23/21 09:05	04/27/21 22:28	1
Nickel	**5.0**		1.0		ug/L		04/23/21 09:05	04/27/21 22:28	1

Client Sample ID: 4/5S

Date Collected: 04/15/21 11:00
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147602-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		1.0		ug/L		04/23/21 09:05	05/04/21 11:54	1
Thallium	ND		0.20		ug/L		04/23/21 09:05	04/27/21 22:28	1
Vanadium	**3.5**		3.0		ug/L		04/23/21 09:05	04/29/21 03:02	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	**19**				meq/L			05/13/21 08:11	1
Total Cations	**18**				meq/L			05/13/21 08:11	1
Percent Difference	**-1.5**				%			05/13/21 08:11	1
Calcium	**120**				mg/L			05/13/21 08:11	1
Magnesium	**55**				mg/L			05/13/21 08:11	1
Potassium	**11**				mg/L			05/13/21 08:11	1
Sodium	**100**				mg/L			05/13/21 08:11	1
Ammonia as N	**41**				mg/L			05/13/21 08:11	1
Chloride	**81**				mg/L			05/13/21 08:11	1
Sulfate	**0.00**				mg/L			05/13/21 08:11	1
Carbonate Alkalinity	**0.00**				mg/L			05/13/21 08:11	1
Bicarbonate Alkalinity	**830**				mg/L			05/13/21 08:11	1
Total Alkalinity	**830**				mg/L			05/13/21 08:11	1
Nitrate/Nitrite	**0.00**				mg/L			05/13/21 08:11	1
Anion/Cation Balance	**-1.5**				%			05/13/21 08:11	1
Calculated TDS	**910**				mg/L			05/13/21 08:11	1
TDS Ratio	**0.92**				NONE			05/13/21 08:11	1
Total Dissolved Solids	**840**				mg/L			05/13/21 08:11	1
Iron	**4.3**				mg/L			05/13/21 08:11	1
Calcium	**6.0**				meq/L			05/13/21 08:11	1
Magnesium	**4.5**				meq/L			05/13/21 08:11	1
Potassium	**0.28**				meq/L			05/13/21 08:11	1
Sodium	**4.3**				meq/L			05/13/21 08:11	1
Ammonia as N	**2.9**				meq/L			05/13/21 08:11	1
Chloride	**2.3**				meq/L			05/13/21 08:11	1
Sulfate	**0.00**				meq/L			05/13/21 08:11	1
Carbonate Alkalinity	**0.00**				meq/L			05/13/21 08:11	1
Bicarbonate Alkalinity	**17**				meq/L			05/13/21 08:11	1
Total Alkalinity	**17**				meq/L			05/13/21 08:11	1
Nitrate/Nitrite	**0.00**				meq/L			05/13/21 08:11	1
Iron	**0.23**				meq/L			05/13/21 08:11	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**81**		3.0		mg/L			05/11/21 19:05	1
Sulfate	ND		5.0		mg/L			05/11/21 19:05	1
Ammonia as N	**41**		0.22		mg/L			04/30/21 17:02	10
Nitrate/Nitrite	ND		0.050		mg/L			05/04/21 18:32	1
Chemical Oxygen Demand (COD)	**66**	**F1**	20		mg/L			04/29/21 08:55	1
Total Organic Carbon - Average	**20**		1.0		mg/L			05/05/21 00:24	1
Total Alkalinity	**830**		10		mg/L			04/20/21 18:35	1
Bicarbonate Alkalinity	**830**		10		mg/L			04/20/21 18:35	1
Carbonate Alkalinity	ND		10		mg/L			04/20/21 18:35	1
Hardness, as CaCO3	**570**		3.0		mg/L			04/22/21 14:03	1
Total Dissolved Solids	**840**		10		mg/L			04/22/21 16:27	1

Client Sample ID: 4/5S

Date Collected: 04/15/21 11:00
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147602-3

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	**23**		4.0		mg/L			04/20/21 16:42	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH adj. to 25 deg C	**6.8**	**HF**	0.1		SU			04/19/21 20:53	1
Specific Conductance	**1700**		2.0		umhos/cm			04/21/21 12:16	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**6.51**				SU			04/15/21 12:00	1
Field Conductivity	**1955**				umhos/cm			04/15/21 12:00	1
Field Temperature	**32.0**				Degrees C			04/15/21 12:00	1
Field Dissolved Oxygen	**1.83**				mg/L			04/15/21 12:00	1
Field EH/ORP	**-65.1**				millivolts			04/15/21 12:00	1

Client Sample ID: 6/7P

Date Collected: 04/15/21 12:30
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147602-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		4.2		ug/L			04/28/21 15:12	20
1,1,1-Trichloroethane	ND		3.2		ug/L			04/28/21 15:12	20
1,1,2,2-Tetrachloroethane	ND		4.2		ug/L			04/28/21 15:12	20
1,1,2-Trichloroethane	ND		5.4		ug/L			04/28/21 15:12	20
1,1-Dichloroethane	ND		4.4		ug/L			04/28/21 15:12	20
1,1-Dichloroethene	ND		4.6		ug/L			04/28/21 15:12	20
1,1-Dichloropropene	ND		3.8		ug/L			04/28/21 15:12	20
1,2,3-Trichlorobenzene	ND		4.2		ug/L			04/28/21 15:12	20
1,2,3-Trichloropropane	ND		6.6		ug/L			04/28/21 15:12	20
1,2,4-Trichlorobenzene	ND		4.2		ug/L			04/28/21 15:12	20
1,2,4-Trimethylbenzene	**7.5**		3.0		ug/L			04/28/21 15:12	20
1,2-Dibromo-3-Chloropropane	ND		9.4		ug/L			04/28/21 15:12	20
1,2-Dibromoethane	ND		3.6		ug/L			04/28/21 15:12	20
1,2-Dichlorobenzene	ND		3.0		ug/L			04/28/21 15:12	20
1,2-Dichloroethane	ND		2.6		ug/L			04/28/21 15:12	20
1,2-Dichloropropane	ND		3.6		ug/L			04/28/21 15:12	20
1,3,5-Trimethylbenzene	ND		3.2		ug/L			04/28/21 15:12	20
1,3-Dichlorobenzene	ND		2.6		ug/L			04/28/21 15:12	20
1,3-Dichloropropane	ND		1.8		ug/L			04/28/21 15:12	20
1,4-Dichlorobenzene	**3.9**		3.2		ug/L			04/28/21 15:12	20
2,2-Dichloropropane	ND		7.6		ug/L			04/28/21 15:12	20
2-Butanone (MEK)	**2600**		40		ug/L			04/28/21 15:12	20
2-Chlorotoluene	ND		3.4		ug/L			04/28/21 15:12	20
2-Hexanone	ND		34		ug/L			04/28/21 15:12	20
4-Chlorotoluene	ND		4.2		ug/L			04/28/21 15:12	20
4-Isopropyltoluene	**7.6**		4.0		ug/L			04/28/21 15:12	20
4-Methyl-2-pentanone	**150**		20		ug/L			04/28/21 15:12	20
Acetone	**2900**		38		ug/L			04/28/21 15:12	20
Benzene	**13**		3.2		ug/L			04/28/21 15:12	20
Bromobenzene	ND		3.4		ug/L			04/28/21 15:12	20
Bromochloromethane	ND		2.0		ug/L			04/28/21 15:12	20

Client Sample ID: 6/7P

Date Collected: 04/15/21 12:30
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147602-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		3.4		ug/L			04/28/21 15:12	20
Bromoform	ND		9.2		ug/L			04/28/21 15:12	20
Bromomethane	ND		4.2		ug/L			04/28/21 15:12	20
Carbon disulfide	ND		3.3		ug/L			04/28/21 15:12	20
Carbon tetrachloride	ND		3.8		ug/L			04/28/21 15:12	20
Chlorobenzene	ND		3.4		ug/L			04/28/21 15:12	20
Chloroethane	ND		8.2		ug/L			04/28/21 15:12	20
Chloroform	ND		3.2		ug/L			04/28/21 15:12	20
Chloromethane	ND		6.0		ug/L			04/28/21 15:12	20
cis-1,2-Dichloroethene	ND		3.0		ug/L			04/28/21 15:12	20
cis-1,3-Dichloropropene	ND		3.2		ug/L			04/28/21 15:12	20
Dibromochloromethane	ND		3.4		ug/L			04/28/21 15:12	20
Dibromomethane	ND		3.4		ug/L			04/28/21 15:12	20
Dichlorodifluoromethane	ND		6.2		ug/L			04/28/21 15:12	20
Ethylbenzene	**16**		3.2		ug/L			04/28/21 15:12	20
Hexachlorobutadiene	ND		7.2		ug/L			04/28/21 15:12	20
Isopropylbenzene	ND		3.8		ug/L			04/28/21 15:12	20
Methylene Chloride	ND		19		ug/L			04/28/21 15:12	20
Naphthalene	**34**		4.4		ug/L			04/28/21 15:12	20
n-Butylbenzene	ND		2.9		ug/L			04/28/21 15:12	20
N-Propylbenzene	ND		3.2		ug/L			04/28/21 15:12	20
sec-Butylbenzene	ND		3.4		ug/L			04/28/21 15:12	20
Styrene	ND		7.1		ug/L			04/28/21 15:12	20
tert-Butylbenzene	ND		3.2		ug/L			04/28/21 15:12	20
Tetrachloroethene	ND		4.0		ug/L			04/28/21 15:12	20
Toluene	**24**		3.4		ug/L			04/28/21 15:12	20
trans-1,2-Dichloroethene	ND		3.0		ug/L			04/28/21 15:12	20
trans-1,3-Dichloropropene	ND		3.8		ug/L			04/28/21 15:12	20
Trichloroethene	ND		3.2		ug/L			04/28/21 15:12	20
Trichlorofluoromethane	ND		5.8		ug/L			04/28/21 15:12	20
Vinyl chloride	ND		2.0		ug/L			04/28/21 15:12	20
Xylenes (total)	**34**		3.8		ug/L			04/28/21 15:12	20

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrahydrofuran	*800*		*ug/L*		*4.32*	*109-99-9*		*04/28/21 15:12*	*20*
m-Xylene & p-Xylene	*24*		*ug/L*		*7.72*	*179601-23-1*		*04/28/21 15:12*	*20*
o-Xylene	*10*		*ug/L*		*8.08*	*95-47-6*		*04/28/21 15:12*	*20*
Tentatively Identified Compound	*None*		*ug/L*					*04/28/21 15:12*	*20*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 127*		*04/28/21 15:12*	*20*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*04/28/21 15:12*	*20*
Dibromofluoromethane (Surr)	*101*		*77 - 120*		*04/28/21 15:12*	*20*
Toluene-d8 (Surr)	*99*		*80 - 125*		*04/28/21 15:12*	*20*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	**25000**		100		ug/L		04/27/21 16:15	04/28/21 09:34	1
Silver	ND		3.0		ug/L		04/27/21 16:15	04/28/21 09:34	1
Zinc	ND		26		ug/L		04/27/21 16:15	04/28/21 09:34	1

Client Sample ID: 6/7P

Date Collected: 04/15/21 12:30
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147602-4

Matrix: Water

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	130000		500		ug/L		04/28/21 08:38	04/28/21 18:13	1
Iron	8700		30		ug/L		04/28/21 08:38	04/28/21 18:13	1
Magnesium	150000		200		ug/L		04/28/21 08:38	04/28/21 18:13	1
Manganese	1000		3.0		ug/L		04/28/21 08:38	04/28/21 18:13	1
Potassium	300000		500		ug/L		04/28/21 08:38	04/28/21 18:13	1
Sodium	1900000		1000		ug/L		04/28/21 08:38	04/28/21 18:13	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	45		0.60		ug/L		04/23/21 09:05	04/27/21 22:32	1
Arsenic	190		1.0		ug/L		04/23/21 09:05	04/27/21 22:32	1
Barium	820		1.0		ug/L		04/23/21 09:05	04/27/21 22:32	1
Beryllium	ND		0.40		ug/L		04/23/21 09:05	04/27/21 22:32	1
Cadmium	ND		0.30		ug/L		04/23/21 09:05	04/27/21 22:32	1
Chromium	43		2.0		ug/L		04/23/21 09:05	04/27/21 22:32	1
Cobalt	29		0.20		ug/L		04/23/21 09:05	04/27/21 22:32	1
Copper	ND		1.0		ug/L		04/23/21 09:05	04/27/21 22:32	1
Lead	ND		0.50		ug/L		04/23/21 09:05	04/27/21 22:32	1
Nickel	93		1.0		ug/L		04/23/21 09:05	04/27/21 22:32	1
Selenium	ND		1.0		ug/L		04/23/21 09:05	05/04/21 11:58	1
Thallium	ND		0.20		ug/L		04/23/21 09:05	04/27/21 22:32	1
Vanadium	61		3.0		ug/L		04/23/21 09:05	04/29/21 03:06	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	130				meq/L			05/13/21 08:11	1
Total Cations	190				meq/L			05/13/21 08:11	1
Percent Difference	17				%			05/13/21 08:11	1
Calcium	130				mg/L			05/13/21 08:11	1
Magnesium	150				mg/L			05/13/21 08:11	1
Potassium	300				mg/L			05/13/21 08:11	1
Sodium	1900				mg/L			05/13/21 08:11	1
Ammonia as N	1100				mg/L			05/13/21 08:11	1
Chloride	2100				mg/L			05/13/21 08:11	1
Sulfate	0.00				mg/L			05/13/21 08:11	1
Carbonate Alkalinity	0.00				mg/L			05/13/21 08:11	1
Bicarbonate Alkalinity	3700				mg/L			05/13/21 08:11	1
Total Alkalinity	3700				mg/L			05/13/21 08:11	1
Nitrate/Nitrite	0.38				mg/L			05/13/21 08:11	1
Anion/Cation Balance	17				%			05/13/21 08:11	1
Calculated TDS	7900				mg/L			05/13/21 08:11	1
TDS Ratio	0.81				NONE			05/13/21 08:11	1
Total Dissolved Solids	6400				mg/L			05/13/21 08:11	1
Iron	8.7				mg/L			05/13/21 08:11	1
Calcium	6.5				meq/L			05/13/21 08:11	1
Magnesium	12				meq/L			05/13/21 08:11	1
Potassium	7.7				meq/L			05/13/21 08:11	1
Sodium	83				meq/L			05/13/21 08:11	1
Ammonia as N	79				meq/L			05/13/21 08:11	1
Chloride	59				meq/L			05/13/21 08:11	1

Client Sample ID: 6/7P

Date Collected: 04/15/21 12:30
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147602-4

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	0.00				meq/L			05/13/21 08:11	1
Carbonate Alkalinity	0.00				meq/L			05/13/21 08:11	1
Bicarbonate Alkalinity	74				meq/L			05/13/21 08:11	1
Total Alkalinity	74				meq/L			05/13/21 08:11	1
Nitrate/Nitrite	0.027				meq/L			05/13/21 08:11	1
Iron	0.47				meq/L			05/13/21 08:11	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2100		100		mg/L			05/11/21 19:50	100
Sulfate	ND		5.0		mg/L			05/11/21 19:35	1
Ammonia as N	1100		11		mg/L			05/03/21 18:46	500
Nitrate/Nitrite	0.38		0.050		mg/L			05/05/21 20:10	1
Chemical Oxygen Demand (COD)	1400		170		mg/L			04/29/21 08:54	20
Total Organic Carbon - Average	420		3.5		mg/L			05/05/21 00:40	10
Total Alkalinity	3700		10		mg/L			04/20/21 18:31	1
Bicarbonate Alkalinity	3700		10		mg/L			04/20/21 18:31	1
Carbonate Alkalinity	ND		10		mg/L			04/20/21 18:31	1
Hardness, as CaCO3	970		3.0		mg/L			04/22/21 14:03	5
Total Dissolved Solids	6400		19		mg/L			04/22/21 16:27	1
Total Suspended Solids	22		4.0		mg/L			04/20/21 16:42	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH adj. to 25 deg C	7.5	HF	0.1		SU			04/19/21 20:57	1
Specific Conductance	14000		2.0		umhos/cm			04/21/21 12:16	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.12				SU			04/15/21 13:30	1
Field Conductivity	14983				umhos/cm			04/15/21 13:30	1
Field Temperature	31.6				Degrees C			04/15/21 13:30	1
Field Dissolved Oxygen	0.52				mg/L			04/15/21 13:30	1
Field EH/ORP	-44.5				millivolts			04/15/21 13:30	1

Client Sample ID: 6/7S

Date Collected: 04/15/21 13:00
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147602-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/28/21 15:35	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/28/21 15:35	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/28/21 15:35	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/28/21 15:35	1
1,1-Dichloroethane	ND		1.0		ug/L			04/28/21 15:35	1
1,1-Dichloroethene	ND		1.0		ug/L			04/28/21 15:35	1
1,1-Dichloropropene	ND		1.0		ug/L			04/28/21 15:35	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/28/21 15:35	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/28/21 15:35	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/28/21 15:35	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/28/21 15:35	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			04/28/21 15:35	1
1,2-Dibromoethane	ND		1.0		ug/L			04/28/21 15:35	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-147602-1

Client Sample ID: 6/7S
Date Collected: 04/15/21 13:00
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147602-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.0		ug/L			04/28/21 15:35	1
1,2-Dichloroethane	ND		1.0		ug/L			04/28/21 15:35	1
1,2-Dichloropropane	ND		1.0		ug/L			04/28/21 15:35	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/28/21 15:35	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/28/21 15:35	1
1,3-Dichloropropane	ND		1.0		ug/L			04/28/21 15:35	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/28/21 15:35	1
2,2-Dichloropropane	ND		5.0		ug/L			04/28/21 15:35	1
2-Butanone (MEK)	ND		6.0		ug/L			04/28/21 15:35	1
2-Chlorotoluene	ND		1.0		ug/L			04/28/21 15:35	1
2-Hexanone	ND		5.0		ug/L			04/28/21 15:35	1
4-Chlorotoluene	ND		1.0		ug/L			04/28/21 15:35	1
4-Isopropyltoluene	ND		1.0		ug/L			04/28/21 15:35	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/28/21 15:35	1
Acetone	ND		10		ug/L			04/28/21 15:35	1
Benzene	ND		1.0		ug/L			04/28/21 15:35	1
Bromobenzene	ND		1.0		ug/L			04/28/21 15:35	1
Bromochloromethane	ND		1.0		ug/L			04/28/21 15:35	1
Bromodichloromethane	ND		1.0		ug/L			04/28/21 15:35	1
Bromoform	ND		1.0		ug/L			04/28/21 15:35	1
Bromomethane	ND		2.0		ug/L			04/28/21 15:35	1
Carbon disulfide	ND		2.0		ug/L			04/28/21 15:35	1
Carbon tetrachloride	ND		1.0		ug/L			04/28/21 15:35	1
Chlorobenzene	ND		1.0		ug/L			04/28/21 15:35	1
Chloroethane	ND		2.0		ug/L			04/28/21 15:35	1
Chloroform	ND		1.0		ug/L			04/28/21 15:35	1
Chloromethane	ND		2.0		ug/L			04/28/21 15:35	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/28/21 15:35	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/28/21 15:35	1
Dibromochloromethane	ND		1.0		ug/L			04/28/21 15:35	1
Dibromomethane	ND		1.0		ug/L			04/28/21 15:35	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/28/21 15:35	1
Ethylbenzene	ND		1.0		ug/L			04/28/21 15:35	1
Hexachlorobutadiene	ND		1.0		ug/L			04/28/21 15:35	1
Isopropylbenzene	ND		1.0		ug/L			04/28/21 15:35	1
Methylene Chloride	ND		5.0		ug/L			04/28/21 15:35	1
Naphthalene	**3.9**		1.0		ug/L			04/28/21 15:35	1
n-Butylbenzene	ND		1.0		ug/L			04/28/21 15:35	1
N-Propylbenzene	ND		1.0		ug/L			04/28/21 15:35	1
sec-Butylbenzene	ND		1.0		ug/L			04/28/21 15:35	1
Styrene	ND		1.0		ug/L			04/28/21 15:35	1
tert-Butylbenzene	ND		1.0		ug/L			04/28/21 15:35	1
Tetrachloroethene	ND		1.0		ug/L			04/28/21 15:35	1
Toluene	ND		1.0		ug/L			04/28/21 15:35	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/28/21 15:35	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/28/21 15:35	1
Trichloroethene	ND		1.0		ug/L			04/28/21 15:35	1
Trichlorofluoromethane	ND		2.0		ug/L			04/28/21 15:35	1
Vinyl chloride	ND		1.0		ug/L			04/28/21 15:35	1

Client Sample ID: 6/7S

Date Collected: 04/15/21 13:00
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147602-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes (total)	ND		2.0		ug/L			04/28/21 15:35	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Ethyl ether	*2.8*		*ug/L*		*2.68*	*60-29-7*		*04/28/21 15:35*	*1*
Tentatively Identified Compound	*None*		*ug/L*					*04/28/21 15:35*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 127*		*04/28/21 15:35*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*04/28/21 15:35*	*1*
Dibromofluoromethane (Surr)	*101*		*77 - 120*		*04/28/21 15:35*	*1*
Toluene-d8 (Surr)	*98*		*80 - 125*		*04/28/21 15:35*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	**25000**		100		ug/L		04/27/21 16:15	04/28/21 09:37	1
Silver	ND		3.0		ug/L		04/27/21 16:15	04/28/21 09:37	1
Zinc	ND		26		ug/L		04/27/21 16:15	04/28/21 09:37	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**190000**		500		ug/L		04/28/21 08:38	04/28/21 18:16	1
Iron	**4000**		30		ug/L		04/28/21 08:38	04/28/21 18:16	1
Magnesium	**130000**		200		ug/L		04/28/21 08:38	04/28/21 18:16	1
Manganese	**6300**		3.0		ug/L		04/28/21 08:38	04/28/21 18:16	1
Potassium	**60000**		500		ug/L		04/28/21 08:38	04/28/21 18:16	1
Sodium	**530000**		1000		ug/L		04/28/21 08:38	04/28/21 18:16	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.3**		0.60		ug/L		04/23/21 09:05	04/27/21 22:35	1
Arsenic	**17**		1.0		ug/L		04/23/21 09:05	04/27/21 22:35	1
Barium	**570**		1.0		ug/L		04/23/21 09:05	04/27/21 22:35	1
Beryllium	ND		0.40		ug/L		04/23/21 09:05	04/27/21 22:35	1
Cadmium	ND		0.30		ug/L		04/23/21 09:05	04/27/21 22:35	1
Chromium	**10**		2.0		ug/L		04/23/21 09:05	04/27/21 22:35	1
Cobalt	**8.5**		0.20		ug/L		04/23/21 09:05	04/27/21 22:35	1
Copper	**2.5**		1.0		ug/L		04/23/21 09:05	04/27/21 22:35	1
Lead	ND		0.50		ug/L		04/23/21 09:05	04/27/21 22:35	1
Nickel	**57**		1.0		ug/L		04/23/21 09:05	04/27/21 22:35	1
Selenium	ND		1.0		ug/L		04/23/21 09:05	05/04/21 12:02	1
Thallium	ND		0.20		ug/L		04/23/21 09:05	04/27/21 22:35	1
Vanadium	**9.7**		3.0		ug/L		04/23/21 09:05	04/29/21 03:09	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	**49**				meq/L			05/13/21 08:11	1
Total Cations	**51**				meq/L			05/13/21 08:11	1
Percent Difference	**1.4**				%			05/13/21 08:11	1
Calcium	**190**				mg/L			05/13/21 08:11	1
Magnesium	**130**				mg/L			05/13/21 08:11	1
Potassium	**60**				mg/L			05/13/21 08:11	1

Client Sample ID: 6/7S

Date Collected: 04/15/21 13:00
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147602-5

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	530				mg/L			05/13/21 08:11	1
Ammonia as N	79				mg/L			05/13/21 08:11	1
Chloride	680				mg/L			05/13/21 08:11	1
Sulfate	0.00				mg/L			05/13/21 08:11	1
Carbonate Alkalinity	0.00				mg/L			05/13/21 08:11	1
Bicarbonate Alkalinity	1500				mg/L			05/13/21 08:11	1
Total Alkalinity	1500				mg/L			05/13/21 08:11	1
Nitrate/Nitrite	0.74				mg/L			05/13/21 08:11	1
Anion/Cation Balance	1.4				%			05/13/21 08:11	1
Calculated TDS	2600				mg/L			05/13/21 08:11	1
TDS Ratio	1.0				NONE			05/13/21 08:11	1
Total Dissolved Solids	2600				mg/L			05/13/21 08:11	1
Iron	4.0				mg/L			05/13/21 08:11	1
Calcium	9.5				meq/L			05/13/21 08:11	1
Magnesium	11				meq/L			05/13/21 08:11	1
Potassium	1.5				meq/L			05/13/21 08:11	1
Sodium	23				meq/L			05/13/21 08:11	1
Ammonia as N	5.6				meq/L			05/13/21 08:11	1
Chloride	19				meq/L			05/13/21 08:11	1
Sulfate	0.00				meq/L			05/13/21 08:11	1
Carbonate Alkalinity	0.00				meq/L			05/13/21 08:11	1
Bicarbonate Alkalinity	30				meq/L			05/13/21 08:11	1
Total Alkalinity	30				meq/L			05/13/21 08:11	1
Nitrate/Nitrite	0.053				meq/L			05/13/21 08:11	1
Iron	0.21				meq/L			05/13/21 08:11	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	680		20		mg/L			05/11/21 22:15	20
Sulfate	ND		5.0		mg/L			05/11/21 22:00	1
Ammonia as N	79		1.1		mg/L			04/30/21 17:48	50
Nitrate/Nitrite	0.74		0.050		mg/L			05/05/21 20:24	1
Chemical Oxygen Demand (COD)	280		43		mg/L			04/29/21 08:55	5
Total Organic Carbon - Average	96		1.7		mg/L			05/05/21 00:58	5
Total Alkalinity	1500		10		mg/L			04/22/21 14:23	1
Bicarbonate Alkalinity	1500		10		mg/L			04/22/21 14:23	1
Carbonate Alkalinity	ND		10		mg/L			04/22/21 14:23	1
Hardness, as CaCO3	1100		3.0		mg/L			04/22/21 14:03	5
Total Dissolved Solids	2600		19		mg/L			04/22/21 16:27	1
Total Suspended Solids	25		4.0		mg/L			04/20/21 16:42	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH adj. to 25 deg C	6.9	HF	0.1		SU			04/19/21 21:01	1
Specific Conductance	4800		2.0		umhos/cm			04/21/21 12:16	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.63				SU			04/15/21 14:00	1
Field Conductivity	5071				umhos/cm			04/15/21 14:00	1
Field Temperature	29.9				Degrees C			04/15/21 14:00	1
Field Dissolved Oxygen	1.98				mg/L			04/15/21 14:00	1
Field EH/ORP	-50.7				millivolts			04/15/21 14:00	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-147602-1

Client Sample ID: 8P
Date Collected: 04/15/21 11:30
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147602-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.1		ug/L			04/29/21 10:19	5
1,1,1-Trichloroethane	ND		1.0		ug/L			04/29/21 10:19	5
1,1,2,2-Tetrachloroethane	ND		1.1		ug/L			04/29/21 10:19	5
1,1,2-Trichloroethane	ND		1.4		ug/L			04/29/21 10:19	5
1,1-Dichloroethane	ND		1.1		ug/L			04/29/21 10:19	5
1,1-Dichloroethene	ND		1.2		ug/L			04/29/21 10:19	5
1,1-Dichloropropene	ND		1.0		ug/L			04/29/21 10:19	5
1,2,3-Trichlorobenzene	ND		1.1		ug/L			04/29/21 10:19	5
1,2,3-Trichloropropane	ND		1.7		ug/L			04/29/21 10:19	5
1,2,4-Trichlorobenzene	ND		1.1		ug/L			04/29/21 10:19	5
1,2,4-Trimethylbenzene	**1.9**		1.0		ug/L			04/29/21 10:19	5
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			04/29/21 10:19	5
1,2-Dibromoethane	ND		1.0		ug/L			04/29/21 10:19	5
1,2-Dichlorobenzene	ND		1.0		ug/L			04/29/21 10:19	5
1,2-Dichloroethane	ND		1.0		ug/L			04/29/21 10:19	5
1,2-Dichloropropane	ND		1.0		ug/L			04/29/21 10:19	5
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/29/21 10:19	5
1,3-Dichlorobenzene	ND		1.0		ug/L			04/29/21 10:19	5
1,3-Dichloropropane	ND		1.0		ug/L			04/29/21 10:19	5
1,4-Dichlorobenzene	**1.8**		1.0		ug/L			04/29/21 10:19	5
2,2-Dichloropropane	ND		5.0		ug/L			04/29/21 10:19	5
2-Butanone (MEK)	**1300**		10		ug/L			04/29/21 10:19	5
2-Chlorotoluene	ND		1.0		ug/L			04/29/21 10:19	5
2-Hexanone	ND		8.5		ug/L			04/29/21 10:19	5
4-Chlorotoluene	ND		1.1		ug/L			04/29/21 10:19	5
4-Isopropyltoluene	**4.2**		1.0		ug/L			04/29/21 10:19	5
4-Methyl-2-pentanone	**44**		5.0		ug/L			04/29/21 10:19	5
Acetone	**1400**		10		ug/L			04/29/21 10:19	5
Benzene	**3.3**		1.0		ug/L			04/29/21 10:19	5
Bromobenzene	ND		1.0		ug/L			04/29/21 10:19	5
Bromochloromethane	ND		1.0		ug/L			04/29/21 10:19	5
Bromodichloromethane	ND		1.0		ug/L			04/29/21 10:19	5
Bromoform	ND		2.3		ug/L			04/29/21 10:19	5
Bromomethane	ND		2.0		ug/L			04/29/21 10:19	5
Carbon disulfide	**6.5**		2.0		ug/L			04/29/21 10:19	5
Carbon tetrachloride	ND		1.0		ug/L			04/29/21 10:19	5
Chlorobenzene	ND		1.0		ug/L			04/29/21 10:19	5
Chloroethane	ND		2.1		ug/L			04/29/21 10:19	5
Chloroform	ND		1.0		ug/L			04/29/21 10:19	5
Chloromethane	ND		2.0		ug/L			04/29/21 10:19	5
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/29/21 10:19	5
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/29/21 10:19	5
Dibromochloromethane	ND		1.0		ug/L			04/29/21 10:19	5
Dibromomethane	ND		1.0		ug/L			04/29/21 10:19	5
Dichlorodifluoromethane	ND		2.0		ug/L			04/29/21 10:19	5
Ethylbenzene	**5.5**		1.0		ug/L			04/29/21 10:19	5
Hexachlorobutadiene	ND		1.8		ug/L			04/29/21 10:19	5
Isopropylbenzene	ND		1.0		ug/L			04/29/21 10:19	5
Methylene Chloride	ND		5.0		ug/L			04/29/21 10:19	5

Client Sample ID: 8P

Date Collected: 04/15/21 11:30
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147602-6

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	**2.4**		1.1		ug/L			04/29/21 10:19	5
n-Butylbenzene	ND		1.0		ug/L			04/29/21 10:19	5
N-Propylbenzene	ND		1.0		ug/L			04/29/21 10:19	5
sec-Butylbenzene	ND		1.0		ug/L			04/29/21 10:19	5
Styrene	ND		1.8		ug/L			04/29/21 10:19	5
tert-Butylbenzene	ND		1.0		ug/L			04/29/21 10:19	5
Tetrachloroethene	ND		1.0		ug/L			04/29/21 10:19	5
Toluene	**11**		1.0		ug/L			04/29/21 10:19	5
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/29/21 10:19	5
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/29/21 10:19	5
Trichloroethene	ND		1.0		ug/L			04/29/21 10:19	5
Trichlorofluoromethane	ND		2.0		ug/L			04/29/21 10:19	5
Vinyl chloride	ND		1.0		ug/L			04/29/21 10:19	5
Xylenes (total)	**12**		2.0		ug/L			04/29/21 10:19	5

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrahydrofuran	*290*		*ug/L*		*4.32*	*109-99-9*		*04/29/21 10:19*	*5*
m-Xylene & p-Xylene	*8.0*		*ug/L*		*7.72*	*179601-23-1*		*04/29/21 10:19*	*5*
o-Xylene	*4.4*		*ug/L*		*8.08*	*95-47-6*		*04/29/21 10:19*	*5*
Tentatively Identified Compound	*None*		*ug/L*					*04/29/21 10:19*	*5*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 127*		*04/29/21 10:19*	*5*
4-Bromofluorobenzene (Surr)	*95*		*78 - 120*		*04/29/21 10:19*	*5*
Dibromofluoromethane (Surr)	*101*		*77 - 120*		*04/29/21 10:19*	*5*
Toluene-d8 (Surr)	*97*		*80 - 125*		*04/29/21 10:19*	*5*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	**24000**		100		ug/L		04/27/21 16:15	04/28/21 09:54	1
Silver	ND		3.0		ug/L		04/27/21 16:15	04/28/21 09:54	1
Zinc	ND		26		ug/L		04/27/21 16:15	04/28/21 09:54	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**97000**		500		ug/L		04/28/21 08:38	04/28/21 18:20	1
Iron	**1300**		30		ug/L		04/28/21 08:38	04/28/21 18:20	1
Magnesium	**120000**		200		ug/L		04/28/21 08:38	04/28/21 18:20	1
Manganese	**880**		3.0		ug/L		04/28/21 08:38	04/28/21 18:20	1
Potassium	**480000**		2400		ug/L		04/28/21 08:38	04/30/21 01:06	10
Sodium	**1900000**		1000		ug/L		04/28/21 08:38	04/28/21 18:20	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**12**		0.60		ug/L		04/23/21 09:05	04/27/21 22:39	1
Arsenic	**97**		1.0		ug/L		04/23/21 09:05	04/27/21 22:39	1
Barium	**470**		1.0		ug/L		04/23/21 09:05	04/27/21 22:39	1
Beryllium	ND		0.40		ug/L		04/23/21 09:05	04/27/21 22:39	1
Cadmium	ND		0.30		ug/L		04/23/21 09:05	04/27/21 22:39	1
Chromium	**150**		2.0		ug/L		04/23/21 09:05	04/27/21 22:39	1
Cobalt	**28**		0.20		ug/L		04/23/21 09:05	04/27/21 22:39	1

Client Sample ID: 8P

Date Collected: 04/15/21 11:30
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147602-6

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		1.0		ug/L		04/23/21 09:05	04/27/21 22:39	1
Lead	ND		0.50		ug/L		04/23/21 09:05	04/27/21 22:39	1
Nickel	**95**		1.0		ug/L		04/23/21 09:05	04/27/21 22:39	1
Selenium	**1.0**		1.0		ug/L		04/23/21 09:05	05/04/21 12:06	1
Thallium	ND		0.20		ug/L		04/23/21 09:05	04/27/21 22:39	1
Vanadium	**150**		3.0		ug/L		04/23/21 09:05	04/29/21 03:13	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	**140**				meq/L			05/13/21 08:11	1
Total Cations	**170**				meq/L			05/13/21 08:11	1
Percent Difference	**8.6**				%			05/13/21 08:11	1
Calcium	**97**				mg/L			05/13/21 08:11	1
Magnesium	**120**				mg/L			05/13/21 08:11	1
Potassium	**480**				mg/L			05/13/21 08:11	1
Sodium	**1900**				mg/L			05/13/21 08:11	1
Ammonia as N	**860**				mg/L			05/13/21 08:11	1
Chloride	**1700**				mg/L			05/13/21 08:11	1
Sulfate	**9.0**				mg/L			05/13/21 08:11	1
Carbonate Alkalinity	**0.00**				mg/L			05/13/21 08:11	1
Bicarbonate Alkalinity	**4800**				mg/L			05/13/21 08:11	1
Total Alkalinity	**4800**				mg/L			05/13/21 08:11	1
Nitrate/Nitrite	**0.088**				mg/L			05/13/21 08:11	1
Anion/Cation Balance	**8.6**				%			05/13/21 08:11	1
Calculated TDS	**8000**				mg/L			05/13/21 08:11	1
TDS Ratio	**0.92**				NONE			05/13/21 08:11	1
Total Dissolved Solids	**7400**				mg/L			05/13/21 08:11	1
Iron	**1.3**				mg/L			05/13/21 08:11	1
Calcium	**4.8**				meq/L			05/13/21 08:11	1
Magnesium	**9.9**				meq/L			05/13/21 08:11	1
Potassium	**12**				meq/L			05/13/21 08:11	1
Sodium	**83**				meq/L			05/13/21 08:11	1
Ammonia as N	**61**				meq/L			05/13/21 08:11	1
Chloride	**48**				meq/L			05/13/21 08:11	1
Sulfate	**0.19**				meq/L			05/13/21 08:11	1
Carbonate Alkalinity	**0.00**				meq/L			05/13/21 08:11	1
Bicarbonate Alkalinity	**96**				meq/L			05/13/21 08:11	1
Total Alkalinity	**96**				meq/L			05/13/21 08:11	1
Nitrate/Nitrite	**0.0063**				meq/L			05/13/21 08:11	1
Iron	**0.070**				meq/L			05/13/21 08:11	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1700**		100		mg/L			05/11/21 22:45	100
Sulfate	**9.0**		5.0		mg/L			05/11/21 22:30	1
Ammonia as N	**860**		110		mg/L			04/30/21 17:50	5000
Nitrate/Nitrite	**0.088**		0.050		mg/L			05/05/21 20:26	1
Chemical Oxygen Demand (COD)	**2700**		430		mg/L			05/03/21 10:49	50
Total Organic Carbon - Average	**930**		8.6		mg/L			05/05/21 18:41	25
Total Alkalinity	**4800**		10		mg/L			04/20/21 18:42	1
Bicarbonate Alkalinity	**4800**		10		mg/L			04/20/21 18:42	1

Client Sample ID: 8P

Date Collected: 04/15/21 11:30
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147602-6
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbonate Alkalinity	ND		10		mg/L			04/20/21 18:42	1
Hardness, as CaCO3	**710**		3.0		mg/L			04/29/21 18:48	5
Total Dissolved Solids	**7400**		470		mg/L			04/22/21 16:27	1
Total Suspended Solids	**170**		4.0		mg/L			04/20/21 16:42	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH adj. to 25 deg C	**7.7**	**HF**	0.1		SU			04/19/21 21:04	1
Specific Conductance	**15000**		2.0		umhos/cm			04/21/21 12:16	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**7.48**				SU			04/15/21 12:30	1
Field Conductivity	**16835**				umhos/cm			04/15/21 12:30	1
Field Temperature	**31.1**				Degrees C			04/15/21 12:30	1
Field Dissolved Oxygen	**1.01**				mg/L			04/15/21 12:30	1
Field EH/ORP	**-224.1**				millivolts			04/15/21 12:30	1

Client Sample ID: 8S

Date Collected: 04/15/21 12:00
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147602-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/28/21 16:21	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/28/21 16:21	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/28/21 16:21	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/28/21 16:21	1
1,1-Dichloroethane	ND		1.0		ug/L			04/28/21 16:21	1
1,1-Dichloroethene	ND		1.0		ug/L			04/28/21 16:21	1
1,1-Dichloropropene	ND		1.0		ug/L			04/28/21 16:21	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/28/21 16:21	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/28/21 16:21	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/28/21 16:21	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/28/21 16:21	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			04/28/21 16:21	1
1,2-Dibromoethane	ND		1.0		ug/L			04/28/21 16:21	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/28/21 16:21	1
1,2-Dichloroethane	ND		1.0		ug/L			04/28/21 16:21	1
1,2-Dichloropropane	ND		1.0		ug/L			04/28/21 16:21	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/28/21 16:21	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/28/21 16:21	1
1,3-Dichloropropane	ND		1.0		ug/L			04/28/21 16:21	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/28/21 16:21	1
2,2-Dichloropropane	ND		5.0		ug/L			04/28/21 16:21	1
2-Butanone (MEK)	ND		6.0		ug/L			04/28/21 16:21	1
2-Chlorotoluene	ND		1.0		ug/L			04/28/21 16:21	1
2-Hexanone	ND		5.0		ug/L			04/28/21 16:21	1
4-Chlorotoluene	ND		1.0		ug/L			04/28/21 16:21	1
4-Isopropyltoluene	ND		1.0		ug/L			04/28/21 16:21	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/28/21 16:21	1
Acetone	ND		10		ug/L			04/28/21 16:21	1

Client Sample ID: 8S

Date Collected: 04/15/21 12:00
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147602-7

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			04/28/21 16:21	1
Bromobenzene	ND		1.0		ug/L			04/28/21 16:21	1
Bromochloromethane	ND		1.0		ug/L			04/28/21 16:21	1
Bromodichloromethane	ND		1.0		ug/L			04/28/21 16:21	1
Bromoform	ND		1.0		ug/L			04/28/21 16:21	1
Bromomethane	ND		2.0		ug/L			04/28/21 16:21	1
Carbon disulfide	ND		2.0		ug/L			04/28/21 16:21	1
Carbon tetrachloride	ND		1.0		ug/L			04/28/21 16:21	1
Chlorobenzene	ND		1.0		ug/L			04/28/21 16:21	1
Chloroethane	ND		2.0		ug/L			04/28/21 16:21	1
Chloroform	ND		1.0		ug/L			04/28/21 16:21	1
Chloromethane	ND		2.0		ug/L			04/28/21 16:21	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/28/21 16:21	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/28/21 16:21	1
Dibromochloromethane	ND		1.0		ug/L			04/28/21 16:21	1
Dibromomethane	ND		1.0		ug/L			04/28/21 16:21	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/28/21 16:21	1
Ethylbenzene	ND		1.0		ug/L			04/28/21 16:21	1
Hexachlorobutadiene	ND		1.0		ug/L			04/28/21 16:21	1
Isopropylbenzene	ND		1.0		ug/L			04/28/21 16:21	1
Methylene Chloride	ND		5.0		ug/L			04/28/21 16:21	1
Naphthalene	ND		1.0		ug/L			04/28/21 16:21	1
n-Butylbenzene	ND		1.0		ug/L			04/28/21 16:21	1
N-Propylbenzene	ND		1.0		ug/L			04/28/21 16:21	1
sec-Butylbenzene	ND		1.0		ug/L			04/28/21 16:21	1
Styrene	ND		1.0		ug/L			04/28/21 16:21	1
tert-Butylbenzene	ND		1.0		ug/L			04/28/21 16:21	1
Tetrachloroethene	ND		1.0		ug/L			04/28/21 16:21	1
Toluene	ND		1.0		ug/L			04/28/21 16:21	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/28/21 16:21	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/28/21 16:21	1
Trichloroethene	ND		1.0		ug/L			04/28/21 16:21	1
Trichlorofluoromethane	ND		2.0		ug/L			04/28/21 16:21	1
Vinyl chloride	ND		1.0		ug/L			04/28/21 16:21	1
Xylenes (total)	ND		2.0		ug/L			04/28/21 16:21	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/28/21 16:21*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 127*		*04/28/21 16:21*	*1*
4-Bromofluorobenzene (Surr)	*95*		*78 - 120*		*04/28/21 16:21*	*1*
Dibromofluoromethane (Surr)	*101*		*77 - 120*		*04/28/21 16:21*	*1*
Toluene-d8 (Surr)	*98*		*80 - 125*		*04/28/21 16:21*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	**20000**		100		ug/L		04/27/21 16:15	04/28/21 09:57	1
Silver	ND		3.0		ug/L		04/27/21 16:15	04/28/21 09:57	1
Zinc	ND		26		ug/L		04/27/21 16:15	04/28/21 09:57	1

Client Sample ID: 8S

Date Collected: 04/15/21 12:00
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147602-7

Matrix: Water

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**75000**		500		ug/L		04/28/21 08:38	04/28/21 18:24	1
Iron	ND		30		ug/L		04/28/21 08:38	04/28/21 18:24	1
Magnesium	**38000**		200		ug/L		04/28/21 08:38	04/28/21 18:24	1
Manganese	**20**		3.0		ug/L		04/28/21 08:38	04/28/21 18:24	1
Potassium	**3100**		500		ug/L		04/28/21 08:38	04/28/21 18:24	1
Sodium	**380000**		1000		ug/L		04/28/21 08:38	04/28/21 18:24	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.60		ug/L		04/23/21 09:05	04/27/21 22:43	1
Arsenic	**2.5**		1.0		ug/L		04/23/21 09:05	04/27/21 22:43	1
Barium	**64**		1.0		ug/L		04/23/21 09:05	04/27/21 22:43	1
Beryllium	ND		0.40		ug/L		04/23/21 09:05	04/27/21 22:43	1
Cadmium	ND		0.30		ug/L		04/23/21 09:05	04/27/21 22:43	1
Chromium	ND		2.0		ug/L		04/23/21 09:05	04/27/21 22:43	1
Cobalt	**0.78**		0.20		ug/L		04/23/21 09:05	04/27/21 22:43	1
Copper	**5.6**		1.0		ug/L		04/23/21 09:05	04/27/21 22:43	1
Lead	ND		0.50		ug/L		04/23/21 09:05	04/27/21 22:43	1
Nickel	**8.3**		1.0		ug/L		04/23/21 09:05	04/27/21 22:43	1
Selenium	ND		1.0		ug/L		04/23/21 09:05	05/04/21 12:10	1
Thallium	ND		0.20		ug/L		04/23/21 09:05	04/27/21 22:43	1
Vanadium	**10**		3.0		ug/L		04/23/21 09:05	04/29/21 03:16	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	**23**				meq/L			05/13/21 08:11	1
Total Cations	**23**				meq/L			05/13/21 08:11	1
Percent Difference	**0.69**				%			05/13/21 08:11	1
Calcium	**75**				mg/L			05/13/21 08:11	1
Magnesium	**38**				mg/L			05/13/21 08:11	1
Potassium	**3.1**				mg/L			05/13/21 08:11	1
Sodium	**380**				mg/L			05/13/21 08:11	1
Ammonia as N	**0.00**				mg/L			05/13/21 08:11	1
Chloride	**93**				mg/L			05/13/21 08:11	1
Sulfate	**170**				mg/L			05/13/21 08:11	1
Carbonate Alkalinity	**0.00**				mg/L			05/13/21 08:11	1
Bicarbonate Alkalinity	**850**				mg/L			05/13/21 08:11	1
Total Alkalinity	**850**				mg/L			05/13/21 08:11	1
Nitrate/Nitrite	**0.11**				mg/L			05/13/21 08:11	1
Anion/Cation Balance	**0.69**				%			05/13/21 08:11	1
Calculated TDS	**1100**				mg/L			05/13/21 08:11	1
TDS Ratio	**1.2**				NONE			05/13/21 08:11	1
Total Dissolved Solids	**1300**				mg/L			05/13/21 08:11	1
Iron	**0.00**				mg/L			05/13/21 08:11	1
Calcium	**3.7**				meq/L			05/13/21 08:11	1
Magnesium	**3.1**				meq/L			05/13/21 08:11	1
Potassium	**0.079**				meq/L			05/13/21 08:11	1
Sodium	**17**				meq/L			05/13/21 08:11	1
Ammonia as N	**0.00**				meq/L			05/13/21 08:11	1
Chloride	**2.6**				meq/L			05/13/21 08:11	1

Client Sample ID: 8S

Date Collected: 04/15/21 12:00
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147602-7

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	3.5				meq/L			05/13/21 08:11	1
Carbonate Alkalinity	0.00				meq/L			05/13/21 08:11	1
Bicarbonate Alkalinity	17				meq/L			05/13/21 08:11	1
Total Alkalinity	17				meq/L			05/13/21 08:11	1
Nitrate/Nitrite	0.0079				meq/L			05/13/21 08:11	1
Iron	0.00				meq/L			05/13/21 08:11	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	93		3.0		mg/L			05/11/21 23:00	1
Sulfate	170		5.2		mg/L			05/11/21 23:15	5
Ammonia as N	ND		0.040		mg/L			04/30/21 16:18	1
Nitrate/Nitrite	0.11		0.050		mg/L			05/04/21 18:52	1
Chemical Oxygen Demand (COD)	26		20		mg/L			04/29/21 08:55	1
Total Organic Carbon - Average	9.2		1.0		mg/L			05/05/21 18:56	1
Total Alkalinity	850		10		mg/L			04/20/21 19:03	1
Bicarbonate Alkalinity	850		10		mg/L			04/20/21 19:03	1
Carbonate Alkalinity	ND		10		mg/L			04/20/21 19:03	1
Hardness, as CaCO3	330		3.0		mg/L			05/04/21 16:04	1
Total Dissolved Solids	1300		19		mg/L			04/22/21 16:27	1
Total Suspended Solids	ND		4.0		mg/L			04/20/21 16:42	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH adj. to 25 deg C	7.7	HF	0.1		SU			04/19/21 21:31	1
Specific Conductance	2100		2.0		umhos/cm			04/21/21 12:16	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.11				SU			04/15/21 13:00	1
Field Conductivity	2220				umhos/cm			04/15/21 13:00	1
Field Temperature	28.7				Degrees C			04/15/21 13:00	1
Field Dissolved Oxygen	2.65				mg/L			04/15/21 13:00	1
Field EH/ORP	29.7				millivolts			04/15/21 13:00	1

Client Sample ID: 9P

Date Collected: 04/15/21 14:15
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147602-8

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.1		ug/L			04/28/21 16:44	5
1,1,1-Trichloroethane	ND		1.0		ug/L			04/28/21 16:44	5
1,1,2,2-Tetrachloroethane	ND		1.1		ug/L			04/28/21 16:44	5
1,1,2-Trichloroethane	ND		1.4		ug/L			04/28/21 16:44	5
1,1-Dichloroethane	ND		1.1		ug/L			04/28/21 16:44	5
1,1-Dichloroethene	ND		1.2		ug/L			04/28/21 16:44	5
1,1-Dichloropropene	ND		1.0		ug/L			04/28/21 16:44	5
1,2,3-Trichlorobenzene	ND		1.1		ug/L			04/28/21 16:44	5
1,2,3-Trichloropropane	ND		1.7		ug/L			04/28/21 16:44	5
1,2,4-Trichlorobenzene	ND		1.1		ug/L			04/28/21 16:44	5
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/28/21 16:44	5
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			04/28/21 16:44	5
1,2-Dibromoethane	ND		1.0		ug/L			04/28/21 16:44	5

Client Sample ID: 9P
Date Collected: 04/15/21 14:15
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147602-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.0		ug/L			04/28/21 16:44	5
1,2-Dichloroethane	ND		1.0		ug/L			04/28/21 16:44	5
1,2-Dichloropropane	ND		1.0		ug/L			04/28/21 16:44	5
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/28/21 16:44	5
1,3-Dichlorobenzene	ND		1.0		ug/L			04/28/21 16:44	5
1,3-Dichloropropane	ND		1.0		ug/L			04/28/21 16:44	5
1,4-Dichlorobenzene	ND		1.0		ug/L			04/28/21 16:44	5
2,2-Dichloropropane	ND		5.0		ug/L			04/28/21 16:44	5
2-Butanone (MEK)	ND		10		ug/L			04/28/21 16:44	5
2-Chlorotoluene	ND		1.0		ug/L			04/28/21 16:44	5
2-Hexanone	ND		8.5		ug/L			04/28/21 16:44	5
4-Chlorotoluene	ND		1.1		ug/L			04/28/21 16:44	5
4-Isopropyltoluene	ND		1.0		ug/L			04/28/21 16:44	5
4-Methyl-2-pentanone	ND		5.0		ug/L			04/28/21 16:44	5
Acetone	**18**		10		ug/L			04/28/21 16:44	5
Benzene	**1.5**		1.0		ug/L			04/28/21 16:44	5
Bromobenzene	ND		1.0		ug/L			04/28/21 16:44	5
Bromochloromethane	ND		1.0		ug/L			04/28/21 16:44	5
Bromodichloromethane	ND		1.0		ug/L			04/28/21 16:44	5
Bromoform	ND		2.3		ug/L			04/28/21 16:44	5
Bromomethane	ND		2.0		ug/L			04/28/21 16:44	5
Carbon disulfide	ND		2.0		ug/L			04/28/21 16:44	5
Carbon tetrachloride	ND		1.0		ug/L			04/28/21 16:44	5
Chlorobenzene	ND		1.0		ug/L			04/28/21 16:44	5
Chloroethane	ND		2.1		ug/L			04/28/21 16:44	5
Chloroform	ND		1.0		ug/L			04/28/21 16:44	5
Chloromethane	ND		2.0		ug/L			04/28/21 16:44	5
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/28/21 16:44	5
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/28/21 16:44	5
Dibromochloromethane	ND		1.0		ug/L			04/28/21 16:44	5
Dibromomethane	ND		1.0		ug/L			04/28/21 16:44	5
Dichlorodifluoromethane	ND		2.0		ug/L			04/28/21 16:44	5
Ethylbenzene	**4.1**		1.0		ug/L			04/28/21 16:44	5
Hexachlorobutadiene	ND		1.8		ug/L			04/28/21 16:44	5
Isopropylbenzene	ND		1.0		ug/L			04/28/21 16:44	5
Methylene Chloride	ND		5.0		ug/L			04/28/21 16:44	5
Naphthalene	ND		1.1		ug/L			04/28/21 16:44	5
n-Butylbenzene	ND		1.0		ug/L			04/28/21 16:44	5
N-Propylbenzene	ND		1.0		ug/L			04/28/21 16:44	5
sec-Butylbenzene	ND		1.0		ug/L			04/28/21 16:44	5
Styrene	ND		1.8		ug/L			04/28/21 16:44	5
tert-Butylbenzene	ND		1.0		ug/L			04/28/21 16:44	5
Tetrachloroethene	ND		1.0		ug/L			04/28/21 16:44	5
Toluene	**6.2**		1.0		ug/L			04/28/21 16:44	5
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/28/21 16:44	5
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/28/21 16:44	5
Trichloroethene	ND		1.0		ug/L			04/28/21 16:44	5
Trichlorofluoromethane	ND		2.0		ug/L			04/28/21 16:44	5
Vinyl chloride	ND		1.0		ug/L			04/28/21 16:44	5

Client Sample ID: 9P

Date Collected: 04/15/21 14:15
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147602-8

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes (total)	12		2.0		ug/L			04/28/21 16:44	5

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrahydrofuran	*210*		*ug/L*		*4.32*	*109-99-9*		*04/28/21 16:44*	*5*
m-Xylene & p-Xylene	*8.2*		*ug/L*		*7.72*	*179601-23-1*		*04/28/21 16:44*	*5*
o-Xylene	*4.0*		*ug/L*		*8.08*	*95-47-6*		*04/28/21 16:44*	*5*
Tentatively Identified Compound	*None*		*ug/L*					*04/28/21 16:44*	*5*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 127*		*04/28/21 16:44*	*5*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*04/28/21 16:44*	*5*
Dibromofluoromethane (Surr)	*101*		*77 - 120*		*04/28/21 16:44*	*5*
Toluene-d8 (Surr)	*97*		*80 - 125*		*04/28/21 16:44*	*5*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	27000		100		ug/L		04/27/21 16:15	04/28/21 10:00	1
Silver	ND		3.0		ug/L		04/27/21 16:15	04/28/21 10:00	1
Zinc	39		26		ug/L		04/27/21 16:15	04/28/21 10:00	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	250000		500		ug/L		04/28/21 08:38	04/28/21 18:27	1
Iron	4700		30		ug/L		04/28/21 08:38	04/28/21 18:27	1
Magnesium	160000		200		ug/L		04/28/21 08:38	04/28/21 18:27	1
Manganese	2700		3.0		ug/L		04/28/21 08:38	04/28/21 18:27	1
Potassium	260000		500		ug/L		04/28/21 08:38	04/28/21 18:27	1
Sodium	1200000		1000		ug/L		04/28/21 08:38	04/28/21 18:27	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.9		0.60		ug/L		04/23/21 09:05	04/27/21 22:46	1
Arsenic	34		1.0		ug/L		04/23/21 09:05	04/27/21 22:46	1
Barium	980		1.0		ug/L		04/23/21 09:05	04/27/21 22:46	1
Beryllium	ND		0.40		ug/L		04/23/21 09:05	04/27/21 22:46	1
Cadmium	ND		0.30		ug/L		04/23/21 09:05	04/27/21 22:46	1
Chromium	96		2.0		ug/L		04/23/21 09:05	04/27/21 22:46	1
Cobalt	40		0.20		ug/L		04/23/21 09:05	04/27/21 22:46	1
Copper	10		1.0		ug/L		04/23/21 09:05	04/27/21 22:46	1
Lead	4.3		0.50		ug/L		04/23/21 09:05	04/27/21 22:46	1
Nickel	140		1.0		ug/L		04/23/21 09:05	04/27/21 22:46	1
Selenium	1.4		1.0		ug/L		04/23/21 09:05	05/04/21 12:50	1
Thallium	ND		0.20		ug/L		04/23/21 09:05	04/27/21 22:46	1
Vanadium	150		3.0		ug/L		04/23/21 09:05	04/29/21 03:20	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	100				meq/L			05/13/21 08:11	1
Total Cations	120				meq/L			05/13/21 08:11	1
Percent Difference	6.7				%			05/13/21 08:11	1
Calcium	250				mg/L			05/13/21 08:11	1

Client Sample ID: 9P

Date Collected: 04/15/21 14:15
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147602-8

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	160				mg/L			05/13/21 08:11	1
Potassium	260				mg/L			05/13/21 08:11	1
Sodium	1200				mg/L			05/13/21 08:11	1
Ammonia as N	490				mg/L			05/13/21 08:11	1
Chloride	1200				mg/L			05/13/21 08:11	1
Sulfate	43				mg/L			05/13/21 08:11	1
Carbonate Alkalinity	0.00				mg/L			05/13/21 08:11	1
Bicarbonate Alkalinity	3500				mg/L			05/13/21 08:11	1
Total Alkalinity	3500				mg/L			05/13/21 08:11	1
Nitrate/Nitrite	0.20				mg/L			05/13/21 08:11	1
Anion/Cation Balance	6.7				%			05/13/21 08:11	1
Calculated TDS	5700				mg/L			05/13/21 08:11	1
TDS Ratio	0.92				NONE			05/13/21 08:11	1
Total Dissolved Solids	5200				mg/L			05/13/21 08:11	1
Iron	4.7				mg/L			05/13/21 08:11	1
Calcium	12				meq/L			05/13/21 08:11	1
Magnesium	13				meq/L			05/13/21 08:11	1
Potassium	6.6				meq/L			05/13/21 08:11	1
Sodium	52				meq/L			05/13/21 08:11	1
Ammonia as N	35				meq/L			05/13/21 08:11	1
Chloride	34				meq/L			05/13/21 08:11	1
Sulfate	0.90				meq/L			05/13/21 08:11	1
Carbonate Alkalinity	0.00				meq/L			05/13/21 08:11	1
Bicarbonate Alkalinity	70				meq/L			05/13/21 08:11	1
Total Alkalinity	70				meq/L			05/13/21 08:11	1
Nitrate/Nitrite	0.014				meq/L			05/13/21 08:11	1
Iron	0.25				meq/L			05/13/21 08:11	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1200		100		mg/L			05/12/21 01:14	100
Sulfate	43		5.0		mg/L			05/12/21 00:59	1
Ammonia as N	490		2.2		mg/L			04/30/21 16:24	100
Nitrate/Nitrite	0.20		0.050		mg/L			05/04/21 18:54	1
Chemical Oxygen Demand (COD)	1500		170		mg/L			05/03/21 10:49	20
Total Organic Carbon - Average	400		6.9		mg/L			05/05/21 19:45	20
Total Alkalinity	3500		10		mg/L			04/20/21 18:51	1
Bicarbonate Alkalinity	3500		10		mg/L			04/20/21 18:51	1
Carbonate Alkalinity	ND		10		mg/L			04/20/21 18:51	1
Hardness, as CaCO3	1500		3.0		mg/L			04/29/21 18:48	5
Total Dissolved Solids	5200		19		mg/L			04/22/21 16:27	1
Total Suspended Solids	67		4.0		mg/L			04/20/21 16:42	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH adj. to 25 deg C	7.4	HF	0.1		SU			04/19/21 21:39	1
Specific Conductance	11000		2.0		umhos/cm			04/21/21 12:16	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.15				SU			04/15/21 15:15	1
Field Conductivity	11507				umhos/cm			04/15/21 15:15	1
Field Temperature	26.6				Degrees C			04/15/21 15:15	1

Client Sample ID: 9P

Lab Sample ID: 280-147602-8

Date Collected: 04/15/21 14:15

Matrix: Water

Date Received: 04/17/21 09:45

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field Dissolved Oxygen	**0.42**				mg/L			04/15/21 15:15	1
Field EH/ORP	**-86.6**				millivolts			04/15/21 15:15	1

Client Sample ID: 9S

Lab Sample ID: 280-147602-9

Date Collected: 04/15/21 14:45

Matrix: Water

Date Received: 04/17/21 09:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/28/21 17:07	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/28/21 17:07	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/28/21 17:07	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/28/21 17:07	1
1,1-Dichloroethane	ND		1.0		ug/L			04/28/21 17:07	1
1,1-Dichloroethene	ND		1.0		ug/L			04/28/21 17:07	1
1,1-Dichloropropene	ND		1.0		ug/L			04/28/21 17:07	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/28/21 17:07	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/28/21 17:07	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/28/21 17:07	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/28/21 17:07	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			04/28/21 17:07	1
1,2-Dibromoethane	ND		1.0		ug/L			04/28/21 17:07	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/28/21 17:07	1
1,2-Dichloroethane	ND		1.0		ug/L			04/28/21 17:07	1
1,2-Dichloropropane	ND		1.0		ug/L			04/28/21 17:07	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/28/21 17:07	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/28/21 17:07	1
1,3-Dichloropropane	ND		1.0		ug/L			04/28/21 17:07	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/28/21 17:07	1
2,2-Dichloropropane	ND		5.0		ug/L			04/28/21 17:07	1
2-Butanone (MEK)	ND		6.0		ug/L			04/28/21 17:07	1
2-Chlorotoluene	ND		1.0		ug/L			04/28/21 17:07	1
2-Hexanone	ND		5.0		ug/L			04/28/21 17:07	1
4-Chlorotoluene	ND		1.0		ug/L			04/28/21 17:07	1
4-Isopropyltoluene	ND		1.0		ug/L			04/28/21 17:07	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/28/21 17:07	1
Acetone	ND		10		ug/L			04/28/21 17:07	1
Benzene	**1.1**		1.0		ug/L			04/28/21 17:07	1
Bromobenzene	ND		1.0		ug/L			04/28/21 17:07	1
Bromochloromethane	ND		1.0		ug/L			04/28/21 17:07	1
Bromodichloromethane	ND		1.0		ug/L			04/28/21 17:07	1
Bromoform	ND		1.0		ug/L			04/28/21 17:07	1
Bromomethane	ND		2.0		ug/L			04/28/21 17:07	1
Carbon disulfide	ND		2.0		ug/L			04/28/21 17:07	1
Carbon tetrachloride	ND		1.0		ug/L			04/28/21 17:07	1
Chlorobenzene	ND		1.0		ug/L			04/28/21 17:07	1
Chloroethane	ND		2.0		ug/L			04/28/21 17:07	1
Chloroform	ND		1.0		ug/L			04/28/21 17:07	1
Chloromethane	ND		2.0		ug/L			04/28/21 17:07	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/28/21 17:07	1

Client Sample ID: 9S

Date Collected: 04/15/21 14:45
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147602-9

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/28/21 17:07	1
Dibromochloromethane	ND		1.0		ug/L			04/28/21 17:07	1
Dibromomethane	ND		1.0		ug/L			04/28/21 17:07	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/28/21 17:07	1
Ethylbenzene	**1.6**		1.0		ug/L			04/28/21 17:07	1
Hexachlorobutadiene	ND		1.0		ug/L			04/28/21 17:07	1
Isopropylbenzene	ND		1.0		ug/L			04/28/21 17:07	1
Methylene Chloride	ND		5.0		ug/L			04/28/21 17:07	1
Naphthalene	ND		1.0		ug/L			04/28/21 17:07	1
n-Butylbenzene	ND		1.0		ug/L			04/28/21 17:07	1
N-Propylbenzene	ND		1.0		ug/L			04/28/21 17:07	1
sec-Butylbenzene	ND		1.0		ug/L			04/28/21 17:07	1
Styrene	ND		1.0		ug/L			04/28/21 17:07	1
tert-Butylbenzene	ND		1.0		ug/L			04/28/21 17:07	1
Tetrachloroethene	ND		1.0		ug/L			04/28/21 17:07	1
Toluene	ND		1.0		ug/L			04/28/21 17:07	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/28/21 17:07	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/28/21 17:07	1
Trichloroethene	ND		1.0		ug/L			04/28/21 17:07	1
Trichlorofluoromethane	ND		2.0		ug/L			04/28/21 17:07	1
Vinyl chloride	ND		1.0		ug/L			04/28/21 17:07	1
Xylenes (total)	**4.4**		2.0		ug/L			04/28/21 17:07	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Ethyl ether	*3.0*		*ug/L*		*2.68*	*60-29-7*		*04/28/21 17:07*	*1*
Tetrahydrofuran	*13*		*ug/L*		*4.32*	*109-99-9*		*04/28/21 17:07*	*1*
m-Xylene & p-Xylene	*2.7*		*ug/L*		*7.72*	*179601-23-1*		*04/28/21 17:07*	*1*
o-Xylene	*1.7*		*ug/L*		*8.08*	*95-47-6*		*04/28/21 17:07*	*1*
Tentatively Identified Compound	*None*		*ug/L*					*04/28/21 17:07*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 127*		*04/28/21 17:07*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*04/28/21 17:07*	*1*
Dibromofluoromethane (Surr)	*101*		*77 - 120*		*04/28/21 17:07*	*1*
Toluene-d8 (Surr)	*98*		*80 - 125*		*04/28/21 17:07*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	**26000**		100		ug/L		04/27/21 16:15	04/28/21 10:04	1
Silver	ND		3.0		ug/L		04/27/21 16:15	04/28/21 10:04	1
Zinc	ND		26		ug/L		04/27/21 16:15	04/28/21 10:04	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**180000**		500		ug/L		04/29/21 16:00	04/30/21 11:53	1
Iron	**7600**		30		ug/L		04/29/21 16:00	04/30/21 11:53	1
Magnesium	**92000**		200		ug/L		04/29/21 16:00	04/30/21 11:53	1
Manganese	**3300**		3.0		ug/L		04/29/21 16:00	04/30/21 11:53	1
Potassium	**33000**		500		ug/L		04/29/21 16:00	04/30/21 11:53	1
Sodium	**430000**		1000		ug/L		04/29/21 16:00	04/30/21 11:53	1

Client Sample ID: 9S

Date Collected: 04/15/21 14:45
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147602-9

Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.60		ug/L		04/23/21 09:05	04/27/21 22:50	1
Arsenic	**15**		1.0		ug/L		04/23/21 09:05	04/27/21 22:50	1
Barium	**470**		1.0		ug/L		04/23/21 09:05	04/27/21 22:50	1
Beryllium	ND		0.40		ug/L		04/23/21 09:05	04/27/21 22:50	1
Cadmium	ND		0.30		ug/L		04/23/21 09:05	04/27/21 22:50	1
Chromium	**4.4**		2.0		ug/L		04/23/21 09:05	04/27/21 22:50	1
Cobalt	**5.6**		0.20		ug/L		04/23/21 09:05	04/27/21 22:50	1
Copper	**1.7**		1.0		ug/L		04/23/21 09:05	04/27/21 22:50	1
Lead	ND		0.50		ug/L		04/23/21 09:05	04/27/21 22:50	1
Nickel	**29**		1.0		ug/L		04/23/21 09:05	04/27/21 22:50	1
Selenium	**1.3**		1.0		ug/L		04/23/21 09:05	05/04/21 12:54	1
Thallium	ND		0.20		ug/L		04/23/21 09:05	04/27/21 22:50	1
Vanadium	**7.1**		3.0		ug/L		04/23/21 09:05	04/29/21 03:23	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	**42**				meq/L			05/13/21 08:11	1
Total Cations	**41**				meq/L			05/13/21 08:11	1
Percent Difference	**-1.4**				%			05/13/21 08:11	1
Calcium	**180**				mg/L			05/13/21 08:11	1
Magnesium	**92**				mg/L			05/13/21 08:11	1
Potassium	**33**				mg/L			05/13/21 08:11	1
Sodium	**430**				mg/L			05/13/21 08:11	1
Ammonia as N	**57**				mg/L			05/13/21 08:11	1
Chloride	**430**				mg/L			05/13/21 08:11	1
Sulfate	**78**				mg/L			05/13/21 08:11	1
Carbonate Alkalinity	**0.00**				mg/L			05/13/21 08:11	1
Bicarbonate Alkalinity	**1400**				mg/L			05/13/21 08:11	1
Total Alkalinity	**1400**				mg/L			05/13/21 08:11	1
Nitrate/Nitrite	**0.00**				mg/L			05/13/21 08:11	1
Anion/Cation Balance	**-1.4**				%			05/13/21 08:11	1
Calculated TDS	**2100**				mg/L			05/13/21 08:11	1
TDS Ratio	**1.1**				NONE			05/13/21 08:11	1
Total Dissolved Solids	**2200**				mg/L			05/13/21 08:11	1
Iron	**7.6**				mg/L			05/13/21 08:11	1
Calcium	**9.0**				meq/L			05/13/21 08:11	1
Magnesium	**7.6**				meq/L			05/13/21 08:11	1
Potassium	**0.84**				meq/L			05/13/21 08:11	1
Sodium	**19**				meq/L			05/13/21 08:11	1
Ammonia as N	**4.1**				meq/L			05/13/21 08:11	1
Chloride	**12**				meq/L			05/13/21 08:11	1
Sulfate	**1.6**				meq/L			05/13/21 08:11	1
Carbonate Alkalinity	**0.00**				meq/L			05/13/21 08:11	1
Bicarbonate Alkalinity	**28**				meq/L			05/13/21 08:11	1
Total Alkalinity	**28**				meq/L			05/13/21 08:11	1
Nitrate/Nitrite	**0.00**				meq/L			05/13/21 08:11	1
Iron	**0.41**				meq/L			05/13/21 08:11	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**430**		20		mg/L			05/12/21 01:44	20

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-147602-1

Client Sample ID: 9S

Date Collected: 04/15/21 14:45
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147602-9

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	78		5.0		mg/L			05/12/21 01:29	1
Ammonia as N	57		1.1		mg/L			04/30/21 17:52	50
Nitrate/Nitrite	ND		0.050		mg/L			05/04/21 18:56	1
Chemical Oxygen Demand (COD)	220		20		mg/L			04/29/21 08:55	2
Total Organic Carbon - Average	74		1.7		mg/L			05/05/21 02:08	5
Total Alkalinity	1400		10		mg/L			04/20/21 19:18	1
Bicarbonate Alkalinity	1400		10		mg/L			04/20/21 19:18	1
Carbonate Alkalinity	ND		10		mg/L			04/20/21 19:18	1
Hardness, as CaCO3	850		3.0		mg/L			04/29/21 18:48	5
Total Dissolved Solids	2200		10		mg/L			04/22/21 16:27	1
Total Suspended Solids	26		4.0		mg/L			04/20/21 16:42	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH adj. to 25 deg C	7.2	HF	0.1		SU			04/19/21 21:42	1
Specific Conductance	3800		2.0		umhos/cm			04/21/21 12:16	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.57				SU			04/15/21 15:45	1
Field Conductivity	4005				umhos/cm			04/15/21 15:45	1
Field Temperature	23.9				Degrees C			04/15/21 15:45	1
Field Dissolved Oxygen	1.06				mg/L			04/15/21 15:45	1
Field EH/ORP	-68.7				millivolts			04/15/21 15:45	1

Surrogate Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-147602-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-127)	(78-120)	(77-120)	(80-125)
280-147602-1	TB3	98	96	100	99
280-147602-2	1/5P	97	96	100	100
280-147602-3	4/5S	99	95	101	98
280-147602-4	6/7P	98	96	101	99
280-147602-5	6/7S	98	96	101	98
280-147602-6	8P	98	95	101	97
280-147602-7	8S	99	95	101	98
280-147602-8	9P	96	96	101	97
280-147602-9	9S	97	96	101	98
LCS 280-534118/5	Lab Control Sample	98	96	100	99
LCS 280-534267/5	Lab Control Sample	97	96	101	98
LCSD 280-534118/6	Lab Control Sample Dup	97	96	101	100
LCSD 280-534267/6	Lab Control Sample Dup	96	96	101	98
MB 280-534118/10	Method Blank	99	96	100	99
MB 280-534267/10	Method Blank	100	95	102	96

Surrogate Legend

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

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

Lab Sample ID: MB 280-534118/10
Matrix: Water
Analysis Batch: 534118

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/28/21 09:52	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/28/21 09:52	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/28/21 09:52	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/28/21 09:52	1
1,1-Dichloroethane	ND		1.0		ug/L			04/28/21 09:52	1
1,1-Dichloroethene	ND		1.0		ug/L			04/28/21 09:52	1
1,1-Dichloropropene	ND		1.0		ug/L			04/28/21 09:52	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/28/21 09:52	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/28/21 09:52	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/28/21 09:52	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/28/21 09:52	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			04/28/21 09:52	1
1,2-Dibromoethane	ND		1.0		ug/L			04/28/21 09:52	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/28/21 09:52	1
1,2-Dichloroethane	ND		1.0		ug/L			04/28/21 09:52	1
1,2-Dichloropropane	ND		1.0		ug/L			04/28/21 09:52	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/28/21 09:52	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/28/21 09:52	1
1,3-Dichloropropane	ND		1.0		ug/L			04/28/21 09:52	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/28/21 09:52	1
2,2-Dichloropropane	ND		5.0		ug/L			04/28/21 09:52	1
2-Butanone (MEK)	ND		6.0		ug/L			04/28/21 09:52	1
2-Chlorotoluene	ND		1.0		ug/L			04/28/21 09:52	1
2-Hexanone	ND		5.0		ug/L			04/28/21 09:52	1
4-Chlorotoluene	ND		1.0		ug/L			04/28/21 09:52	1
4-Isopropyltoluene	ND		1.0		ug/L			04/28/21 09:52	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/28/21 09:52	1
Acetone	ND		10		ug/L			04/28/21 09:52	1
Benzene	ND		1.0		ug/L			04/28/21 09:52	1
Bromobenzene	ND		1.0		ug/L			04/28/21 09:52	1
Bromochloromethane	ND		1.0		ug/L			04/28/21 09:52	1
Bromodichloromethane	ND		1.0		ug/L			04/28/21 09:52	1
Bromoform	ND		1.0		ug/L			04/28/21 09:52	1
Bromomethane	ND		2.0		ug/L			04/28/21 09:52	1
Carbon disulfide	ND		2.0		ug/L			04/28/21 09:52	1
Carbon tetrachloride	ND		1.0		ug/L			04/28/21 09:52	1
Chlorobenzene	ND		1.0		ug/L			04/28/21 09:52	1
Chloroethane	ND		2.0		ug/L			04/28/21 09:52	1
Chloroform	ND		1.0		ug/L			04/28/21 09:52	1
Chloromethane	ND		2.0		ug/L			04/28/21 09:52	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/28/21 09:52	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/28/21 09:52	1
Dibromochloromethane	ND		1.0		ug/L			04/28/21 09:52	1
Dibromomethane	ND		1.0		ug/L			04/28/21 09:52	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/28/21 09:52	1
Ethylbenzene	ND		1.0		ug/L			04/28/21 09:52	1
Hexachlorobutadiene	ND		1.0		ug/L			04/28/21 09:52	1
Isopropylbenzene	ND		1.0		ug/L			04/28/21 09:52	1

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

Lab Sample ID: MB 280-534118/10
Matrix: Water
Analysis Batch: 534118

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		5.0		ug/L			04/28/21 09:52	1
Naphthalene	ND		1.0		ug/L			04/28/21 09:52	1
n-Butylbenzene	ND		1.0		ug/L			04/28/21 09:52	1
N-Propylbenzene	ND		1.0		ug/L			04/28/21 09:52	1
sec-Butylbenzene	ND		1.0		ug/L			04/28/21 09:52	1
Styrene	ND		1.0		ug/L			04/28/21 09:52	1
tert-Butylbenzene	ND		1.0		ug/L			04/28/21 09:52	1
Tetrachloroethene	ND		1.0		ug/L			04/28/21 09:52	1
Toluene	ND		1.0		ug/L			04/28/21 09:52	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/28/21 09:52	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/28/21 09:52	1
Trichloroethene	ND		1.0		ug/L			04/28/21 09:52	1
Trichlorofluoromethane	ND		2.0		ug/L			04/28/21 09:52	1
Vinyl chloride	ND		1.0		ug/L			04/28/21 09:52	1
Xylenes (total)	ND		2.0		ug/L			04/28/21 09:52	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/28/21 09:52*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 127*		*04/28/21 09:52*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*04/28/21 09:52*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 120*		*04/28/21 09:52*	*1*
Toluene-d8 (Surr)	*99*		*80 - 125*		*04/28/21 09:52*	*1*

Lab Sample ID: LCS 280-534118/5
Matrix: Water
Analysis Batch: 534118

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	24.4		ug/L		98	65 - 135
1,1,1-Trichloroethane	25.0	24.2		ug/L		97	65 - 135
1,1,2,2-Tetrachloroethane	25.0	23.4		ug/L		94	58 - 135
1,1,2-Trichloroethane	25.0	24.7		ug/L		99	64 - 135
1,1-Dichloroethane	25.0	25.4		ug/L		101	65 - 135
1,1-Dichloroethene	25.0	24.0		ug/L		96	65 - 136
1,1-Dichloropropene	25.0	24.2		ug/L		97	65 - 135
1,2,3-Trichlorobenzene	25.0	23.6		ug/L		94	60 - 135
1,2,3-Trichloropropane	25.0	22.2		ug/L		89	65 - 135
1,2,4-Trichlorobenzene	25.0	23.2		ug/L		93	58 - 135
1,2,4-Trimethylbenzene	25.0	24.9		ug/L		100	65 - 135
1,2-Dibromo-3-Chloropropane	25.0	20.9		ug/L		84	57 - 135
1,2-Dibromoethane	25.0	23.9		ug/L		96	65 - 135
1,2-Dichlorobenzene	25.0	24.1		ug/L		97	65 - 135
1,2-Dichloroethane	25.0	22.8		ug/L		91	65 - 135
1,2-Dichloropropane	25.0	25.5		ug/L		102	64 - 135
1,3,5-Trimethylbenzene	25.0	24.9		ug/L		100	65 - 135
1,3-Dichlorobenzene	25.0	24.5		ug/L		98	65 - 135

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

Lab Sample ID: LCS 280-534118/5
Matrix: Water
Analysis Batch: 534118

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichloropropane	25.0	24.4		ug/L		98	64 - 135
1,4-Dichlorobenzene	25.0	23.6		ug/L		94	65 - 135
2,2-Dichloropropane	25.0	25.4		ug/L		102	65 - 135
2-Butanone (MEK)	100	85.3		ug/L		85	44 - 177
2-Chlorotoluene	25.0	24.6		ug/L		99	65 - 135
2-Hexanone	100	81.1		ug/L		81	57 - 139
4-Chlorotoluene	25.0	24.0		ug/L		96	65 - 135
4-Isopropyltoluene	25.0	24.9		ug/L		100	65 - 135
4-Methyl-2-pentanone	100	84.0		ug/L		84	60 - 150
Acetone	100	80.9		ug/L		81	39 - 156
Benzene	25.0	24.7		ug/L		99	65 - 135
Bromobenzene	25.0	24.2		ug/L		97	65 - 135
Bromochloromethane	25.0	27.5		ug/L		110	65 - 135
Bromodichloromethane	25.0	25.0		ug/L		100	65 - 135
Bromoform	25.0	22.1		ug/L		88	62 - 135
Bromomethane	25.0	29.4		ug/L		118	45 - 135
Carbon disulfide	25.0	24.1		ug/L		96	55 - 143
Carbon tetrachloride	25.0	25.0		ug/L		100	65 - 135
Chlorobenzene	25.0	24.6		ug/L		99	65 - 135
Chloroethane	25.0	26.8		ug/L		107	46 - 136
Chloroform	25.0	25.0		ug/L		100	65 - 135
Chloromethane	25.0	27.0		ug/L		108	34 - 145
cis-1,2-Dichloroethene	25.0	24.3		ug/L		97	65 - 135
cis-1,3-Dichloropropene	25.0	25.0		ug/L		100	65 - 135
Dibromochloromethane	25.0	25.9		ug/L		104	65 - 135
Dibromomethane	25.0	23.8		ug/L		95	65 - 135
Dichlorodifluoromethane	25.0	28.1		ug/L		112	43 - 142
Ethylbenzene	25.0	25.1		ug/L		100	65 - 135
Hexachlorobutadiene	25.0	24.4		ug/L		98	65 - 135
Isopropylbenzene	25.0	24.2		ug/L		97	65 - 135
Methylene Chloride	25.0	24.5		ug/L		98	54 - 141
Naphthalene	25.0	22.0		ug/L		88	42 - 135
n-Butylbenzene	25.0	24.2		ug/L		97	64 - 135
N-Propylbenzene	25.0	24.9		ug/L		100	65 - 135
sec-Butylbenzene	25.0	24.9		ug/L		100	64 - 135
Styrene	25.0	25.4		ug/L		102	65 - 135
tert-Butylbenzene	25.0	24.5		ug/L		98	65 - 135
Tetrachloroethene	25.0	24.5		ug/L		98	65 - 135
Toluene	25.0	24.9		ug/L		99	65 - 135
trans-1,2-Dichloroethene	25.0	24.3		ug/L		97	65 - 135
trans-1,3-Dichloropropene	25.0	25.2		ug/L		101	65 - 135
Trichloroethene	25.0	23.3		ug/L		93	65 - 135
Trichlorofluoromethane	25.0	24.5		ug/L		98	53 - 137
Vinyl chloride	25.0	24.0		ug/L		96	40 - 137

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 127*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*

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

Lab Sample ID: LCS 280-534118/5
Matrix: Water
Analysis Batch: 534118

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane (Surr)	*100*		*77 - 120*
Toluene-d8 (Surr)	*99*		*80 - 125*

Lab Sample ID: LCSD 280-534118/6
Matrix: Water
Analysis Batch: 534118

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane			25.0	24.3		ug/L		97	65 - 135	0	20
1,1,1-Trichloroethane			25.0	23.9		ug/L		96	65 - 135	1	20
1,1,2,2-Tetrachloroethane			25.0	23.0		ug/L		92	58 - 135	2	20
1,1,2-Trichloroethane			25.0	24.3		ug/L		97	64 - 135	2	27
1,1-Dichloroethane			25.0	24.7		ug/L		99	65 - 135	3	21
1,1-Dichloroethene			25.0	23.5		ug/L		94	65 - 136	2	20
1,1-Dichloropropene			25.0	23.4		ug/L		94	65 - 135	3	21
1,2,3-Trichlorobenzene			25.0	23.8		ug/L		95	60 - 135	1	36
1,2,3-Trichloropropane			25.0	22.7		ug/L		91	65 - 135	2	23
1,2,4-Trichlorobenzene			25.0	23.0		ug/L		92	58 - 135	1	25
1,2,4-Trimethylbenzene			25.0	24.6		ug/L		98	65 - 135	1	20
1,2-Dibromo-3-Chloropropane			25.0	20.8		ug/L		83	57 - 135	1	22
1,2-Dibromoethane			25.0	23.8		ug/L		95	65 - 135	1	27
1,2-Dichlorobenzene			25.0	24.1		ug/L		96	65 - 135	0	20
1,2-Dichloroethane			25.0	22.6		ug/L		90	65 - 135	1	20
1,2-Dichloropropane			25.0	24.8		ug/L		99	64 - 135	3	20
1,3,5-Trimethylbenzene			25.0	24.4		ug/L		98	65 - 135	2	20
1,3-Dichlorobenzene			25.0	24.2		ug/L		97	65 - 135	1	20
1,3-Dichloropropane			25.0	24.2		ug/L		97	64 - 135	1	20
1,4-Dichlorobenzene			25.0	23.5		ug/L		94	65 - 135	0	23
2,2-Dichloropropane			25.0	24.7		ug/L		99	65 - 135	3	20
2-Butanone (MEK)			100	84.1		ug/L		84	44 - 177	1	32
2-Chlorotoluene			25.0	24.4		ug/L		98	65 - 135	1	20
2-Hexanone			100	80.5		ug/L		80	57 - 139	1	25
4-Chlorotoluene			25.0	23.9		ug/L		96	65 - 135	0	20
4-Isopropyltoluene			25.0	24.3		ug/L		97	65 - 135	2	20
4-Methyl-2-pentanone			100	82.1		ug/L		82	60 - 150	2	22
Acetone			100	80.3		ug/L		80	39 - 156	1	23
Benzene			25.0	24.1		ug/L		96	65 - 135	2	20
Bromobenzene			25.0	23.7		ug/L		95	65 - 135	2	26
Bromochloromethane			25.0	27.4		ug/L		110	65 - 135	0	29
Bromodichloromethane			25.0	24.8		ug/L		99	65 - 135	1	20
Bromoform			25.0	21.6		ug/L		86	62 - 135	2	27
Bromomethane			25.0	28.9		ug/L		115	45 - 135	2	33
Carbon disulfide			25.0	23.6		ug/L		94	55 - 143	2	20
Carbon tetrachloride			25.0	23.7		ug/L		95	65 - 135	5	21
Chlorobenzene			25.0	24.4		ug/L		98	65 - 135	1	20
Chloroethane			25.0	26.8		ug/L		107	46 - 136	0	25
Chloroform			25.0	24.4		ug/L		98	65 - 135	3	20
Chloromethane			25.0	26.5		ug/L		106	34 - 145	2	24

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

Lab Sample ID: LCSD 280-534118/6
Matrix: Water
Analysis Batch: 534118

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,2-Dichloroethene			25.0	24.0		ug/L		96	65 - 135	2	20
cis-1,3-Dichloropropene			25.0	24.8		ug/L		99	65 - 135	1	26
Dibromochloromethane			25.0	26.0		ug/L		104	65 - 135	1	20
Dibromomethane			25.0	23.3		ug/L		93	65 - 135	2	26
Dichlorodifluoromethane			25.0	26.8		ug/L		107	43 - 142	5	30
Ethylbenzene			25.0	24.3		ug/L		97	65 - 135	3	20
Hexachlorobutadiene			25.0	24.5		ug/L		98	65 - 135	0	25
Isopropylbenzene			25.0	23.7		ug/L		95	65 - 135	2	20
Methylene Chloride			25.0	24.1		ug/L		96	54 - 141	2	26
Naphthalene			25.0	21.4		ug/L		86	42 - 135	3	23
n-Butylbenzene			25.0	23.6		ug/L		94	64 - 135	3	21
N-Propylbenzene			25.0	24.2		ug/L		97	65 - 135	3	20
sec-Butylbenzene			25.0	24.5		ug/L		98	64 - 135	2	21
Styrene			25.0	25.1		ug/L		100	65 - 135	1	26
tert-Butylbenzene			25.0	23.8		ug/L		95	65 - 135	3	21
Tetrachloroethene			25.0	24.4		ug/L		97	65 - 135	1	20
Toluene			25.0	24.4		ug/L		98	65 - 135	2	20
trans-1,2-Dichloroethene			25.0	23.0		ug/L		92	65 - 135	5	24
trans-1,3-Dichloropropene			25.0	24.9		ug/L		99	65 - 135	1	26
Trichloroethene			25.0	23.0		ug/L		92	65 - 135	1	20
Trichlorofluoromethane			25.0	23.9		ug/L		96	53 - 137	2	27
Vinyl chloride			25.0	24.0		ug/L		96	40 - 137	0	24

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 127*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*
Dibromofluoromethane (Surr)	*101*		*77 - 120*
Toluene-d8 (Surr)	*100*		*80 - 125*

Lab Sample ID: MB 280-534267/10
Matrix: Water
Analysis Batch: 534267

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/29/21 09:33	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/29/21 09:33	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/29/21 09:33	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/29/21 09:33	1
1,1-Dichloroethane	ND		1.0		ug/L			04/29/21 09:33	1
1,1-Dichloroethene	ND		1.0		ug/L			04/29/21 09:33	1
1,1-Dichloropropene	ND		1.0		ug/L			04/29/21 09:33	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/29/21 09:33	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/29/21 09:33	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/29/21 09:33	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/29/21 09:33	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			04/29/21 09:33	1
1,2-Dibromoethane	ND		1.0		ug/L			04/29/21 09:33	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/29/21 09:33	1

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

Lab Sample ID: MB 280-534267/10
Matrix: Water
Analysis Batch: 534267

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		1.0		ug/L			04/29/21 09:33	1
1,2-Dichloropropane	ND		1.0		ug/L			04/29/21 09:33	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/29/21 09:33	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/29/21 09:33	1
1,3-Dichloropropane	ND		1.0		ug/L			04/29/21 09:33	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/29/21 09:33	1
2,2-Dichloropropane	ND		5.0		ug/L			04/29/21 09:33	1
2-Butanone (MEK)	ND		6.0		ug/L			04/29/21 09:33	1
2-Chlorotoluene	ND		1.0		ug/L			04/29/21 09:33	1
2-Hexanone	ND		5.0		ug/L			04/29/21 09:33	1
4-Chlorotoluene	ND		1.0		ug/L			04/29/21 09:33	1
4-Isopropyltoluene	ND		1.0		ug/L			04/29/21 09:33	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/29/21 09:33	1
Acetone	ND		10		ug/L			04/29/21 09:33	1
Benzene	ND		1.0		ug/L			04/29/21 09:33	1
Bromobenzene	ND		1.0		ug/L			04/29/21 09:33	1
Bromochloromethane	ND		1.0		ug/L			04/29/21 09:33	1
Bromodichloromethane	ND		1.0		ug/L			04/29/21 09:33	1
Bromoform	ND		1.0		ug/L			04/29/21 09:33	1
Bromomethane	ND		2.0		ug/L			04/29/21 09:33	1
Carbon disulfide	ND		2.0		ug/L			04/29/21 09:33	1
Carbon tetrachloride	ND		1.0		ug/L			04/29/21 09:33	1
Chlorobenzene	ND		1.0		ug/L			04/29/21 09:33	1
Chloroethane	ND		2.0		ug/L			04/29/21 09:33	1
Chloroform	ND		1.0		ug/L			04/29/21 09:33	1
Chloromethane	ND		2.0		ug/L			04/29/21 09:33	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/29/21 09:33	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/29/21 09:33	1
Dibromochloromethane	ND		1.0		ug/L			04/29/21 09:33	1
Dibromomethane	ND		1.0		ug/L			04/29/21 09:33	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/29/21 09:33	1
Ethylbenzene	ND		1.0		ug/L			04/29/21 09:33	1
Hexachlorobutadiene	ND		1.0		ug/L			04/29/21 09:33	1
Isopropylbenzene	ND		1.0		ug/L			04/29/21 09:33	1
Methylene Chloride	ND		5.0		ug/L			04/29/21 09:33	1
Naphthalene	ND		1.0		ug/L			04/29/21 09:33	1
n-Butylbenzene	ND		1.0		ug/L			04/29/21 09:33	1
N-Propylbenzene	ND		1.0		ug/L			04/29/21 09:33	1
sec-Butylbenzene	ND		1.0		ug/L			04/29/21 09:33	1
Styrene	ND		1.0		ug/L			04/29/21 09:33	1
tert-Butylbenzene	ND		1.0		ug/L			04/29/21 09:33	1
Tetrachloroethene	ND		1.0		ug/L			04/29/21 09:33	1
Toluene	ND		1.0		ug/L			04/29/21 09:33	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/29/21 09:33	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/29/21 09:33	1
Trichloroethene	ND		1.0		ug/L			04/29/21 09:33	1
Trichlorofluoromethane	ND		2.0		ug/L			04/29/21 09:33	1
Vinyl chloride	ND		1.0		ug/L			04/29/21 09:33	1
Xylenes (total)	ND		2.0		ug/L			04/29/21 09:33	1

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

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					04/29/21 09:33	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		70 - 127		04/29/21 09:33	1
4-Bromofluorobenzene (Surr)	95		78 - 120		04/29/21 09:33	1
Dibromofluoromethane (Surr)	102		77 - 120		04/29/21 09:33	1
Toluene-d8 (Surr)	96		80 - 125		04/29/21 09:33	1

Lab Sample ID: LCS 280-534267/5
Matrix: Water
Analysis Batch: 534267

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	24.1		ug/L		96	65 - 135
1,1,1-Trichloroethane	25.0	24.1		ug/L		96	65 - 135
1,1,2,2-Tetrachloroethane	25.0	22.5		ug/L		90	58 - 135
1,1,2-Trichloroethane	25.0	24.3		ug/L		97	64 - 135
1,1-Dichloroethane	25.0	25.1		ug/L		100	65 - 135
1,1-Dichloroethene	25.0	23.6		ug/L		94	65 - 136
1,1-Dichloropropene	25.0	23.5		ug/L		94	65 - 135
1,2,3-Trichlorobenzene	25.0	22.7		ug/L		91	60 - 135
1,2,3-Trichloropropane	25.0	22.5		ug/L		90	65 - 135
1,2,4-Trichlorobenzene	25.0	21.8		ug/L		87	58 - 135
1,2,4-Trimethylbenzene	25.0	23.7		ug/L		95	65 - 135
1,2-Dibromo-3-Chloropropane	25.0	20.0		ug/L		80	57 - 135
1,2-Dibromoethane	25.0	23.5		ug/L		94	65 - 135
1,2-Dichlorobenzene	25.0	23.5		ug/L		94	65 - 135
1,2-Dichloroethane	25.0	22.6		ug/L		90	65 - 135
1,2-Dichloropropane	25.0	24.7		ug/L		99	64 - 135
1,3,5-Trimethylbenzene	25.0	23.5		ug/L		94	65 - 135
1,3-Dichlorobenzene	25.0	23.3		ug/L		93	65 - 135
1,3-Dichloropropane	25.0	23.7		ug/L		95	64 - 135
1,4-Dichlorobenzene	25.0	22.6		ug/L		90	65 - 135
2,2-Dichloropropane	25.0	23.8		ug/L		95	65 - 135
2-Butanone (MEK)	100	85.0		ug/L		85	44 - 177
2-Chlorotoluene	25.0	23.8		ug/L		95	65 - 135
2-Hexanone	100	78.7		ug/L		79	57 - 139
4-Chlorotoluene	25.0	23.6		ug/L		94	65 - 135
4-Isopropyltoluene	25.0	23.6		ug/L		95	65 - 135
4-Methyl-2-pentanone	100	84.5		ug/L		85	60 - 150
Acetone	100	80.4		ug/L		80	39 - 156
Benzene	25.0	24.3		ug/L		97	65 - 135
Bromobenzene	25.0	23.2		ug/L		93	65 - 135
Bromochloromethane	25.0	27.6		ug/L		111	65 - 135
Bromodichloromethane	25.0	24.9		ug/L		100	65 - 135
Bromoform	25.0	21.4		ug/L		86	62 - 135
Bromomethane	25.0	31.2		ug/L		125	45 - 135
Carbon disulfide	25.0	23.5		ug/L		94	55 - 143
Carbon tetrachloride	25.0	24.1		ug/L		96	65 - 135
Chlorobenzene	25.0	23.8		ug/L		95	65 - 135
Chloroethane	25.0	25.5		ug/L		102	46 - 136

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

Lab Sample ID: LCS 280-534267/5
Matrix: Water
Analysis Batch: 534267

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroform	25.0	24.7		ug/L		99	65 - 135
Chloromethane	25.0	25.3		ug/L		101	34 - 145
cis-1,2-Dichloroethene	25.0	24.0		ug/L		96	65 - 135
cis-1,3-Dichloropropene	25.0	24.0		ug/L		96	65 - 135
Dibromochloromethane	25.0	24.9		ug/L		99	65 - 135
Dibromomethane	25.0	23.5		ug/L		94	65 - 135
Dichlorodifluoromethane	25.0	26.1		ug/L		105	43 - 142
Ethylbenzene	25.0	24.1		ug/L		96	65 - 135
Hexachlorobutadiene	25.0	23.2		ug/L		93	65 - 135
Isopropylbenzene	25.0	23.2		ug/L		93	65 - 135
Methylene Chloride	25.0	24.1		ug/L		96	54 - 141
Naphthalene	25.0	20.4		ug/L		82	42 - 135
n-Butylbenzene	25.0	22.6		ug/L		91	64 - 135
N-Propylbenzene	25.0	23.2		ug/L		93	65 - 135
sec-Butylbenzene	25.0	23.4		ug/L		93	64 - 135
Styrene	25.0	24.7		ug/L		99	65 - 135
tert-Butylbenzene	25.0	22.9		ug/L		92	65 - 135
Tetrachloroethene	25.0	23.4		ug/L		94	65 - 135
Toluene	25.0	24.4		ug/L		97	65 - 135
trans-1,2-Dichloroethene	25.0	23.3		ug/L		93	65 - 135
trans-1,3-Dichloropropene	25.0	25.0		ug/L		100	65 - 135
Trichloroethene	25.0	22.5		ug/L		90	65 - 135
Trichlorofluoromethane	25.0	23.4		ug/L		94	53 - 137
Vinyl chloride	25.0	23.0		ug/L		92	40 - 137

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 127*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*
Dibromofluoromethane (Surr)	*101*		*77 - 120*
Toluene-d8 (Surr)	*98*		*80 - 125*

Lab Sample ID: LCSD 280-534267/6
Matrix: Water
Analysis Batch: 534267

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	24.0		ug/L		96	65 - 135	1	20
1,1,1-Trichloroethane	25.0	24.5		ug/L		98	65 - 135	2	20
1,1,2,2-Tetrachloroethane	25.0	22.3		ug/L		89	58 - 135	1	20
1,1,2-Trichloroethane	25.0	24.4		ug/L		98	64 - 135	0	27
1,1-Dichloroethane	25.0	25.4		ug/L		101	65 - 135	1	21
1,1-Dichloroethene	25.0	24.2		ug/L		97	65 - 136	2	20
1,1-Dichloropropene	25.0	24.0		ug/L		96	65 - 135	2	21
1,2,3-Trichlorobenzene	25.0	23.0		ug/L		92	60 - 135	1	36
1,2,3-Trichloropropane	25.0	22.5		ug/L		90	65 - 135	0	23
1,2,4-Trichlorobenzene	25.0	22.5		ug/L		90	58 - 135	3	25
1,2,4-Trimethylbenzene	25.0	24.3		ug/L		97	65 - 135	3	20
1,2-Dibromo-3-Chloropropane	25.0	21.0		ug/L		84	57 - 135	5	22

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

Lab Sample ID: LCSD 280-534267/6
Matrix: Water
Analysis Batch: 534267

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromoethane	25.0	23.7		ug/L		95	65 - 135	1	27
1,2-Dichlorobenzene	25.0	23.9		ug/L		96	65 - 135	2	20
1,2-Dichloroethane	25.0	22.9		ug/L		92	65 - 135	1	20
1,2-Dichloropropane	25.0	25.1		ug/L		100	64 - 135	1	20
1,3,5-Trimethylbenzene	25.0	24.1		ug/L		96	65 - 135	2	20
1,3-Dichlorobenzene	25.0	23.8		ug/L		95	65 - 135	2	20
1,3-Dichloropropane	25.0	23.8		ug/L		95	64 - 135	0	20
1,4-Dichlorobenzene	25.0	23.0		ug/L		92	65 - 135	2	23
2,2-Dichloropropane	25.0	24.4		ug/L		98	65 - 135	2	20
2-Butanone (MEK)	100	86.0		ug/L		86	44 - 177	1	32
2-Chlorotoluene	25.0	23.8		ug/L		95	65 - 135	0	20
2-Hexanone	100	79.5		ug/L		80	57 - 139	1	25
4-Chlorotoluene	25.0	23.6		ug/L		94	65 - 135	0	20
4-Isopropyltoluene	25.0	24.3		ug/L		97	65 - 135	3	20
4-Methyl-2-pentanone	100	84.7		ug/L		85	60 - 150	0	22
Acetone	100	79.6		ug/L		80	39 - 156	1	23
Benzene	25.0	24.6		ug/L		99	65 - 135	1	20
Bromobenzene	25.0	23.8		ug/L		95	65 - 135	3	26
Bromochloromethane	25.0	27.8		ug/L		111	65 - 135	0	29
Bromodichloromethane	25.0	25.3		ug/L		101	65 - 135	1	20
Bromoform	25.0	21.4		ug/L		86	62 - 135	0	27
Bromomethane	25.0	29.8		ug/L		119	45 - 135	5	33
Carbon disulfide	25.0	23.9		ug/L		96	55 - 143	2	20
Carbon tetrachloride	25.0	24.5		ug/L		98	65 - 135	2	21
Chlorobenzene	25.0	23.9		ug/L		96	65 - 135	0	20
Chloroethane	25.0	26.9		ug/L		108	46 - 136	5	25
Chloroform	25.0	25.2		ug/L		101	65 - 135	2	20
Chloromethane	25.0	26.3		ug/L		105	34 - 145	4	24
cis-1,2-Dichloroethene	25.0	24.5		ug/L		98	65 - 135	2	20
cis-1,3-Dichloropropene	25.0	24.2		ug/L		97	65 - 135	1	26
Dibromochloromethane	25.0	25.3		ug/L		101	65 - 135	2	20
Dibromomethane	25.0	23.5		ug/L		94	65 - 135	0	26
Dichlorodifluoromethane	25.0	29.5		ug/L		118	43 - 142	12	30
Ethylbenzene	25.0	24.5		ug/L		98	65 - 135	2	20
Hexachlorobutadiene	25.0	24.0		ug/L		96	65 - 135	3	25
Isopropylbenzene	25.0	23.5		ug/L		94	65 - 135	1	20
Methylene Chloride	25.0	24.3		ug/L		97	54 - 141	1	26
Naphthalene	25.0	21.1		ug/L		84	42 - 135	3	23
n-Butylbenzene	25.0	23.3		ug/L		93	64 - 135	3	21
N-Propylbenzene	25.0	23.9		ug/L		96	65 - 135	3	20
sec-Butylbenzene	25.0	24.2		ug/L		97	64 - 135	3	21
Styrene	25.0	24.7		ug/L		99	65 - 135	0	26
tert-Butylbenzene	25.0	23.6		ug/L		94	65 - 135	3	21
Tetrachloroethene	25.0	24.1		ug/L		97	65 - 135	3	20
Toluene	25.0	24.8		ug/L		99	65 - 135	2	20
trans-1,2-Dichloroethene	25.0	24.0		ug/L		96	65 - 135	3	24
trans-1,3-Dichloropropene	25.0	25.1		ug/L		101	65 - 135	1	26
Trichloroethene	25.0	22.9		ug/L		92	65 - 135	2	20
Trichlorofluoromethane	25.0	26.1		ug/L		104	53 - 137	11	27

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

Lab Sample ID: LCSD 280-534267/6
Matrix: Water
Analysis Batch: 534267

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vinyl chloride			25.0	24.6		ug/L		99	40 - 137	7	24

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 127*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*
Dibromofluoromethane (Surr)	*101*		*77 - 120*
Toluene-d8 (Surr)	*98*		*80 - 125*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 280-533566/1-A
Matrix: Water
Analysis Batch: 534189

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 533566

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	ND		100		ug/L		04/27/21 16:15	04/28/21 08:53	1
Silver	ND		3.0		ug/L		04/27/21 16:15	04/28/21 08:53	1
Zinc	ND		26		ug/L		04/27/21 16:15	04/28/21 08:53	1

Lab Sample ID: LCS 280-533566/2-A
Matrix: Water
Analysis Batch: 534189

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 533566

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silicon			2000	2050		ug/L		102	90 - 110
Silver			50.0	53.2		ug/L		106	86 - 115
Zinc			500	492		ug/L		98	85 - 111

Lab Sample ID: 280-147599-Q-2-C MS
Matrix: Water
Analysis Batch: 534189

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 533566

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silicon	67000		2000	68500	4	ug/L		79	79 - 140
Silver	ND		50.0	57.1		ug/L		114	75 - 141
Zinc	ND		500	494		ug/L		98	60 - 137

Lab Sample ID: 280-147599-Q-2-D MSD
Matrix: Water
Analysis Batch: 534189

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 533566

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silicon	67000		2000	70600	4	ug/L		185	79 - 140	3	20
Silver	ND		50.0	56.8		ug/L		114	75 - 141	1	20
Zinc	ND		500	485		ug/L		96	60 - 137	2	20

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 280-533806/1-A
Matrix: Water
Analysis Batch: 534364

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 533806

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		500		ug/L		04/28/21 08:38	04/28/21 16:25	1
Iron	ND		30		ug/L		04/28/21 08:38	04/28/21 16:25	1
Magnesium	ND		200		ug/L		04/28/21 08:38	04/28/21 16:25	1
Manganese	ND		3.0		ug/L		04/28/21 08:38	04/28/21 16:25	1
Potassium	ND		500		ug/L		04/28/21 08:38	04/28/21 16:25	1
Sodium	ND		1000		ug/L		04/28/21 08:38	04/28/21 16:25	1

Lab Sample ID: LCS 280-533806/2-A
Matrix: Water
Analysis Batch: 534364

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 533806

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	50000	49200		ug/L		98	90 - 111
Iron	10000	9900		ug/L		99	89 - 115
Magnesium	50000	49200		ug/L		98	90 - 113
Manganese	1000	1020		ug/L		102	90 - 110
Potassium	50000	50000		ug/L		100	89 - 114
Sodium	50000	45900		ug/L		92	90 - 115

Lab Sample ID: MB 280-534307/1-A
Matrix: Water
Analysis Batch: 534717

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 534307

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		500		ug/L		04/29/21 16:00	04/30/21 10:56	1
Iron	ND		30		ug/L		04/29/21 16:00	04/30/21 10:56	1
Magnesium	ND		200		ug/L		04/29/21 16:00	04/30/21 10:56	1
Manganese	ND		3.0		ug/L		04/29/21 16:00	04/30/21 10:56	1
Potassium	ND		500		ug/L		04/29/21 16:00	04/30/21 10:56	1
Sodium	ND		1000		ug/L		04/29/21 16:00	04/30/21 10:56	1

Lab Sample ID: LCS 280-534307/2-A
Matrix: Water
Analysis Batch: 534717

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 534307

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	50000	49500		ug/L		99	90 - 111
Iron	10000	9830		ug/L		98	89 - 115
Magnesium	50000	48600		ug/L		97	90 - 113
Manganese	1000	976		ug/L		98	90 - 110
Potassium	50000	48400		ug/L		97	89 - 114
Sodium	50000	48200		ug/L		96	90 - 115

Lab Sample ID: 280-147511-N-1-B MS
Matrix: Water
Analysis Batch: 534364

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 533806

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	28000	^2	50000	78600		ug/L		101	48 - 153

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 280-147511-N-1-B MS
Matrix: Water
Analysis Batch: 534364

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 533806

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	35		10000	10200		ug/L		102	52 - 155
Magnesium	12000		50000	63300		ug/L		102	62 - 146
Manganese	330		1000	1340		ug/L		101	79 - 121
Potassium	5400		50000	57100		ug/L		103	76 - 132
Sodium	42000		50000	91200		ug/L		98	70 - 203

Lab Sample ID: 280-147511-N-1-C MSD
Matrix: Water
Analysis Batch: 534364

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 533806

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium	28000	^2	50000	79800		ug/L		104	48 - 153	2	20
Iron	35		10000	10300		ug/L		103	52 - 155	1	20
Magnesium	12000		50000	64200		ug/L		104	62 - 146	1	20
Manganese	330		1000	1350		ug/L		101	79 - 121	0	20
Potassium	5400		50000	58200		ug/L		105	76 - 132	2	20
Sodium	42000		50000	92900		ug/L		102	70 - 203	2	20

Lab Sample ID: 280-147607-D-2-I MS
Matrix: Water
Analysis Batch: 534717

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 534307

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	36000		50000	84300		ug/L		96	48 - 153
Iron	ND		10000	9790		ug/L		98	52 - 155
Magnesium	62000		50000	111000		ug/L		98	62 - 146
Manganese	4.1		1000	988		ug/L		98	79 - 121
Potassium	9900		50000	58700		ug/L		98	76 - 132
Sodium	120000		50000	174000		ug/L		97	70 - 203

Lab Sample ID: 280-147607-D-2-J MSD
Matrix: Water
Analysis Batch: 534717

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 534307

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium	36000		50000	86600		ug/L		101	48 - 153	3	20
Iron	ND		10000	9990		ug/L		100	52 - 155	2	20
Magnesium	62000		50000	114000		ug/L		104	62 - 146	3	20
Manganese	4.1		1000	1000		ug/L		100	79 - 121	1	20
Potassium	9900		50000	60200		ug/L		101	76 - 132	3	20
Sodium	120000		50000	179000		ug/L		109	70 - 203	3	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 280-533107/1-A
Matrix: Water
Analysis Batch: 534277

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 533107

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.60		ug/L		04/23/21 09:05	04/28/21 21:17	1

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

Lab Sample ID: MB 280-533107/1-A
Matrix: Water
Analysis Batch: 534277

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 533107

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		1.0		ug/L		04/23/21 09:05	04/28/21 21:17	1
Beryllium	ND		0.40		ug/L		04/23/21 09:05	04/28/21 21:17	1
Cadmium	ND		0.30		ug/L		04/23/21 09:05	04/28/21 21:17	1
Chromium	ND		2.0		ug/L		04/23/21 09:05	04/28/21 21:17	1
Cobalt	ND		0.20		ug/L		04/23/21 09:05	04/28/21 21:17	1
Nickel	ND		1.0		ug/L		04/23/21 09:05	04/28/21 21:17	1

Lab Sample ID: MB 280-533107/1-A
Matrix: Water
Analysis Batch: 534866

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 533107

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	ND		1.0		ug/L		04/23/21 09:05	05/04/21 12:23	1
Copper	ND		1.0		ug/L		04/23/21 09:05	05/04/21 12:23	1
Lead	ND		0.50		ug/L		04/23/21 09:05	05/04/21 12:23	1
Selenium	ND		1.0		ug/L		04/23/21 09:05	05/04/21 12:23	1
Thallium	ND		0.20		ug/L		04/23/21 09:05	05/04/21 12:23	1
Vanadium	ND		3.0		ug/L		04/23/21 09:05	05/04/21 12:23	1

Lab Sample ID: LCS 280-533107/2-A
Matrix: Water
Analysis Batch: 534277

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 533107

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	40.0	37.6		ug/L		94	85 - 115
Arsenic	40.0	37.5		ug/L		94	85 - 117
Beryllium	40.0	36.8		ug/L		92	80 - 125
Cadmium	40.0	38.2		ug/L		96	85 - 115
Chromium	40.0	41.7		ug/L		104	84 - 121
Cobalt	40.0	40.1		ug/L		100	85 - 120
Nickel	40.0	39.2		ug/L		98	85 - 119

Lab Sample ID: LCS 280-533107/2-A
Matrix: Water
Analysis Batch: 534866

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 533107

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	40.0	40.6		ug/L		101	85 - 118
Copper	40.0	39.2		ug/L		98	85 - 119
Lead	40.0	39.7		ug/L		99	85 - 118
Selenium	40.0	39.2		ug/L		98	77 - 122
Thallium	40.0	35.9		ug/L		90	85 - 118
Vanadium	40.0	39.2		ug/L		98	85 - 120

Lab Sample ID: 280-147602-2 MS
Matrix: Water
Analysis Batch: 534277

Client Sample ID: 1/5P
Prep Type: Total Recoverable
Prep Batch: 533107

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	4.4		40.0	43.0		ug/L		96	85 - 115

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

Lab Sample ID: 280-147602-2 MS
Matrix: Water
Analysis Batch: 534277

Client Sample ID: 1/5P
Prep Type: Total Recoverable
Prep Batch: 533107

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Beryllium	ND	F1 F2	40.0	34.8		ug/L		87	80 - 125
Cadmium	ND		40.0	37.6		ug/L		94	85 - 115
Chromium	100		40.0	150		ug/L		119	84 - 121
Cobalt	37		40.0	77.4		ug/L		100	85 - 120
Nickel	91		40.0	133		ug/L		107	85 - 119

Lab Sample ID: 280-147602-2 MS
Matrix: Water
Analysis Batch: 534866

Client Sample ID: 1/5P
Prep Type: Total Recoverable
Prep Batch: 533107

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	230		40.0	258	4	ug/L		74	85 - 117
Barium	690		40.0	703	4	ug/L		43	85 - 118
Copper	ND		40.0	37.4		ug/L		94	85 - 119
Lead	1.3		40.0	37.6		ug/L		91	85 - 118
Selenium	2.0		40.0	38.8		ug/L		92	77 - 122
Thallium	ND	F1	40.0	33.7	F1	ug/L		84	85 - 118
Vanadium	120	F1	40.0	155	F1	ug/L		74	85 - 120

Lab Sample ID: 280-147602-2 MSD
Matrix: Water
Analysis Batch: 534277

Client Sample ID: 1/5P
Prep Type: Total Recoverable
Prep Batch: 533107

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	4.4		40.0	43.8		ug/L		99	85 - 115	2	20
Beryllium	ND	F1 F2	40.0	21.9	F1 F2	ug/L		55	80 - 125	46	20
Cadmium	ND		40.0	36.9		ug/L		92	85 - 115	2	20
Chromium	100		40.0	150		ug/L		118	84 - 121	0	20
Cobalt	37		40.0	74.4		ug/L		93	85 - 120	4	20
Nickel	91		40.0	132		ug/L		103	85 - 119	1	20

Lab Sample ID: 280-147602-2 MSD
Matrix: Water
Analysis Batch: 534866

Client Sample ID: 1/5P
Prep Type: Total Recoverable
Prep Batch: 533107

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	230		40.0	269	4	ug/L		101	85 - 117	4	20
Barium	690		40.0	735	4	ug/L		122	85 - 118	4	20
Copper	ND		40.0	38.9		ug/L		97	85 - 119	4	20
Lead	1.3		40.0	38.2		ug/L		92	85 - 118	1	20
Selenium	2.0		40.0	39.4		ug/L		93	77 - 122	1	20
Thallium	ND	F1	40.0	34.1		ug/L		85	85 - 118	1	20
Vanadium	120	F1	40.0	162		ug/L		94	85 - 120	5	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 280-535742/6
Matrix: Water
Analysis Batch: 535742

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0		mg/L			05/11/21 16:38	1
Sulfate	ND		5.0		mg/L			05/11/21 16:38	1

Lab Sample ID: LCS 280-535742/4
Matrix: Water
Analysis Batch: 535742

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	100	98.4		mg/L		98	90 - 110
Sulfate	100	93.4		mg/L		93	90 - 110

Lab Sample ID: LCSD 280-535742/5
Matrix: Water
Analysis Batch: 535742

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	100	100		mg/L		100	90 - 110	2	10
Sulfate	100	95.4		mg/L		95	90 - 110	2	10

Lab Sample ID: MRL 280-535742/3
Matrix: Water
Analysis Batch: 535742

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	5.00	4.20		mg/L		84	50 - 150
Sulfate	5.00	ND		mg/L		81	50 - 150

Lab Sample ID: 280-147631-A-2 MS
Matrix: Water
Analysis Batch: 535742

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	180		250	477		mg/L		119	80 - 120
Sulfate	140		250	427		mg/L		113	80 - 120

Lab Sample ID: 280-147631-A-2 MSD
Matrix: Water
Analysis Batch: 535742

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	180		250	447		mg/L		107	80 - 120	7	20
Sulfate	140		250	396		mg/L		101	80 - 120	8	20

Lab Sample ID: 280-147631-A-4 MS
Matrix: Water
Analysis Batch: 535742

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	350		250	649		mg/L		119	80 - 120
Sulfate	5.3		250	255		mg/L		100	80 - 120

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 280-147631-A-4 MSD
Matrix: Water
Analysis Batch: 535742

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	350		250	625		mg/L		109	80 - 120	4	20
Sulfate	5.3		250	241		mg/L		94	80 - 120	5	20

Lab Sample ID: 280-147697-A-5 MS
Matrix: Water
Analysis Batch: 535742

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	160		50.0	214	E	mg/L		102	80 - 120
Sulfate	94		50.0	148		mg/L		108	80 - 120

Lab Sample ID: 280-147697-A-5 MSD
Matrix: Water
Analysis Batch: 535742

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	160		50.0	214	E	mg/L		101	80 - 120	0	20
Sulfate	94		50.0	148		mg/L		106	80 - 120	0	20

Lab Sample ID: 280-147631-A-2 DU
Matrix: Water
Analysis Batch: 535742

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	180		176		mg/L		1	15
Sulfate	140		142		mg/L		1	15

Lab Sample ID: 280-147631-A-4 DU
Matrix: Water
Analysis Batch: 535742

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	350		345		mg/L		2	15
Sulfate	5.3		5.29		mg/L		0.6	15

Lab Sample ID: 280-147697-A-5 DU
Matrix: Water
Analysis Batch: 535742

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	160		160		mg/L		2	15
Sulfate	94		92.3		mg/L		2	15

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-534560/101
Matrix: Water
Analysis Batch: 534560

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.040		mg/L			04/30/21 16:43	1

Lab Sample ID: MB 280-534560/31
Matrix: Water
Analysis Batch: 534560

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.040		mg/L			04/30/21 14:22	1

Lab Sample ID: MB 280-534560/66
Matrix: Water
Analysis Batch: 534560

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.040		mg/L			04/30/21 15:32	1

Lab Sample ID: LCS 280-534560/29
Matrix: Water
Analysis Batch: 534560

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia as N			2.50	2.29		mg/L		92	90 - 110		

Lab Sample ID: LCS 280-534560/64
Matrix: Water
Analysis Batch: 534560

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia as N			2.50	2.41		mg/L		97	90 - 110		

Lab Sample ID: LCS 280-534560/99
Matrix: Water
Analysis Batch: 534560

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia as N			2.50	2.45		mg/L		98	90 - 110		

Lab Sample ID: LCSD 280-534560/100
Matrix: Water
Analysis Batch: 534560

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N			2.50	2.43		mg/L		97	90 - 110	1	10

Lab Sample ID: LCSD 280-534560/30
Matrix: Water
Analysis Batch: 534560

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N			2.50	2.52		mg/L		101	90 - 110	9	10

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: LCSD 280-534560/65
Matrix: Water
Analysis Batch: 534560

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N			2.50	2.45		mg/L		98	90 - 110	2	10

Lab Sample ID: 280-147602-7 MS
Matrix: Water
Analysis Batch: 534560

Client Sample ID: 8S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N	ND		1.00	0.973		mg/L		97	90 - 110

Lab Sample ID: 280-147602-7 MSD
Matrix: Water
Analysis Batch: 534560

Client Sample ID: 8S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N	ND		1.00	0.948		mg/L		95	90 - 110	3	10

Lab Sample ID: MB 280-534766/91
Matrix: Water
Analysis Batch: 534766

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.040		mg/L			05/03/21 18:20	1

Lab Sample ID: LCS 280-534766/89
Matrix: Water
Analysis Batch: 534766

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N			2.50	2.47		mg/L		99	90 - 110

Lab Sample ID: LCSD 280-534766/90
Matrix: Water
Analysis Batch: 534766

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N			2.50	2.51		mg/L		100	90 - 110	2	10

Lab Sample ID: 280-147847-D-9 MS
Matrix: Water
Analysis Batch: 534766

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N	0.12	F1	1.00	1.01	F1	mg/L		89	90 - 110

Lab Sample ID: 280-147847-D-9 MSD
Matrix: Water
Analysis Batch: 534766

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N	0.12	F1	1.00	0.990	F1	mg/L		87	90 - 110	2	10

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-534909/60
Matrix: Water
Analysis Batch: 534909

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate/Nitrite	ND		0.050		mg/L			05/04/21 18:24	1

Lab Sample ID: LCS 280-534909/59
Matrix: Water
Analysis Batch: 534909

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate/Nitrite			5.00	5.12		mg/L		102	90 - 110		

Lab Sample ID: 280-147602-2 MS
Matrix: Water
Analysis Batch: 534909

Client Sample ID: 1/5P
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate/Nitrite	ND		4.00	3.70		mg/L		93	90 - 110		

Lab Sample ID: 280-147602-2 MSD
Matrix: Water
Analysis Batch: 534909

Client Sample ID: 1/5P
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate/Nitrite	ND		4.00	4.02		mg/L		100	90 - 110	8	10

Lab Sample ID: MB 280-535096/23
Matrix: Water
Analysis Batch: 535096

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate/Nitrite	ND		0.050		mg/L			05/05/21 19:50	1

Lab Sample ID: LCS 280-535096/21
Matrix: Water
Analysis Batch: 535096

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate/Nitrite			5.00	5.13		mg/L		103	90 - 110		

Lab Sample ID: LCSD 280-535096/22
Matrix: Water
Analysis Batch: 535096

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate/Nitrite			5.00	5.33		mg/L		107	90 - 110	4	10

Lab Sample ID: 280-147620-A-21 MS
Matrix: Water
Analysis Batch: 535096

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate/Nitrite	0.97		4.00	5.34		mg/L		109	90 - 110		

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: 280-147620-A-21 MSD
Matrix: Water
Analysis Batch: 535096

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate/Nitrite	0.97		4.00	5.37		mg/L		110	90 - 110	1	10

Method: 410.4 - COD

Lab Sample ID: MB 280-534289/36
Matrix: Water
Analysis Batch: 534289

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (COD)	ND		20		mg/L			04/29/21 08:55	1

Lab Sample ID: MB 280-534289/5
Matrix: Water
Analysis Batch: 534289

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (COD)	ND		20		mg/L			04/29/21 08:54	1

Lab Sample ID: LCS 280-534289/3
Matrix: Water
Analysis Batch: 534289

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand (COD)	100	91.7		mg/L		92	90 - 110

Lab Sample ID: LCS 280-534289/34
Matrix: Water
Analysis Batch: 534289

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand (COD)	100	95.9		mg/L		96	90 - 110

Lab Sample ID: LCSD 280-534289/35
Matrix: Water
Analysis Batch: 534289

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chemical Oxygen Demand (COD)	100	102		mg/L		102	90 - 110	6	11

Lab Sample ID: LCSD 280-534289/4
Matrix: Water
Analysis Batch: 534289

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chemical Oxygen Demand (COD)	100	93.5		mg/L		93	90 - 110	2	11

Method: 410.4 - COD (Continued)

Lab Sample ID: 280-147602-3 MS
Matrix: Water
Analysis Batch: 534289

Client Sample ID: 4/5S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand (COD)	66	F1	50.0	103	F1	mg/L		75	90 - 110

Lab Sample ID: 280-147602-3 MSD
Matrix: Water
Analysis Batch: 534289

Client Sample ID: 4/5S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chemical Oxygen Demand (COD)	66	F1	50.0	101	F1	mg/L		71	90 - 110	2	11

Lab Sample ID: MB 280-534683/5
Matrix: Water
Analysis Batch: 534683

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (COD)	ND		20		mg/L			05/03/21 10:49	1

Lab Sample ID: LCS 280-534683/3
Matrix: Water
Analysis Batch: 534683

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand (COD)	100	97.3		mg/L		97	90 - 110

Lab Sample ID: LCSD 280-534683/4
Matrix: Water
Analysis Batch: 534683

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chemical Oxygen Demand (COD)	100	98.7		mg/L		99	90 - 110	1	11

Lab Sample ID: 280-147607-E-2 MS
Matrix: Water
Analysis Batch: 534683

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand (COD)	ND	F1	50.0	55.8	F1	mg/L		112	90 - 110

Lab Sample ID: 280-147607-E-2 MSD
Matrix: Water
Analysis Batch: 534683

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chemical Oxygen Demand (COD)	ND	F1	50.0	56.5	F1	mg/L		113	90 - 110	1	11

Method: 9040B - pH

Lab Sample ID: LCS 280-533185/30
Matrix: Water
Analysis Batch: 533185

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH adj. to 25 deg C	7.00	7.1		SU		101	99 - 101

Lab Sample ID: LCS 280-533185/4
Matrix: Water
Analysis Batch: 533185

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH adj. to 25 deg C	7.00	7.1		SU		101	99 - 101

Lab Sample ID: 280-147602-7 DU
Matrix: Water
Analysis Batch: 533185

Client Sample ID: 8S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH adj. to 25 deg C	7.7	HF	7.6		SU		1	5

Method: 9050A - Specific Conductance

Lab Sample ID: MB 280-533352/5
Matrix: Water
Analysis Batch: 533352

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	ND		2.0		umhos/cm			04/21/21 12:16	1

Lab Sample ID: LCS 280-533352/3
Matrix: Water
Analysis Batch: 533352

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Specific Conductance	1410	1440		umhos/cm		102	90 - 110

Lab Sample ID: LCSD 280-533352/4
Matrix: Water
Analysis Batch: 533352

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Specific Conductance	1410	1430		umhos/cm		102	90 - 110	1	10

Lab Sample ID: 280-147467-J-2 DU
Matrix: Water
Analysis Batch: 533352

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Specific Conductance	97		96.4		umhos/cm		0.3	10

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 280-535008/4
Matrix: Water
Analysis Batch: 535008

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Average	ND		1.0		mg/L			05/04/21 15:57	1

Lab Sample ID: LCS 280-535008/3
Matrix: Water
Analysis Batch: 535008

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Average	25.0	24.8		mg/L		99	88 - 112

Lab Sample ID: 280-147597-D-7 MS
Matrix: Water
Analysis Batch: 535008

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Average	1.6		25.0	26.6		mg/L		100	88 - 112

Lab Sample ID: 280-147597-D-7 MSD
Matrix: Water
Analysis Batch: 535008

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Average	1.6		25.0	26.3		mg/L		99	88 - 112	1	15

Lab Sample ID: MB 280-535153/4
Matrix: Water
Analysis Batch: 535153

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Average	ND		1.0		mg/L			05/05/21 17:09	1

Lab Sample ID: LCS 280-535153/3
Matrix: Water
Analysis Batch: 535153

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Average	25.0	25.1		mg/L		100	88 - 112

Lab Sample ID: 280-147602-7 MS
Matrix: Water
Analysis Batch: 535153

Client Sample ID: 8S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Average	9.2		25.0	34.5		mg/L		101	88 - 112

Lab Sample ID: 280-147602-7 MSD
Matrix: Water
Analysis Batch: 535153

Client Sample ID: 8S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Average	9.2		25.0	34.3		mg/L		100	88 - 112	0	15

Method: SM 1030E - Cation Anion Balance

Lab Sample ID: MB 280-535981/1
Matrix: Water
Analysis Batch: 535981

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	0.000				meq/L			05/13/21 08:11	1
Total Cations	0.000				meq/L			05/13/21 08:11	1
Percent Difference	NC				%			05/13/21 08:11	1
Calcium	0.000				mg/L			05/13/21 08:11	1
Magnesium	0.000				mg/L			05/13/21 08:11	1
Potassium	0.000				mg/L			05/13/21 08:11	1
Sodium	0.000				mg/L			05/13/21 08:11	1
Ammonia as N	0.000				mg/L			05/13/21 08:11	1
Chloride	0.000				mg/L			05/13/21 08:11	1
Sulfate	0.000				mg/L			05/13/21 08:11	1
Carbonate Alkalinity	0.000				mg/L			05/13/21 08:11	1
Bicarbonate Alkalinity	0.000				mg/L			05/13/21 08:11	1
Total Alkalinity	0.000				mg/L			05/13/21 08:11	1
Nitrate/Nitrite	0.000				mg/L			05/13/21 08:11	1
Anion/Cation Balance	NC				%			05/13/21 08:11	1
Calculated TDS	0.000				mg/L			05/13/21 08:11	1
TDS Ratio	NC				NONE			05/13/21 08:11	1
Total Dissolved Solids	0.000				mg/L			05/13/21 08:11	1
Iron	0.000				mg/L			05/13/21 08:11	1

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-533319/6
Matrix: Water
Analysis Batch: 533319

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	ND		10		mg/L			04/20/21 15:04	1
Bicarbonate Alkalinity	ND		10		mg/L			04/20/21 15:04	1
Carbonate Alkalinity	ND		10		mg/L			04/20/21 15:04	1

Lab Sample ID: LCS 280-533319/4
Matrix: Water
Analysis Batch: 533319

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Alkalinity			200	200		mg/L		100	89 - 109		

Lab Sample ID: LCSD 280-533319/5
Matrix: Water
Analysis Batch: 533319

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Alkalinity			200	199		mg/L		99	89 - 109	1	10

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: 280-147438-B-2 DU
Matrix: Water
Analysis Batch: 533319

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Alkalinity	180			181		mg/L				2	10

Lab Sample ID: MB 280-533325/7
Matrix: Water
Analysis Batch: 533325

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	ND		10		mg/L			04/20/21 17:54	1
Bicarbonate Alkalinity	ND		10		mg/L			04/20/21 17:54	1
Carbonate Alkalinity	ND		10		mg/L			04/20/21 17:54	1

Lab Sample ID: LCS 280-533325/6
Matrix: Water
Analysis Batch: 533325

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Alkalinity			1000	928		mg/L		93	89 - 109		

Lab Sample ID: 280-147589-A-2 DU
Matrix: Water
Analysis Batch: 533325

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Alkalinity	2900			2990		mg/L				2	10

Lab Sample ID: MB 280-533620/6
Matrix: Water
Analysis Batch: 533620

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	ND		10		mg/L			04/22/21 13:28	1
Bicarbonate Alkalinity	ND		10		mg/L			04/22/21 13:28	1
Carbonate Alkalinity	ND		10		mg/L			04/22/21 13:28	1

Lab Sample ID: LCS 280-533620/4
Matrix: Water
Analysis Batch: 533620

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Alkalinity			200	198		mg/L		99	89 - 109		

Lab Sample ID: LCSD 280-533620/5
Matrix: Water
Analysis Batch: 533620

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Alkalinity			200	198		mg/L		99	89 - 109	0	10

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: 280-147620-A-16 DU
Matrix: Water
Analysis Batch: 533620

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Alkalinity	240			239		mg/L				0.4	10

Method: SM 2340C - Hardness, Total (mg/l as CaC03)

Lab Sample ID: MB 280-533520/2
Matrix: Water
Analysis Batch: 533520

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness, as CaCO3	ND		3.0		mg/L			04/22/21 14:03	1

Lab Sample ID: LCS 280-533520/1
Matrix: Water
Analysis Batch: 533520

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Hardness, as CaCO3			398	394		mg/L		99	90 - 110		

Lab Sample ID: 280-147467-E-4 MS
Matrix: Water
Analysis Batch: 533520

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Hardness, as CaCO3	33		398	431		mg/L		100	90 - 110		

Lab Sample ID: 280-147467-E-4 MSD
Matrix: Water
Analysis Batch: 533520

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Hardness, as CaCO3	33		398	428		mg/L		99	90 - 110	1	10

Lab Sample ID: MB 280-534380/2
Matrix: Water
Analysis Batch: 534380

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness, as CaCO3	ND		3.0		mg/L			04/29/21 18:48	1

Lab Sample ID: LCS 280-534380/1
Matrix: Water
Analysis Batch: 534380

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Hardness, as CaCO3			398	402		mg/L		101	90 - 110		

Method: SM 2340C - Hardness, Total (mg/l as CaC03) (Continued)

Lab Sample ID: 280-147776-E-1 MS
Matrix: Water
Analysis Batch: 534380

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Hardness, as CaCO3	230		398	628		mg/L		99	90 - 110		

Lab Sample ID: 280-147776-E-1 MSD
Matrix: Water
Analysis Batch: 534380

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Hardness, as CaCO3	230		398	630		mg/L		100	90 - 110	0	10

Lab Sample ID: MB 280-534883/2
Matrix: Water
Analysis Batch: 534883

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness, as CaCO3	ND		3.0		mg/L			05/04/21 16:04	1

Lab Sample ID: LCS 280-534883/1
Matrix: Water
Analysis Batch: 534883

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Hardness, as CaCO3			398	397		mg/L		100	90 - 110		

Lab Sample ID: 280-147868-F-1 MS
Matrix: Water
Analysis Batch: 534883

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Hardness, as CaCO3	230		398	634		mg/L		101	90 - 110		

Lab Sample ID: 280-147868-F-1 MSD
Matrix: Water
Analysis Batch: 534883

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Hardness, as CaCO3	230		398	634		mg/L		101	90 - 110	0	10

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 280-533539/1
Matrix: Water
Analysis Batch: 533539

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10		mg/L			04/22/21 16:27	1

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 280-533539/2
Matrix: Water
Analysis Batch: 533539

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	501	502		mg/L		100	88 - 114

Lab Sample ID: 280-147597-A-8 DU
Matrix: Water
Analysis Batch: 533539

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	350		362		mg/L		3	10

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 280-533245/1
Matrix: Water
Analysis Batch: 533245

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0		mg/L			04/20/21 16:42	1

Lab Sample ID: LCS 280-533245/2
Matrix: Water
Analysis Batch: 533245

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	100	86.8		mg/L		87	79 - 114

Lab Sample ID: LCSD 280-533245/3
Matrix: Water
Analysis Batch: 533245

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Suspended Solids	100	87.2		mg/L		87	79 - 114	0	20

Lab Sample ID: 280-147602-9 DU
Matrix: Water
Analysis Batch: 533245

Client Sample ID: 9S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	26		28.0		mg/L		7	10

QC Association Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-147602-1

GC/MS VOA

Analysis Batch: 534118

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147602-1	TB3	Total/NA	Water	8260B	
280-147602-2	1/5P	Total/NA	Water	8260B	
280-147602-3	4/5S	Total/NA	Water	8260B	
280-147602-4	6/7P	Total/NA	Water	8260B	
280-147602-5	6/7S	Total/NA	Water	8260B	
280-147602-7	8S	Total/NA	Water	8260B	
280-147602-8	9P	Total/NA	Water	8260B	
280-147602-9	9S	Total/NA	Water	8260B	
MB 280-534118/10	Method Blank	Total/NA	Water	8260B	
LCS 280-534118/5	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-534118/6	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 534267

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147602-6	8P	Total/NA	Water	8260B	
MB 280-534267/10	Method Blank	Total/NA	Water	8260B	
LCS 280-534267/5	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-534267/6	Lab Control Sample Dup	Total/NA	Water	8260B	

Metals

Prep Batch: 533107

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147602-2	1/5P	Total Recoverable	Water	3005A	
280-147602-3	4/5S	Total Recoverable	Water	3005A	
280-147602-4	6/7P	Total Recoverable	Water	3005A	
280-147602-5	6/7S	Total Recoverable	Water	3005A	
280-147602-6	8P	Total Recoverable	Water	3005A	
280-147602-7	8S	Total Recoverable	Water	3005A	
280-147602-8	9P	Total Recoverable	Water	3005A	
280-147602-9	9S	Total Recoverable	Water	3005A	
MB 280-533107/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-533107/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-147602-2 MS	1/5P	Total Recoverable	Water	3005A	
280-147602-2 MSD	1/5P	Total Recoverable	Water	3005A	

Prep Batch: 533566

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147602-2	1/5P	Total Recoverable	Water	3005A	
280-147602-3	4/5S	Total Recoverable	Water	3005A	
280-147602-4	6/7P	Total Recoverable	Water	3005A	
280-147602-5	6/7S	Total Recoverable	Water	3005A	
280-147602-6	8P	Total Recoverable	Water	3005A	
280-147602-7	8S	Total Recoverable	Water	3005A	
280-147602-8	9P	Total Recoverable	Water	3005A	
280-147602-9	9S	Total Recoverable	Water	3005A	
MB 280-533566/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-533566/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-147599-Q-2-C MS	Matrix Spike	Total Recoverable	Water	3005A	
280-147599-Q-2-D MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Metals

Prep Batch: 533806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147602-2	1/5P	Dissolved	Water	3005A	
280-147602-3	4/5S	Dissolved	Water	3005A	
280-147602-4	6/7P	Dissolved	Water	3005A	
280-147602-5	6/7S	Dissolved	Water	3005A	
280-147602-6	8P	Dissolved	Water	3005A	
280-147602-7	8S	Dissolved	Water	3005A	
280-147602-8	9P	Dissolved	Water	3005A	
MB 280-533806/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-533806/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-147511-N-1-B MS	Matrix Spike	Dissolved	Water	3005A	
280-147511-N-1-C MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	

Analysis Batch: 534125

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147602-3	4/5S	Total Recoverable	Water	6020	533107
280-147602-4	6/7P	Total Recoverable	Water	6020	533107
280-147602-5	6/7S	Total Recoverable	Water	6020	533107
280-147602-6	8P	Total Recoverable	Water	6020	533107
280-147602-7	8S	Total Recoverable	Water	6020	533107
280-147602-8	9P	Total Recoverable	Water	6020	533107
280-147602-9	9S	Total Recoverable	Water	6020	533107

Analysis Batch: 534189

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147602-2	1/5P	Total Recoverable	Water	6010B	533566
280-147602-3	4/5S	Total Recoverable	Water	6010B	533566
280-147602-4	6/7P	Total Recoverable	Water	6010B	533566
280-147602-5	6/7S	Total Recoverable	Water	6010B	533566
280-147602-6	8P	Total Recoverable	Water	6010B	533566
280-147602-7	8S	Total Recoverable	Water	6010B	533566
280-147602-8	9P	Total Recoverable	Water	6010B	533566
280-147602-9	9S	Total Recoverable	Water	6010B	533566
MB 280-533566/1-A	Method Blank	Total Recoverable	Water	6010B	533566
LCS 280-533566/2-A	Lab Control Sample	Total Recoverable	Water	6010B	533566
280-147599-Q-2-C MS	Matrix Spike	Total Recoverable	Water	6010B	533566
280-147599-Q-2-D MSD	Matrix Spike Duplicate	Total Recoverable	Water	6010B	533566

Analysis Batch: 534277

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147602-2	1/5P	Total Recoverable	Water	6020	533107
280-147602-3	4/5S	Total Recoverable	Water	6020	533107
280-147602-4	6/7P	Total Recoverable	Water	6020	533107
280-147602-5	6/7S	Total Recoverable	Water	6020	533107
280-147602-6	8P	Total Recoverable	Water	6020	533107
280-147602-7	8S	Total Recoverable	Water	6020	533107
280-147602-8	9P	Total Recoverable	Water	6020	533107
280-147602-9	9S	Total Recoverable	Water	6020	533107
MB 280-533107/1-A	Method Blank	Total Recoverable	Water	6020	533107
LCS 280-533107/2-A	Lab Control Sample	Total Recoverable	Water	6020	533107
280-147602-2 MS	1/5P	Total Recoverable	Water	6020	533107
280-147602-2 MSD	1/5P	Total Recoverable	Water	6020	533107

Metals

Prep Batch: 534307

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147602-9	9S	Dissolved	Water	3005A	
MB 280-534307/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-534307/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-147607-D-2-I MS	Matrix Spike	Dissolved	Water	3005A	
280-147607-D-2-J MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	

Analysis Batch: 534364

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147602-2	1/5P	Dissolved	Water	6010B	533806
280-147602-3	4/5S	Dissolved	Water	6010B	533806
280-147602-4	6/7P	Dissolved	Water	6010B	533806
280-147602-5	6/7S	Dissolved	Water	6010B	533806
280-147602-6	8P	Dissolved	Water	6010B	533806
280-147602-7	8S	Dissolved	Water	6010B	533806
280-147602-8	9P	Dissolved	Water	6010B	533806
MB 280-533806/1-A	Method Blank	Total Recoverable	Water	6010B	533806
LCS 280-533806/2-A	Lab Control Sample	Total Recoverable	Water	6010B	533806
280-147511-N-1-B MS	Matrix Spike	Dissolved	Water	6010B	533806
280-147511-N-1-C MSD	Matrix Spike Duplicate	Dissolved	Water	6010B	533806

Analysis Batch: 534467

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147602-2	1/5P	Dissolved	Water	6010B	533806
280-147602-6	8P	Dissolved	Water	6010B	533806

Analysis Batch: 534717

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147602-9	9S	Dissolved	Water	6010B	534307
MB 280-534307/1-A	Method Blank	Total Recoverable	Water	6010B	534307
LCS 280-534307/2-A	Lab Control Sample	Total Recoverable	Water	6010B	534307
280-147607-D-2-I MS	Matrix Spike	Dissolved	Water	6010B	534307
280-147607-D-2-J MSD	Matrix Spike Duplicate	Dissolved	Water	6010B	534307

Analysis Batch: 534866

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147602-2	1/5P	Total Recoverable	Water	6020	533107
280-147602-3	4/5S	Total Recoverable	Water	6020	533107
280-147602-4	6/7P	Total Recoverable	Water	6020	533107
280-147602-5	6/7S	Total Recoverable	Water	6020	533107
280-147602-6	8P	Total Recoverable	Water	6020	533107
280-147602-7	8S	Total Recoverable	Water	6020	533107
280-147602-8	9P	Total Recoverable	Water	6020	533107
280-147602-9	9S	Total Recoverable	Water	6020	533107
MB 280-533107/1-A	Method Blank	Total Recoverable	Water	6020	533107
LCS 280-533107/2-A	Lab Control Sample	Total Recoverable	Water	6020	533107
280-147602-2 MS	1/5P	Total Recoverable	Water	6020	533107
280-147602-2 MSD	1/5P	Total Recoverable	Water	6020	533107

General Chemistry

Analysis Batch: 533185

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147602-2	1/5P	Total/NA	Water	9040B	
280-147602-3	4/5S	Total/NA	Water	9040B	
280-147602-4	6/7P	Total/NA	Water	9040B	
280-147602-5	6/7S	Total/NA	Water	9040B	
280-147602-6	8P	Total/NA	Water	9040B	
280-147602-7	8S	Total/NA	Water	9040B	
280-147602-8	9P	Total/NA	Water	9040B	
280-147602-9	9S	Total/NA	Water	9040B	
LCS 280-533185/30	Lab Control Sample	Total/NA	Water	9040B	
LCS 280-533185/4	Lab Control Sample	Total/NA	Water	9040B	
280-147602-7 DU	8S	Total/NA	Water	9040B	

Analysis Batch: 533245

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147602-2	1/5P	Total/NA	Water	SM 2540D	
280-147602-3	4/5S	Total/NA	Water	SM 2540D	
280-147602-4	6/7P	Total/NA	Water	SM 2540D	
280-147602-5	6/7S	Total/NA	Water	SM 2540D	
280-147602-6	8P	Total/NA	Water	SM 2540D	
280-147602-7	8S	Total/NA	Water	SM 2540D	
280-147602-8	9P	Total/NA	Water	SM 2540D	
280-147602-9	9S	Total/NA	Water	SM 2540D	
MB 280-533245/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 280-533245/2	Lab Control Sample	Total/NA	Water	SM 2540D	
LCSD 280-533245/3	Lab Control Sample Dup	Total/NA	Water	SM 2540D	
280-147602-9 DU	9S	Total/NA	Water	SM 2540D	

Analysis Batch: 533319

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147602-3	4/5S	Total/NA	Water	SM 2320B	
280-147602-7	8S	Total/NA	Water	SM 2320B	
280-147602-9	9S	Total/NA	Water	SM 2320B	
MB 280-533319/6	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-533319/4	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 280-533319/5	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
280-147438-B-2 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 533325

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147602-2	1/5P	Total/NA	Water	SM 2320B	
280-147602-4	6/7P	Total/NA	Water	SM 2320B	
280-147602-6	8P	Total/NA	Water	SM 2320B	
280-147602-8	9P	Total/NA	Water	SM 2320B	
MB 280-533325/7	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-533325/6	Lab Control Sample	Total/NA	Water	SM 2320B	
280-147589-A-2 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 533352

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147602-2	1/5P	Total/NA	Water	9050A	
280-147602-3	4/5S	Total/NA	Water	9050A	

General Chemistry (Continued)

Analysis Batch: 533352 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147602-4	6/7P	Total/NA	Water	9050A	
280-147602-5	6/7S	Total/NA	Water	9050A	
280-147602-6	8P	Total/NA	Water	9050A	
280-147602-7	8S	Total/NA	Water	9050A	
280-147602-8	9P	Total/NA	Water	9050A	
280-147602-9	9S	Total/NA	Water	9050A	
MB 280-533352/5	Method Blank	Total/NA	Water	9050A	
LCS 280-533352/3	Lab Control Sample	Total/NA	Water	9050A	
LCSD 280-533352/4	Lab Control Sample Dup	Total/NA	Water	9050A	
280-147467-J-2 DU	Duplicate	Total/NA	Water	9050A	

Analysis Batch: 533520

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147602-2	1/5P	Total/NA	Water	SM 2340C	
280-147602-3	4/5S	Total/NA	Water	SM 2340C	
280-147602-4	6/7P	Total/NA	Water	SM 2340C	
280-147602-5	6/7S	Total/NA	Water	SM 2340C	
MB 280-533520/2	Method Blank	Total/NA	Water	SM 2340C	
LCS 280-533520/1	Lab Control Sample	Total/NA	Water	SM 2340C	
280-147467-E-4 MS	Matrix Spike	Total/NA	Water	SM 2340C	
280-147467-E-4 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 2340C	

Analysis Batch: 533539

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147602-2	1/5P	Total/NA	Water	SM 2540C	
280-147602-3	4/5S	Total/NA	Water	SM 2540C	
280-147602-4	6/7P	Total/NA	Water	SM 2540C	
280-147602-5	6/7S	Total/NA	Water	SM 2540C	
280-147602-6	8P	Total/NA	Water	SM 2540C	
280-147602-7	8S	Total/NA	Water	SM 2540C	
280-147602-8	9P	Total/NA	Water	SM 2540C	
280-147602-9	9S	Total/NA	Water	SM 2540C	
MB 280-533539/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-533539/2	Lab Control Sample	Total/NA	Water	SM 2540C	
280-147597-A-8 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 533620

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147602-5	6/7S	Total/NA	Water	SM 2320B	
MB 280-533620/6	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-533620/4	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 280-533620/5	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
280-147620-A-16 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 534289

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147602-3	4/5S	Total/NA	Water	410.4	
280-147602-4	6/7P	Total/NA	Water	410.4	
280-147602-5	6/7S	Total/NA	Water	410.4	
280-147602-7	8S	Total/NA	Water	410.4	
280-147602-9	9S	Total/NA	Water	410.4	

General Chemistry (Continued)

Analysis Batch: 534289 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-534289/36	Method Blank	Total/NA	Water	410.4	
MB 280-534289/5	Method Blank	Total/NA	Water	410.4	
LCS 280-534289/3	Lab Control Sample	Total/NA	Water	410.4	
LCS 280-534289/34	Lab Control Sample	Total/NA	Water	410.4	
LCSD 280-534289/35	Lab Control Sample Dup	Total/NA	Water	410.4	
LCSD 280-534289/4	Lab Control Sample Dup	Total/NA	Water	410.4	
280-147602-3 MS	4/5S	Total/NA	Water	410.4	
280-147602-3 MSD	4/5S	Total/NA	Water	410.4	

Analysis Batch: 534380

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147602-6	8P	Total/NA	Water	SM 2340C	
280-147602-8	9P	Total/NA	Water	SM 2340C	
280-147602-9	9S	Total/NA	Water	SM 2340C	
MB 280-534380/2	Method Blank	Total/NA	Water	SM 2340C	
LCS 280-534380/1	Lab Control Sample	Total/NA	Water	SM 2340C	
280-147776-E-1 MS	Matrix Spike	Total/NA	Water	SM 2340C	
280-147776-E-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 2340C	

Analysis Batch: 534560

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147602-2	1/5P	Total/NA	Water	350.1	
280-147602-3	4/5S	Total/NA	Water	350.1	
280-147602-5	6/7S	Total/NA	Water	350.1	
280-147602-6	8P	Total/NA	Water	350.1	
280-147602-7	8S	Total/NA	Water	350.1	
280-147602-8	9P	Total/NA	Water	350.1	
280-147602-9	9S	Total/NA	Water	350.1	
MB 280-534560/101	Method Blank	Total/NA	Water	350.1	
MB 280-534560/31	Method Blank	Total/NA	Water	350.1	
MB 280-534560/66	Method Blank	Total/NA	Water	350.1	
LCS 280-534560/29	Lab Control Sample	Total/NA	Water	350.1	
LCS 280-534560/64	Lab Control Sample	Total/NA	Water	350.1	
LCS 280-534560/99	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-534560/100	Lab Control Sample Dup	Total/NA	Water	350.1	
LCSD 280-534560/30	Lab Control Sample Dup	Total/NA	Water	350.1	
LCSD 280-534560/65	Lab Control Sample Dup	Total/NA	Water	350.1	
280-147602-7 MS	8S	Total/NA	Water	350.1	
280-147602-7 MSD	8S	Total/NA	Water	350.1	

Analysis Batch: 534683

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147602-2	1/5P	Total/NA	Water	410.4	
280-147602-6	8P	Total/NA	Water	410.4	
280-147602-8	9P	Total/NA	Water	410.4	
MB 280-534683/5	Method Blank	Total/NA	Water	410.4	
LCS 280-534683/3	Lab Control Sample	Total/NA	Water	410.4	
LCSD 280-534683/4	Lab Control Sample Dup	Total/NA	Water	410.4	
280-147607-E-2 MS	Matrix Spike	Total/NA	Water	410.4	
280-147607-E-2 MSD	Matrix Spike Duplicate	Total/NA	Water	410.4	

General Chemistry

Analysis Batch: 534766

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147602-4	6/7P	Total/NA	Water	350.1	
MB 280-534766/91	Method Blank	Total/NA	Water	350.1	
LCS 280-534766/89	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-534766/90	Lab Control Sample Dup	Total/NA	Water	350.1	
280-147847-D-9 MS	Matrix Spike	Total/NA	Water	350.1	
280-147847-D-9 MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	

Analysis Batch: 534883

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147602-7	8S	Total/NA	Water	SM 2340C	
MB 280-534883/2	Method Blank	Total/NA	Water	SM 2340C	
LCS 280-534883/1	Lab Control Sample	Total/NA	Water	SM 2340C	
280-147868-F-1 MS	Matrix Spike	Total/NA	Water	SM 2340C	
280-147868-F-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 2340C	

Analysis Batch: 534909

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147602-2	1/5P	Total/NA	Water	353.2	
280-147602-3	4/5S	Total/NA	Water	353.2	
280-147602-7	8S	Total/NA	Water	353.2	
280-147602-8	9P	Total/NA	Water	353.2	
280-147602-9	9S	Total/NA	Water	353.2	
MB 280-534909/60	Method Blank	Total/NA	Water	353.2	
LCS 280-534909/59	Lab Control Sample	Total/NA	Water	353.2	
280-147602-2 MS	1/5P	Total/NA	Water	353.2	
280-147602-2 MSD	1/5P	Total/NA	Water	353.2	

Analysis Batch: 535008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147602-2	1/5P	Total/NA	Water	9060	
280-147602-3	4/5S	Total/NA	Water	9060	
280-147602-4	6/7P	Total/NA	Water	9060	
280-147602-5	6/7S	Total/NA	Water	9060	
280-147602-9	9S	Total/NA	Water	9060	
MB 280-535008/4	Method Blank	Total/NA	Water	9060	
LCS 280-535008/3	Lab Control Sample	Total/NA	Water	9060	
280-147597-D-7 MS	Matrix Spike	Total/NA	Water	9060	
280-147597-D-7 MSD	Matrix Spike Duplicate	Total/NA	Water	9060	

Analysis Batch: 535096

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147602-4	6/7P	Total/NA	Water	353.2	
280-147602-5	6/7S	Total/NA	Water	353.2	
280-147602-6	8P	Total/NA	Water	353.2	
MB 280-535096/23	Method Blank	Total/NA	Water	353.2	
LCS 280-535096/21	Lab Control Sample	Total/NA	Water	353.2	
LCSD 280-535096/22	Lab Control Sample Dup	Total/NA	Water	353.2	
280-147620-A-21 MS	Matrix Spike	Total/NA	Water	353.2	
280-147620-A-21 MSD	Matrix Spike Duplicate	Total/NA	Water	353.2	

General Chemistry

Analysis Batch: 535153

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147602-6	8P	Total/NA	Water	9060	
280-147602-7	8S	Total/NA	Water	9060	
280-147602-8	9P	Total/NA	Water	9060	
MB 280-535153/4	Method Blank	Total/NA	Water	9060	
LCS 280-535153/3	Lab Control Sample	Total/NA	Water	9060	
280-147602-7 MS	8S	Total/NA	Water	9060	
280-147602-7 MSD	8S	Total/NA	Water	9060	

Analysis Batch: 535742

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147602-2	1/5P	Total/NA	Water	300.0	
280-147602-2	1/5P	Total/NA	Water	300.0	
280-147602-3	4/5S	Total/NA	Water	300.0	
280-147602-4	6/7P	Total/NA	Water	300.0	
280-147602-4	6/7P	Total/NA	Water	300.0	
280-147602-5	6/7S	Total/NA	Water	300.0	
280-147602-5	6/7S	Total/NA	Water	300.0	
280-147602-6	8P	Total/NA	Water	300.0	
280-147602-6	8P	Total/NA	Water	300.0	
280-147602-7	8S	Total/NA	Water	300.0	
280-147602-7	8S	Total/NA	Water	300.0	
280-147602-8	9P	Total/NA	Water	300.0	
280-147602-8	9P	Total/NA	Water	300.0	
280-147602-9	9S	Total/NA	Water	300.0	
280-147602-9	9S	Total/NA	Water	300.0	
MB 280-535742/6	Method Blank	Total/NA	Water	300.0	
LCS 280-535742/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 280-535742/5	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 280-535742/3	Lab Control Sample	Total/NA	Water	300.0	
280-147631-A-2 MS	Matrix Spike	Total/NA	Water	300.0	
280-147631-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
280-147631-A-4 MS	Matrix Spike	Total/NA	Water	300.0	
280-147631-A-4 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
280-147697-A-5 MS	Matrix Spike	Total/NA	Water	300.0	
280-147697-A-5 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
280-147631-A-2 DU	Duplicate	Total/NA	Water	300.0	
280-147631-A-4 DU	Duplicate	Total/NA	Water	300.0	
280-147697-A-5 DU	Duplicate	Total/NA	Water	300.0	

Analysis Batch: 535981

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147602-2	1/5P	Total/NA	Water	SM 1030E	
280-147602-2	1/5P	Total/NA	Water	SM 1030E (meq)	
280-147602-3	4/5S	Total/NA	Water	SM 1030E	
280-147602-3	4/5S	Total/NA	Water	SM 1030E (meq)	
280-147602-4	6/7P	Total/NA	Water	SM 1030E	
280-147602-4	6/7P	Total/NA	Water	SM 1030E (meq)	
280-147602-5	6/7S	Total/NA	Water	SM 1030E	
280-147602-5	6/7S	Total/NA	Water	SM 1030E (meq)	
280-147602-6	8P	Total/NA	Water	SM 1030E	
280-147602-6	8P	Total/NA	Water	SM 1030E (meq)	

General Chemistry (Continued)

Analysis Batch: 535981 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147602-7	8S	Total/NA	Water	SM 1030E	
280-147602-7	8S	Total/NA	Water	SM 1030E (meq)	
280-147602-8	9P	Total/NA	Water	SM 1030E	
280-147602-8	9P	Total/NA	Water	SM 1030E (meq)	
280-147602-9	9S	Total/NA	Water	SM 1030E	
280-147602-9	9S	Total/NA	Water	SM 1030E (meq)	
MB 280-535981/1	Method Blank	Total/NA	Water	SM 1030E	

Field Service / Mobile Lab

Analysis Batch: 533841

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-147602-2	1/5P	Total/NA	Water	Field Sampling	
280-147602-3	4/5S	Total/NA	Water	Field Sampling	
280-147602-4	6/7P	Total/NA	Water	Field Sampling	
280-147602-5	6/7S	Total/NA	Water	Field Sampling	
280-147602-6	8P	Total/NA	Water	Field Sampling	
280-147602-7	8S	Total/NA	Water	Field Sampling	
280-147602-8	9P	Total/NA	Water	Field Sampling	
280-147602-9	9S	Total/NA	Water	Field Sampling	

Client Sample ID: TB3
Lab Sample ID: 280-147602-1
Date Collected: 04/15/21 07:00
Matrix: Water
Date Received: 04/17/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	534118	04/28/21 10:15	TAW	TAL DEN

Client Sample ID: 1/5P
Lab Sample ID: 280-147602-2
Date Collected: 04/15/21 10:30
Matrix: Water
Date Received: 04/17/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	5 mL	5 mL	534118	04/28/21 14:26	TAW	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	533806	04/28/21 08:38	MAB	TAL DEN
Dissolved	Analysis	6010B		1			534364	04/28/21 18:05	LMT	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	533806	04/28/21 08:38	MAB	TAL DEN
Dissolved	Analysis	6010B		10			534467	04/30/21 01:02	LMT	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	533566	04/27/21 16:15	EC	TAL DEN
Total Recoverable	Analysis	6010B		1			534189	04/28/21 09:27	LMT	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	533107	04/23/21 09:05	MAB	TAL DEN
Total Recoverable	Analysis	6020		5			534866	05/04/21 13:46	LMT	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	533107	04/23/21 09:05	MAB	TAL DEN
Total Recoverable	Analysis	6020		1			534277	04/28/21 21:24	LMT	TAL DEN
Total/NA	Analysis	300.0		1	5 mL	5 mL	535742	05/11/21 18:36	CJ	TAL DEN
Total/NA	Analysis	300.0		100	5 mL	5 mL	535742	05/11/21 18:50	CJ	TAL DEN
Total/NA	Analysis	350.1		500	10 mL	10 mL	534560	04/30/21 14:38	QJB	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	534909	05/04/21 18:26	SVC	TAL DEN
Total/NA	Analysis	410.4		50	2 mL	2 mL	534683	05/03/21 10:49	SPG	TAL DEN
Total/NA	Analysis	9040B		1			533185	04/19/21 20:50	QJB	TAL DEN
Total/NA	Analysis	9050A		1			533352	04/21/21 12:16	QJB	TAL DEN
Total/NA	Analysis	9060		20	20 mL	20 mL	535008	05/04/21 23:29	RAF	TAL DEN
Total/NA	Analysis	SM 1030E		1			535981	05/13/21 08:11	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			535981	05/13/21 08:11	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			533325	04/20/21 18:22	QJB	TAL DEN
Total/NA	Analysis	SM 2340C		5	25 mL	25 mL	533520	04/22/21 14:03	RAF	TAL DEN
Total/NA	Analysis	SM 2540C		1	25 mL	100 mL	533539	04/22/21 16:27	JMH	TAL DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	533245	04/20/21 16:42	JMH	TAL DEN
Total/NA	Analysis	Field Sampling		1			533841	04/15/21 11:30	A1S	TAL DEN

Client Sample ID: 4/5S
Lab Sample ID: 280-147602-3
Date Collected: 04/15/21 11:00
Matrix: Water
Date Received: 04/17/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	534118	04/28/21 14:49	TAW	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	533806	04/28/21 08:38	MAB	TAL DEN
Dissolved	Analysis	6010B		1			534364	04/28/21 18:09	LMT	TAL DEN

Lab Chronicle

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-147602-1

Client Sample ID: 4/5S

Date Collected: 04/15/21 11:00
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147602-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	533566	04/27/21 16:15	EC	TAL DEN
Total Recoverable	Analysis	6010B		1			534189	04/28/21 09:30	LMT	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	533107	04/23/21 09:05	MAB	TAL DEN
Total Recoverable	Analysis	6020		1			534866	05/04/21 11:54	LMT	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	533107	04/23/21 09:05	MAB	TAL DEN
Total Recoverable	Analysis	6020		1			534125	04/27/21 22:28	LMT	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	533107	04/23/21 09:05	MAB	TAL DEN
Total Recoverable	Analysis	6020		1			534277	04/29/21 03:02	LMT	TAL DEN
Total/NA	Analysis	300.0		1	5 mL	5 mL	535742	05/11/21 19:05	CJ	TAL DEN
Total/NA	Analysis	350.1		10	10 mL	10 mL	534560	04/30/21 17:02	QJB	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	534909	05/04/21 18:32	SVC	TAL DEN
Total/NA	Analysis	410.4		1	2 mL	2 mL	534289	04/29/21 08:55	SPG	TAL DEN
Total/NA	Analysis	9040B		1			533185	04/19/21 20:53	QJB	TAL DEN
Total/NA	Analysis	9050A		1			533352	04/21/21 12:16	QJB	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	535008	05/05/21 00:24	RAF	TAL DEN
Total/NA	Analysis	SM 1030E		1			535981	05/13/21 08:11	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			535981	05/13/21 08:11	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			533319	04/20/21 18:35	QJB	TAL DEN
Total/NA	Analysis	SM 2340C		1	25 mL	25 mL	533520	04/22/21 14:03	RAF	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	533539	04/22/21 16:27	JMH	TAL DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	533245	04/20/21 16:42	JMH	TAL DEN
Total/NA	Analysis	Field Sampling		1			533841	04/15/21 12:00	A1S	TAL DEN

Client Sample ID: 6/7P

Date Collected: 04/15/21 12:30
Date Received: 04/17/21 09:45

Lab Sample ID: 280-147602-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	5 mL	5 mL	534118	04/28/21 15:12	TAW	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	533806	04/28/21 08:38	MAB	TAL DEN
Dissolved	Analysis	6010B		1			534364	04/28/21 18:13	LMT	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	533566	04/27/21 16:15	EC	TAL DEN
Total Recoverable	Analysis	6010B		1			534189	04/28/21 09:34	LMT	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	533107	04/23/21 09:05	MAB	TAL DEN
Total Recoverable	Analysis	6020		1			534866	05/04/21 11:58	LMT	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	533107	04/23/21 09:05	MAB	TAL DEN
Total Recoverable	Analysis	6020		1			534125	04/27/21 22:32	LMT	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	533107	04/23/21 09:05	MAB	TAL DEN
Total Recoverable	Analysis	6020		1			534277	04/29/21 03:06	LMT	TAL DEN
Total/NA	Analysis	300.0		1	5 mL	5 mL	535742	05/11/21 19:35	CJ	TAL DEN
Total/NA	Analysis	300.0		100	5 mL	5 mL	535742	05/11/21 19:50	CJ	TAL DEN
Total/NA	Analysis	350.1		500	10 mL	10 mL	534766	05/03/21 18:46	QJB	TAL DEN

Client Sample ID: 6/7P
Lab Sample ID: 280-147602-4
Date Collected: 04/15/21 12:30
Matrix: Water
Date Received: 04/17/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	353.2		1	100 mL	100 mL	535096	05/05/21 20:10	SVC	TAL DEN
Total/NA	Analysis	410.4		20	2 mL	2 mL	534289	04/29/21 08:54	SPG	TAL DEN
Total/NA	Analysis	9040B		1			533185	04/19/21 20:57	QJB	TAL DEN
Total/NA	Analysis	9050A		1			533352	04/21/21 12:16	QJB	TAL DEN
Total/NA	Analysis	9060		10	20 mL	20 mL	535008	05/05/21 00:40	RAF	TAL DEN
Total/NA	Analysis	SM 1030E		1			535981	05/13/21 08:11	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			535981	05/13/21 08:11	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			533325	04/20/21 18:31	QJB	TAL DEN
Total/NA	Analysis	SM 2340C		5	25 mL	25 mL	533520	04/22/21 14:03	RAF	TAL DEN
Total/NA	Analysis	SM 2540C		1	25 mL	100 mL	533539	04/22/21 16:27	JMH	TAL DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	533245	04/20/21 16:42	JMH	TAL DEN
Total/NA	Analysis	Field Sampling		1			533841	04/15/21 13:30	A1S	TAL DEN

Client Sample ID: 6/7S
Lab Sample ID: 280-147602-5
Date Collected: 04/15/21 13:00
Matrix: Water
Date Received: 04/17/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	534118	04/28/21 15:35	TAW	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	533806	04/28/21 08:38	MAB	TAL DEN
Dissolved	Analysis	6010B		1			534364	04/28/21 18:16	LMT	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	533566	04/27/21 16:15	EC	TAL DEN
Total Recoverable	Analysis	6010B		1			534189	04/28/21 09:37	LMT	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	533107	04/23/21 09:05	MAB	TAL DEN
Total Recoverable	Analysis	6020		1			534866	05/04/21 12:02	LMT	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	533107	04/23/21 09:05	MAB	TAL DEN
Total Recoverable	Analysis	6020		1			534125	04/27/21 22:35	LMT	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	533107	04/23/21 09:05	MAB	TAL DEN
Total Recoverable	Analysis	6020		1			534277	04/29/21 03:09	LMT	TAL DEN
Total/NA	Analysis	300.0		1	5 mL	5 mL	535742	05/11/21 22:00	CJ	TAL DEN
Total/NA	Analysis	300.0		20	5 mL	5 mL	535742	05/11/21 22:15	CJ	TAL DEN
Total/NA	Analysis	350.1		50	10 mL	10 mL	534560	04/30/21 17:48	QJB	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	535096	05/05/21 20:24	SVC	TAL DEN
Total/NA	Analysis	410.4		5	2 mL	2 mL	534289	04/29/21 08:55	SPG	TAL DEN
Total/NA	Analysis	9040B		1			533185	04/19/21 21:01	QJB	TAL DEN
Total/NA	Analysis	9050A		1			533352	04/21/21 12:16	QJB	TAL DEN
Total/NA	Analysis	9060		5	20 mL	20 mL	535008	05/05/21 00:58	RAF	TAL DEN
Total/NA	Analysis	SM 1030E		1			535981	05/13/21 08:11	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			535981	05/13/21 08:11	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			533620	04/22/21 14:23	QJB	TAL DEN
Total/NA	Analysis	SM 2340C		5	25 mL	25 mL	533520	04/22/21 14:03	RAF	TAL DEN
Total/NA	Analysis	SM 2540C		1	25 mL	100 mL	533539	04/22/21 16:27	JMH	TAL DEN

Lab Chronicle

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-147602-1

Client Sample ID: 6/7S

Lab Sample ID: 280-147602-5

Date Collected: 04/15/21 13:00

Matrix: Water

Date Received: 04/17/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	533245	04/20/21 16:42	JMH	TAL DEN
Total/NA	Analysis	Field Sampling		1			533841	04/15/21 14:00	A1S	TAL DEN

Client Sample ID: 8P

Lab Sample ID: 280-147602-6

Date Collected: 04/15/21 11:30

Matrix: Water

Date Received: 04/17/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	5 mL	5 mL	534267	04/29/21 10:19	TAW	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	533806	04/28/21 08:38	MAB	TAL DEN
Dissolved	Analysis	6010B		1			534364	04/28/21 18:20	LMT	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	533806	04/28/21 08:38	MAB	TAL DEN
Dissolved	Analysis	6010B		10			534467	04/30/21 01:06	LMT	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	533566	04/27/21 16:15	EC	TAL DEN
Total Recoverable	Analysis	6010B		1			534189	04/28/21 09:54	LMT	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	533107	04/23/21 09:05	MAB	TAL DEN
Total Recoverable	Analysis	6020		1			534866	05/04/21 12:06	LMT	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	533107	04/23/21 09:05	MAB	TAL DEN
Total Recoverable	Analysis	6020		1			534125	04/27/21 22:39	LMT	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	533107	04/23/21 09:05	MAB	TAL DEN
Total Recoverable	Analysis	6020		1			534277	04/29/21 03:13	LMT	TAL DEN
Total/NA	Analysis	300.0		1	5 mL	5 mL	535742	05/11/21 22:30	CJ	TAL DEN
Total/NA	Analysis	300.0		100	5 mL	5 mL	535742	05/11/21 22:45	CJ	TAL DEN
Total/NA	Analysis	350.1		5000	10 mL	10 mL	534560	04/30/21 17:50	QJB	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	535096	05/05/21 20:26	SVC	TAL DEN
Total/NA	Analysis	410.4		50	2 mL	2 mL	534683	05/03/21 10:49	SPG	TAL DEN
Total/NA	Analysis	9040B		1			533185	04/19/21 21:04	QJB	TAL DEN
Total/NA	Analysis	9050A		1			533352	04/21/21 12:16	QJB	TAL DEN
Total/NA	Analysis	9060		25	20 mL	20 mL	535153	05/05/21 18:41	RAF	TAL DEN
Total/NA	Analysis	SM 1030E		1			535981	05/13/21 08:11	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			535981	05/13/21 08:11	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			533325	04/20/21 18:42	QJB	TAL DEN
Total/NA	Analysis	SM 2340C		5	25 mL	25 mL	534380	04/29/21 18:48	RAF	TAL DEN
Total/NA	Analysis	SM 2540C		1	1 mL	100 mL	533539	04/22/21 16:27	JMH	TAL DEN
Total/NA	Analysis	SM 2540D		1	70 mL	250 mL	533245	04/20/21 16:42	JMH	TAL DEN
Total/NA	Analysis	Field Sampling		1			533841	04/15/21 12:30	A1S	TAL DEN

Client Sample ID: 8S

Lab Sample ID: 280-147602-7

Date Collected: 04/15/21 12:00

Matrix: Water

Date Received: 04/17/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	534118	04/28/21 16:21	TAW	TAL DEN

Client Sample ID: 8S

Lab Sample ID: 280-147602-7

Date Collected: 04/15/21 12:00

Matrix: Water

Date Received: 04/17/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			50 mL	50 mL	533806	04/28/21 08:38	MAB	TAL DEN
Dissolved	Analysis	6010B		1			534364	04/28/21 18:24	LMT	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	533566	04/27/21 16:15	EC	TAL DEN
Total Recoverable	Analysis	6010B		1			534189	04/28/21 09:57	LMT	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	533107	04/23/21 09:05	MAB	TAL DEN
Total Recoverable	Analysis	6020		1			534866	05/04/21 12:10	LMT	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	533107	04/23/21 09:05	MAB	TAL DEN
Total Recoverable	Analysis	6020		1			534125	04/27/21 22:43	LMT	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	533107	04/23/21 09:05	MAB	TAL DEN
Total Recoverable	Analysis	6020		1			534277	04/29/21 03:16	LMT	TAL DEN
Total/NA	Analysis	300.0		1	5 mL	5 mL	535742	05/11/21 23:00	CJ	TAL DEN
Total/NA	Analysis	300.0		5	5 mL	5 mL	535742	05/11/21 23:15	CJ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	534560	04/30/21 16:18	QJB	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	534909	05/04/21 18:52	SVC	TAL DEN
Total/NA	Analysis	410.4		1	2 mL	2 mL	534289	04/29/21 08:55	SPG	TAL DEN
Total/NA	Analysis	9040B		1			533185	04/19/21 21:31	QJB	TAL DEN
Total/NA	Analysis	9050A		1			533352	04/21/21 12:16	QJB	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	535153	05/05/21 18:56	RAF	TAL DEN
Total/NA	Analysis	SM 1030E		1			535981	05/13/21 08:11	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			535981	05/13/21 08:11	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			533319	04/20/21 19:03	QJB	TAL DEN
Total/NA	Analysis	SM 2340C		1	25 mL	25 mL	534883	05/04/21 16:04	RAF	TAL DEN
Total/NA	Analysis	SM 2540C		1	25 mL	100 mL	533539	04/22/21 16:27	JMH	TAL DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	533245	04/20/21 16:42	JMH	TAL DEN
Total/NA	Analysis	Field Sampling		1			533841	04/15/21 13:00	A1S	TAL DEN

Client Sample ID: 9P

Lab Sample ID: 280-147602-8

Date Collected: 04/15/21 14:15

Matrix: Water

Date Received: 04/17/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	5 mL	5 mL	534118	04/28/21 16:44	TAW	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	533806	04/28/21 08:38	MAB	TAL DEN
Dissolved	Analysis	6010B		1			534364	04/28/21 18:27	LMT	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	533566	04/27/21 16:15	EC	TAL DEN
Total Recoverable	Analysis	6010B		1			534189	04/28/21 10:00	LMT	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	533107	04/23/21 09:05	MAB	TAL DEN
Total Recoverable	Analysis	6020		1			534866	05/04/21 12:50	LMT	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	533107	04/23/21 09:05	MAB	TAL DEN
Total Recoverable	Analysis	6020		1			534125	04/27/21 22:46	LMT	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	533107	04/23/21 09:05	MAB	TAL DEN
Total Recoverable	Analysis	6020		1			534277	04/29/21 03:20	LMT	TAL DEN
Total/NA	Analysis	300.0		1	5 mL	5 mL	535742	05/12/21 00:59	CJ	TAL DEN

Client Sample ID: 9P

Lab Sample ID: 280-147602-8

Date Collected: 04/15/21 14:15

Matrix: Water

Date Received: 04/17/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		100	5 mL	5 mL	535742	05/12/21 01:14	CJ	TAL DEN
Total/NA	Analysis	350.1		100	10 mL	10 mL	534560	04/30/21 16:24	QJB	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	534909	05/04/21 18:54	SVC	TAL DEN
Total/NA	Analysis	410.4		20	2 mL	2 mL	534683	05/03/21 10:49	SPG	TAL DEN
Total/NA	Analysis	9040B		1			533185	04/19/21 21:39	QJB	TAL DEN
Total/NA	Analysis	9050A		1			533352	04/21/21 12:16	QJB	TAL DEN
Total/NA	Analysis	9060		20	20 mL	20 mL	535153	05/05/21 19:45	RAF	TAL DEN
Total/NA	Analysis	SM 1030E		1			535981	05/13/21 08:11	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			535981	05/13/21 08:11	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			533325	04/20/21 18:51	QJB	TAL DEN
Total/NA	Analysis	SM 2340C		5	25 mL	25 mL	534380	04/29/21 18:48	RAF	TAL DEN
Total/NA	Analysis	SM 2540C		1	25 mL	100 mL	533539	04/22/21 16:27	JMH	TAL DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	533245	04/20/21 16:42	JMH	TAL DEN
Total/NA	Analysis	Field Sampling		1			533841	04/15/21 15:15	A1S	TAL DEN

Client Sample ID: 9S

Lab Sample ID: 280-147602-9

Date Collected: 04/15/21 14:45

Matrix: Water

Date Received: 04/17/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	534118	04/28/21 17:07	TAW	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	534307	04/29/21 16:00	EC	TAL DEN
Dissolved	Analysis	6010B		1			534717	04/30/21 11:53	LMT	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	533566	04/27/21 16:15	EC	TAL DEN
Total Recoverable	Analysis	6010B		1			534189	04/28/21 10:04	LMT	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	533107	04/23/21 09:05	MAB	TAL DEN
Total Recoverable	Analysis	6020		1			534866	05/04/21 12:54	LMT	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	533107	04/23/21 09:05	MAB	TAL DEN
Total Recoverable	Analysis	6020		1			534125	04/27/21 22:50	LMT	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	533107	04/23/21 09:05	MAB	TAL DEN
Total Recoverable	Analysis	6020		1			534277	04/29/21 03:23	LMT	TAL DEN
Total/NA	Analysis	300.0		1	5 mL	5 mL	535742	05/12/21 01:29	CJ	TAL DEN
Total/NA	Analysis	300.0		20	5 mL	5 mL	535742	05/12/21 01:44	CJ	TAL DEN
Total/NA	Analysis	350.1		50	10 mL	10 mL	534560	04/30/21 17:52	QJB	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	534909	05/04/21 18:56	SVC	TAL DEN
Total/NA	Analysis	410.4		2	2 mL	2 mL	534289	04/29/21 08:55	SPG	TAL DEN
Total/NA	Analysis	9040B		1			533185	04/19/21 21:42	QJB	TAL DEN
Total/NA	Analysis	9050A		1			533352	04/21/21 12:16	QJB	TAL DEN
Total/NA	Analysis	9060		5	20 mL	20 mL	535008	05/05/21 02:08	RAF	TAL DEN
Total/NA	Analysis	SM 1030E		1			535981	05/13/21 08:11	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			535981	05/13/21 08:11	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			533319	04/20/21 19:18	QJB	TAL DEN

Lab Chronicle

Client: Waste Management
Job ID: 280-147602-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Client Sample ID: 9S
Lab Sample ID: 280-147602-9
Date Collected: 04/15/21 14:45
Matrix: Water
Date Received: 04/17/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2340C		5	25 mL	25 mL	534380	04/29/21 18:48	RAF	TAL DEN
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	533539	04/22/21 16:27	JMH	TAL DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	533245	04/20/21 16:42	JMH	TAL DEN
Total/NA	Analysis	Field Sampling		1			533841	04/15/21 15:45	A1S	TAL DEN

Laboratory References:
TAL DEN = Eurofins TestAmerica, Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Eurofins TestAmerica, Denver
4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Fax (303) 431-7171

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: I. Hultquist	Lab PM: Sara, Betsy A	Carrier Tracking No(s):	COC No: 280-16515-868.1
Client Contact:	Phone: 503-716-6320	E-Mail: Betsy.Sara@Eurofinset.com		Page: Page 1 of 1
Company: Waste Management				Job #:
Address: 13469 SW Highway 18	Due Date Requested:			
City: McMinnville	TAT Requested (days):			
State, Zip: OR, 97128				
Phone:	PO #:			
Email:	WO #:			
Project Name: 1003|Riverbend Landfill SCS Engineers Event Desc: LF Module Sumps - Apr	Project #: 28002786			
Site: Oregon	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B	TDS/Alks/EC/pH/Cl/SO4	Hardness/Total Metals	Ammonia/COD/TOC/NOXT	TSS	Dissolved Metals	Cation/Anion Balance	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	N	D	S	N	D			
TB3	4/15/2021	0700	G	W			X							2	Short Holds: pH
1/5P	4/15/2021	1030	G	W	X		X	X	X	X	X	X	X	11	
4/5S	4/15/2021	1100	G	W	X		X	X	X	X	X	X	X	11	
6/7P	4/15/2021	1230	G	W	X		X	X	X	X	X	X	X	11	
6/7S	4/15/2021	1300	G	W	X		X	X	X	X	X	X	X	11	
8P	4/15/2021	1130	G	W	X		X	X	X	X	X	X	X	11	
8S	4/15/2021	1200	G	W	X		X	X	X	X	X	X	X	11	
9P	4/15/2021	1415	G	W	X		X	X	X	X	X	X	X	11	
9S	4/15/2021	1445	G	W	X		X	X	X	X	X	X	X	11	

280-147602 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: [signature]	Date/Time: 4/16/2021 1630	Company: SCS	Received by: [signature]	Date/Time: 4/17/2021 945	Company: EtA Den
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: 13985610/1398563/1584243/1584242 | Cooler Temperature(s) °C and Other Remarks: 0.2/0.3/0.1/0.3

12/2/2021

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** 11SP
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM: N | NE | E | SE | S | SW | (W) | NW
WEATHER: (SUNNY) | CLOUDY | RAIN | ? **TEMPERATURE:** °F 60.0 °C (Circle appropriate units)

(LIGHT) | MEDIUM | HEAVY

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW	[Water Column x Gal/ft] Volume (gal)
/ /	:	.	.	.	.	.	X 1 .
/ /	:	.	.	.	.	.	X 3 .

Gal/ft = (dia./2)^2 x 0.163 | 1" = 0.041 | 2" = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	[√ if used] √
VOA Glass	4/15/21	10:30	A	3	(40 ml)	(HCl)	(YES)	NO		
VOA Glass	/ /	:			40 ml	$Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/15/21	10:30	A	2	250, 500 (1L)	(None)	(YES)	NO	NA	
Yellow Glass	4/15/21	10:30	A	4	(250) 500, 1L	(H_2SO_4)	(YES)	NO		
Red Total Poly	4/15/21	10:30	A	1	125, 250, (500)	(HNO_3)	(YES)	NO		
Red Diss. Poly	4/15/21	10:30	A	1	250, (500) 1L	(HNO_3)	(YES)	(YES)		
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 | 11 | Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [ ] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA

Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (C)	DTW	Diss O_2 (mg/l)	Water Quality
0	A (1030)	0.00	7.60	29.7	21172	31.9	-	1.31	Dark Brown/clear
1		.	.			.	.	.	Odor
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

liquid level 17.0''

SAMPLER: T. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** 4/5J

SITE ADDRESS: McMinnville , Oregon **BLIND ID:**

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW
WEATHER:	SUNNY	CLOUDY	RAIN	?				

LIGHT | MEDIUM | HEAVY

TEMPERATURE: 60.0 °C (Circle appropriate units)

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW	[Water Column x Gal/ft] Volume (gal)
/ /	:	.	.	.	.	.	X 1 .
/ /	:	.	.	.	.	.	X 3 .

Gal/ft = (dia./2)^2 x 0.163 | 1" = 0.041 | 2" = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	[√ if used]
VOA Glass	4/15/21	11:00	A	3	40 ml	HCl	YES	NO		√
VOA Glass	/ /	:			40 ml	$Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/15/21	11:00	A	2	250, 500, 1L	None	YES	NO	NA	
Yellow Glass	4/15/21	11:00	A	4	250 500, 1L	H_2SO_4	YES	NO		
Red Total Poly	4/15/21	11:00	A	1	125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/15/21	11:00	A	1	250, 500, 1L	HNO_3	YES	YES		
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 | 11 | Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [ ] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA

Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O_2 (mg/l)	Water Quality
0	A (1100)	0.00	6.51	-65.1	1955	32.0	-	1.83	clear/light yellow
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

liquid level 17.6"

SAMPLER: (PRINTED NAME) I. Hultgvist (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** GW7R
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	LIGHT	(MEDIUM)	HEAVY
WEATHER:	(SUNNY)	CLOUDY	RAIN	?					**TEMPERATURE:**	(°F) 62.0	(°C)

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW	[Water Column x Gal/ft] Volume (gal)
/ /	:	.	.	.	.	.	X 1 .
/ /	:	.	.	.	.		X 3 .

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	[√ if used] √
VOA Glass	4/15/21	12:30	A	3 (40 ml)	(HCl)	(YES)	NO		
VOA Glass	/ /	:		40 ml	$Na_2S_2O_3$	YES	NO		
Amber Glass	4/15/21	12:30		250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/15/21	12:30	A	2 250, 500 (1L)	(None)	(YES)	NO	NA	
Yellow Glass	4/15/21	12:30	A	4 (250) 500, 1L	(H_2SO_4)	(YES)	NO		
Red Total Poly	4/15/21	12:30	A	1 125, 250, (500)	(HNO_3)	(YES)	NO		
Red Diss. Poly	4/15/21	12:30	A	1 250, (500) 1L	(HNO_3)	(YES)	(YES)		
White Poly	/ /	:		250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:		100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 11 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O_2 (mg/l)	Water Quality
0	A(1230)	0.00	7.12	-44.5	14983	31.6	.	0.52	Light Brown/
1		.	.			.	.	.	Clear Strong
2		.	.			.	.	.	odor
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Liquid level 32.5 '

SAMPLER: I Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** 6178
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		**TEMPERATURE:**	°F 68.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW	[Water Column x Gal/ft]	Volume (gal)
/ /	:	.	.	.	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	[√ if used] √
VOA Glass	4/15/21	13 :00	A	3	40 ml (HCl)	YES	NO		
VOA Glass	/ /	:			40 ml $Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
White Poly	4/15/21	13 :00	A	2	250, 500 (1L) None	YES	NO	NA	
Yellow Glass	4/15/21	13 :00	A	4	(250), 500, 1L (H_2SO_4)	YES	NO		
Red Total Poly	4/15/21	13 :00	A	1	125, 250, (500) (HNO_3)	YES	NO		
Red Diss. Poly	4/15/21	13 :00	A	1	250, (500), 1L (HNO_3)	YES	YES		
White Poly	/ /	:			250, 500, 1L None	YES	YES		
Clear Poly	/ /	:			100, 250, 500 $Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 | 11 | Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA

Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	A (1300)	0.00	6.63	50.7	5071	29.9	-	1.98	clear/light yellow
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Liquid level 11.4' Ran Sump repeatedly due to low purge volume

SAMPLER: I. McHugh (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** 8P
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY	CLOUDY	RAIN	?							

TEMPERATURE: °F 60.0 °C (Circle appropriate units)

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW	[Water Column x Gal/ft] Volume (gal)
/ /	:	.	.	.	.	.	X 1
/ /	:	.	.	.	.		X 3

Gal/ft = (dia./2)^2 x 0.163 | 1" = 0.041 | 2" = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	[√ if used] √
VOA Glass	4/15/21	11:30	A	3	40 ml	HCl	YES	NO		
VOA Glass	/ /	:			40 ml	$Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/15/21	11:30	A	2	250, 500, 1L	None	YES	NO	NA	
Yellow Glass	4/15/21	11:30	A	4	250, 500, 1L	H_2SO_4	YES	NO		
Red Total Poly	4/15/21	11:30	A	1	125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/15/21	11:30	A	1	250, 500, 1L	HNO_3	YES	YES		
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 | 11 | Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA

Purge Start Time: :

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Pump/Bailer Inlet Depth: Diss O_2 (mg/l)	Water Quality
0	A (1130)	0.00	7.48	-224.1	16835	31.1	-	1.01	Dark Brown / Clear
1		.	.			.	.	.	Strong odor
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Liquid level 12.41'

SAMPLER: T. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** 68
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(F) 60.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW	[Water Column x Gal/ft] Volume (gal)
/ /	:	.	.	.	.	.	X 1 .
/ /	:	.	.	.	.	.	X 3 .

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	[√ if used] √
VOA Glass	4/15/21	12:00	A	3	40 ml	(HCl)	(YES)	NO		
VOA Glass	/ /	:			40 ml	$Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/15/21	12:00	A	2	250, 500, (1L)	(None)	(YES)	NO	NA	
Yellow Glass	4/15/21	12:00	A	4	(250), 500, 1L	(H_2SO_4)	(YES)	NO		
Red Total Poly	4/15/21	12:00	A	1	125, 250, (500)	(HNO_3)	(YES)	NO		
Red Diss. Poly	4/15/21	12:00	A	1	250, (500) 1L	(HNO_3)	(YES)	(YES)		
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — 11 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O_2 (mg/l)	Water Quality
0	A(1200)	0.00	7.11	29.7	2220	28.7	—	2.65	clear/colorless
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Liquid level 11.41'

SAMPLER: I. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** OFP

SITE ADDRESS: McMinnville , Oregon **BLIND ID:**

DUP ID: NA

WIND FROM:	N	(NE)	E	SE	S	SW	W	NW	LIGHT	(MEDIUM)	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(°F 65.0)	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW	[Water Column x Gal/ft]	Volume (gal)
/ /	:						X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)^2 x 0.163	1" =	0.041	2" =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	√
VOA Glass	4/15/21	14 : 15		3	40 ml	(HCl)	(YES)	NO		
VOA Glass	/ /	:			40 ml	$Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/15/21	14 : 15		2	250, 500 (1L)	None	(YES)	NO	NA	
Yellow Glass	4/15/21	14 : 15		4	(250), 500, 1L	~~H_2SO_4~~	(YES)	NO		
Red Total Poly	4/15/21	14 : 15		1	125, 250, (500)	(HNO_3)	(YES)	NO		
Red Diss. Poly	4/15/21	14 : 15		1	250, (500), 1L	(HNO_3)	(YES)	(YES)		
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — 11 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_2/NO_3) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA

Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	A (1415)	0.00	7.15	-86.6	11507	26.6	-	0.42	cloudy / Dark brown
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

liquid level 43.0 "

SAMPLER: I. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** 9S
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	(NE)	E	SE	S	SW	W	NW	LIGHT	(MEDIUM)	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	°F 68.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW	[Water Column x Gal/ft] Volume (gal)
/ /	:	.	.	.	.	.	X 1 .
/ /	:	.	.	.	.		X 3 .

Gal/ft = (dia./2)^2 x 0.163 | 1" = 0.041 | 2" = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	[√ if used] √
VOA Glass	4/15/21	14:45	A	3 40 ml	(HCl)	(YES)	NO		
VOA Glass	/ /	:		40 ml	$Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/15/21	14:45	A	2 250, 500, (1L)	None	(YES)	NO	NA	
Yellow Glass	4/15/21	14:45	A	4 250, 500, 1L	H_2SO_4	(YES)	NO		
Red Total Poly	4/15/21	14:45	A	1 125, 250, (500)	HNO_3	(YES)	NO		
Red Diss. Poly	4/15/21	14:45	A	1 250, (500), 1L	HNO_3	(YES)	(YES)		
White Poly	/ /	:		250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:		100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 | 11 | Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8260) (8011) OR [X] WA [ ]
	AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
	YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
	RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
	RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
	WHITE - Poly	(Orthophosphate)
	Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O_2 (mg/l)	Water Quality
0	A(1445)	0.00	6.57	68.7	4005	23.9	-	1.06	clear / light yellow
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Liquid level 13.01'

SAMPLER: I. Hultquist (PRINTED NAME) (SIGNATURE)

ORIGIN ID:SAVA (503) 594-8783
TIFFANY ANDREWS
SCS ENGINEERS
15940 SW 72ND AVE

PORTLAND, OR 97224
UNITED STATES US

SHIP DATE: 02APR21
ACTWGT: 15.00 LB MAN
CAD: 0886563/CAFE3409
DIMS: 24x15x15 IN

TO

EUROFINS TESTAMERICA DENVER
4955 YARROW STREET

ARVADA CO 800024517
(303) 736-0100
REF: S280-107585

RMA:

FedEx Express

FedEx
TRK# 0221 9508 8924 2475

SATURDAY 12:0
PRIORITY OVERNIG

XO LAAA

800(
CO-US DE

#5027332 04/16 [illegible]/F9A6/FE4A

280-147602 Waybill

ORIGIN ID:SAVA (503) 534-3783
TIFFANY ANDREWS
SCS ENGINEERS
15940 SW 72ND AVE

PORTLAND, OR 97224
UNITED STATES US

SHIP DATE: 02APR21
ACTWGT: 15.00 LB MAN
CAD: 0886563/CAFE3409
DIMS: 24x15x15 IN

TO

EUROFINS TESTAMERICA DENVER
4955 YARROW STREET

ARVADA CO 800024517
(303) 736-0100
REF: S280-107585

RMA:

FedEx Express

FedEx
TRK# 0221 9508 8924 2512

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO LAAA

80002
CO-US DEN

#5027332 04/16 56DJ3/F9A6/FE4A



ORIGIN ID:SAVA (503) 724-0112
TIFFANY ANDREWS
SCS ENGINEERS
15940 SW 72ND AVE

PORTLAND, OR 97224
UNITED STATES US

SHIP DATE: 02APR21
ACTWGT: 15.00 LB MAN
CAD: 0886563/CAFE3409
DIMS: 24x15x15 IN

TO

EUROFINS TESTAMERICA DENVER
4955 YARROW STREET

ARVADA CO 800024517
(303) 736-0100
REF: S280-107587

RMA:

FedEx Express

FedEx
TRK# 0221 9508 8924 2122

SATURDAY 12:00
PRIORITY OVERNIGHT

XO LAAA

800
CO-US DI

ORIGIN ID:SAVA (503) 534-3783
TIFFANY ANDREWS
SCS ENGINEERS
15940 SW 72ND AVE

PORTLAND, OR 97224
UNITED STATES US

SHIP DATE: 02APR21
ACTWGT: 15.00 LB MAN
CAD: 0886563/CAFE3409
DIMS: 24x15x15 IN

TO

EUROFINS TESTAMERICA DENVER
4955 YARROW STREET

ARVADA CO 800024517
(303) 736-0100
REF: S280-107585

RMA:

FedEx Express

FedEx
TRK# 0221 9508 8924 2497

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO LAAA

80002
CO-US DEN

#5027332 04/16 56DJ3/F9A6/FE4A

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-147602-1

Login Number: 147602

List Source: Eurofins TestAmerica, Denver

List Number: 1

Creator: Rystrom, Joshua R

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	
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	

Fall 2021

Compliance Groundwater

Laboratory Analytical Reports

eurofins | Environment Testing America



ANALYTICAL REPORT

Eurofins Denver
4955 Yarrow Street
Arvada, CO 80002
Tel: (303)736-0100

Laboratory Job ID: 280-155957-1
Client Project/Site: 1003|Riverbend Landfill - Groundwater
Sampling Event: Semiannual Compliance Wells - Apr Oct

For:
Waste Management
7227 NE 55th Avenue
Portland, Oregon 97218

Attn: Mr. William V Hickey, PMP

Authorized for release by:
3/15/2022 3:00:01 PM
Janice Collins, Project Management Assistant I
(303)736-0100
Janice.Collins@Eurofinset.com

Designee for

Betsy Sara, Project Manager II
(303)736-0189
Betsy.Sara@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Waste Management
Job ID: 280-155957-1
Project/Site: 1003|Riverbend Landfill - Groundwater

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

General Chemistry

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 280-155957-1

Laboratory: Eurofins Denver

Narrative

CASE NARRATIVE

Client: Waste Management

Project: 1003|Riverbend Landfill - Groundwater

Report Number: 280-155957-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

This report may include reporting limits (RLs) less than Eurofins TestAmerica's standard reporting limit. The reported sample results and associated reporting limits are being used specifically to meet the needs of this project. Note that data are not normally reported to these levels without qualification because they are inherently less reliable and potentially less defensible than required by the latest industry standards.

Sample Receiving

The samples were received on 11/19/2021; the samples arrived in good condition, properly preserved and on ice. The temperatures of the coolers at receipt were 0.6°C, 1.0°C, 1.4°C and 1.9°C.

Holding Times

Due to anomalous concentrations relative to historical Total Dissolved Solids (TDS) in the samples MW-15A, MW-15B and FB3, reanalysis was performed outside of the 7-day holding time. The reanalysis results reflected the historical TDS results for these samples, and therefore the reanalysis results are reported in this submission. The original anomalous result for TDS for MW-15A was 170 mg/L. The original anomalous result for TDS for MW-15B was 190 mg/L. The original anomalous result for TDS for FB3 was 14 mg/L.

All other holding times were met.

Method Blanks

All Method Blanks met method criteria.

Laboratory Control Samples (LCS)

All Laboratory Control Sample recoveries were within 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 Tetrachloroethene and Chloroethane Method 8260B. 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.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) for Method 8260B (batch 559320) and Method 8011, however, LCS/LCSD pairs were analyzed to demonstrate method precision and accuracy.

All other MS and MSD results were within established control limits.

Job ID: 280-155957-1 (Continued)

Laboratory: Eurofins Denver (Continued)

General Comments

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.

The analysis for Chloride and Sulfate Method 300.0 was performed by TestAmerica Buffalo. Their address and phone number are:
TestAmerica Buffalo
10 Hazelwood Drive, Suite 106
Amherst, NY 14228
Phone: 716-691-2600

Detection Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Groundwater

Job ID: 280-155957-1

Client Sample ID: TB1 — Lab Sample ID: 280-155957-1

No Detections.

Client Sample ID: MW-14A — Lab Sample ID: 280-155957-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	29000		500		ug/L	1		6010B	Dissolved
Magnesium	11000		200		ug/L	1		6010B	Dissolved
Sodium	10000		1000		ug/L	1		6010B	Dissolved
Chloride	6.9		0.50		mg/L	1		300.0	Total/NA
Sulfate	16		1.0		mg/L	1		300.0	Total/NA
Nitrate/Nitrite	2.3		0.050		mg/L	1		353.2	Total/NA
Total Organic Carbon - Average	1.7		1.0		mg/L	1		9060	Total/NA
Total Anions	2.9				meq/L	1		SM 1030E	Total/NA
Total Cations	2.8				meq/L	1		SM 1030E	Total/NA
Percent Difference	-1.8				%	1		SM 1030E	Total/NA
Calcium	29				mg/L	1		SM 1030E	Total/NA
Magnesium	11				mg/L	1		SM 1030E	Total/NA
Potassium	0.00				mg/L	1		SM 1030E	Total/NA
Sodium	10				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.00				mg/L	1		SM 1030E	Total/NA
Chloride	6.9				mg/L	1		SM 1030E	Total/NA
Sulfate	16				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	110				mg/L	1		SM 1030E	Total/NA
Alkalinity	110				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	2.3				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	-1.8				%	1		SM 1030E	Total/NA
Calculated TDS	130				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.4				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	170				mg/L	1		SM 1030E	Total/NA
Iron	0.00				mg/L	1		SM 1030E	Total/NA
Calcium	1.4				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	0.91				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	0.43				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	0.19				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.33				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	110				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	2.2				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.16				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	110		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	170		10		mg/L	1		SM 2540C	Total/NA
Field pH	6.17				SU	1		Field Sampling	Total/NA
Field Conductivity	300.0				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	11.6				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	6.70				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	197.8				millivolts	1		Field Sampling	Total/NA

Client Sample ID: MW-14B — Lab Sample ID: 280-155957-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	49000		500		ug/L	1		6010B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-14B (Continued)

Lab Sample ID: 280-155957-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	4000		30		ug/L	1		6010B	Dissolved
Magnesium	15000		200		ug/L	1		6010B	Dissolved
Manganese	2000		3.0		ug/L	1		6010B	Dissolved
Potassium	640		500		ug/L	1		6010B	Dissolved
Sodium	29000		1000		ug/L	1		6010B	Dissolved
Chloride	24		0.50		mg/L	1		300.0	Total/NA
Sulfate	2.9		1.0		mg/L	1		300.0	Total/NA
Ammonia as N	0.35		0.030		mg/L	1		350.1	Total/NA
Total Organic Carbon - Average	2.1		1.0		mg/L	1		9060	Total/NA
Total Anions	4.9				meq/L	1		SM 1030E	Total/NA
Total Cations	5.2				meq/L	1		SM 1030E	Total/NA
Percent Difference	2.6				%	1		SM 1030E	Total/NA
Calcium	49				mg/L	1		SM 1030E	Total/NA
Magnesium	15				mg/L	1		SM 1030E	Total/NA
Potassium	0.64				mg/L	1		SM 1030E	Total/NA
Sodium	29				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.35				mg/L	1		SM 1030E	Total/NA
Chloride	24				mg/L	1		SM 1030E	Total/NA
Sulfate	2.9				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	210				mg/L	1		SM 1030E	Total/NA
Alkalinity	210				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.00				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	2.6				%	1		SM 1030E	Total/NA
Calculated TDS	250				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.1				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	280				mg/L	1		SM 1030E	Total/NA
Iron	4.0				mg/L	1		SM 1030E	Total/NA
Calcium	2.4				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	1.2				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.016				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	1.3				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.025				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	0.68				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.060				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	210				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	4.2				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.21				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	210		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	280		10		mg/L	1		SM 2540C	Total/NA
Field pH	7.42				SU	1		Field Sampling	Total/NA
Field Conductivity	533.6				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	10.9				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	2.20				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	-42.7				millivolts	1		Field Sampling	Total/NA

Client Sample ID: DUP3

Lab Sample ID: 280-155957-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	49000		500		ug/L	1		6010B	Dissolved
Iron	4100		30		ug/L	1		6010B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: DUP3 (Continued)

Lab Sample ID: 280-155957-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	15000		200		ug/L	1		6010B	Dissolved
Manganese	2000		3.0		ug/L	1		6010B	Dissolved
Potassium	570		500		ug/L	1		6010B	Dissolved
Sodium	29000		1000		ug/L	1		6010B	Dissolved
Chloride	24		0.50		mg/L	1		300.0	Total/NA
Sulfate	2.9		1.0		mg/L	1		300.0	Total/NA
Ammonia as N	0.35		0.030		mg/L	1		350.1	Total/NA
Total Organic Carbon - Average	2.1		1.0		mg/L	1		9060	Total/NA
Total Anions	4.9				meq/L	1		SM 1030E	Total/NA
Total Cations	5.2				meq/L	1		SM 1030E	Total/NA
Percent Difference	2.6				%	1		SM 1030E	Total/NA
Calcium	49				mg/L	1		SM 1030E	Total/NA
Magnesium	15				mg/L	1		SM 1030E	Total/NA
Potassium	0.57				mg/L	1		SM 1030E	Total/NA
Sodium	29				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.35				mg/L	1		SM 1030E	Total/NA
Chloride	24				mg/L	1		SM 1030E	Total/NA
Sulfate	2.9				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	210				mg/L	1		SM 1030E	Total/NA
Alkalinity	210				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.00				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	2.6				%	1		SM 1030E	Total/NA
Calculated TDS	250				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.1				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	270				mg/L	1		SM 1030E	Total/NA
Iron	4.1				mg/L	1		SM 1030E	Total/NA
Calcium	2.4				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	1.2				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.015				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	1.3				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.025				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	0.68				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.060				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	210				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	4.2				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.22				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	210		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	270		10		mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-15A

Lab Sample ID: 280-155957-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	6400		500		ug/L	1		6010B	Dissolved
Iron	96		30		ug/L	1		6010B	Dissolved
Magnesium	2200		200		ug/L	1		6010B	Dissolved
Sodium	19000		1000		ug/L	1		6010B	Dissolved
Chloride	3.1		0.50		mg/L	1		300.0	Total/NA
Sulfate	20		1.0		mg/L	1		300.0	Total/NA
Nitrate/Nitrite	0.42		0.050		mg/L	1		353.2	Total/NA
Total Organic Carbon - Average	2.4		1.0		mg/L	1		9060	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-15A (Continued)

Lab Sample ID: 280-155957-5

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Total Anions	1.6				meq/L	1		SM 1030E	Total/NA
Total Cations	1.3				meq/L	1		SM 1030E	Total/NA
Percent Difference	-8.9				%	1		SM 1030E	Total/NA
Calcium	6.4				mg/L	1		SM 1030E	Total/NA
Magnesium	2.2				mg/L	1		SM 1030E	Total/NA
Potassium	0.00				mg/L	1		SM 1030E	Total/NA
Sodium	19				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.00				mg/L	1		SM 1030E	Total/NA
Chloride	3.1				mg/L	1		SM 1030E	Total/NA
Sulfate	20				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	53				mg/L	1		SM 1030E	Total/NA
Alkalinity	53				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.42				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	-8.9				%	1		SM 1030E	Total/NA
Calculated TDS	63				mg/L	1		SM 1030E	Total/NA
TDS Ratio	5.7				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	360				mg/L	1		SM 1030E	Total/NA
Iron	0.096				mg/L	1		SM 1030E	Total/NA
Calcium	0.32				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	0.18				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	0.83				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	0.087				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.42				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	53				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	1.1				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.030				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.0052				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	53		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	360	H	10		mg/L	1		SM 2540C	Total/NA
Field pH	6.21				SU	1		Field Sampling	Total/NA
Field Conductivity	197.0				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	14.8				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	9.63				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	201.5				millivolts	1		Field Sampling	Total/NA

Client Sample ID: MW-15B

Lab Sample ID: 280-155957-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	78000		500		ug/L	1		6010B	Dissolved
Iron	500		30		ug/L	1		6010B	Dissolved
Magnesium	31000		200		ug/L	1		6010B	Dissolved
Manganese	980		3.0		ug/L	1		6010B	Dissolved
Sodium	37000		1000		ug/L	1		6010B	Dissolved
Chloride	41		0.50		mg/L	1		300.0	Total/NA
Sulfate	1.8		1.0		mg/L	1		300.0	Total/NA
Total Organic Carbon - Average	1.4		1.0		mg/L	1		9060	Total/NA
Total Anions	8.8				meq/L	1		SM 1030E	Total/NA
Total Cations	8.1				meq/L	1		SM 1030E	Total/NA
Percent Difference	-4.2				%	1		SM 1030E	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-15B (Continued)

Lab Sample ID: 280-155957-6

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Calcium	78				mg/L	1		SM 1030E	Total/NA
Magnesium	31				mg/L	1		SM 1030E	Total/NA
Potassium	0.00				mg/L	1		SM 1030E	Total/NA
Sodium	37				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.00				mg/L	1		SM 1030E	Total/NA
Chloride	41				mg/L	1		SM 1030E	Total/NA
Sulfate	1.8				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	380				mg/L	1		SM 1030E	Total/NA
Alkalinity	380				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.00				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	-4.2				%	1		SM 1030E	Total/NA
Calculated TDS	420				mg/L	1		SM 1030E	Total/NA
TDS Ratio	0.99				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	410				mg/L	1		SM 1030E	Total/NA
Iron	0.50				mg/L	1		SM 1030E	Total/NA
Calcium	3.9				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	2.6				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	1.6				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	1.2				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.037				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	380				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	7.6				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.027				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	380		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	410	H	10		mg/L	1		SM 2540C	Total/NA
Field pH	6.98				SU	1		Field Sampling	Total/NA
Field Conductivity	865.0				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	13.5				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	0.59				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	13.7				millivolts	1		Field Sampling	Total/NA

Client Sample ID: FB2

Lab Sample ID: 280-155957-7

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Total Anions	0.00				meq/L	1		SM 1030E	Total/NA
Total Cations	0.00				meq/L	1		SM 1030E	Total/NA
Percent Difference	NC				%	1		SM 1030E	Total/NA
Calcium	0.00				mg/L	1		SM 1030E	Total/NA
Magnesium	0.00				mg/L	1		SM 1030E	Total/NA
Potassium	0.00				mg/L	1		SM 1030E	Total/NA
Sodium	0.00				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.00				mg/L	1		SM 1030E	Total/NA
Chloride	0.00				mg/L	1		SM 1030E	Total/NA
Sulfate	0.00				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	0.00				mg/L	1		SM 1030E	Total/NA
Alkalinity	0.00				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.00				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	NC				%	1		SM 1030E	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: FB2 (Continued)
Lab Sample ID: 280-155957-7

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Calculated TDS	0.00				mg/L	1		SM 1030E	Total/NA
TDS Ratio	NC				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	0.00				mg/L	1		SM 1030E	Total/NA
Iron	0.00				mg/L	1		SM 1030E	Total/NA
Calcium	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	0.00				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.00				meq/L	1		SM 1030E (meq)	Total/NA

Client Sample ID: MW-16A
Lab Sample ID: 280-155957-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	35000		500		ug/L	1		6010B	Dissolved
Iron	30		30		ug/L	1		6010B	Dissolved
Magnesium	16000		200		ug/L	1		6010B	Dissolved
Manganese	1600		3.0		ug/L	1		6010B	Dissolved
Sodium	33000		1000		ug/L	1		6010B	Dissolved
Chloride	11		0.50		mg/L	1		300.0	Total/NA
Sulfate	17		1.0		mg/L	1		300.0	Total/NA
Ammonia as N	0.052		0.030		mg/L	1		350.1	Total/NA
Nitrate/Nitrite	0.11		0.050		mg/L	1		353.2	Total/NA
Total Organic Carbon - Average	2.1		1.0		mg/L	1		9060	Total/NA
Total Anions	4.9				meq/L	1		SM 1030E	Total/NA
Total Cations	4.5				meq/L	1		SM 1030E	Total/NA
Percent Difference	-3.9				%	1		SM 1030E	Total/NA
Calcium	35				mg/L	1		SM 1030E	Total/NA
Magnesium	16				mg/L	1		SM 1030E	Total/NA
Potassium	0.00				mg/L	1		SM 1030E	Total/NA
Sodium	33				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.052				mg/L	1		SM 1030E	Total/NA
Chloride	11				mg/L	1		SM 1030E	Total/NA
Sulfate	17				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	210				mg/L	1		SM 1030E	Total/NA
Alkalinity	210				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.11				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	-3.9				%	1		SM 1030E	Total/NA
Calculated TDS	220				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.2				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	270				mg/L	1		SM 1030E	Total/NA
Iron	0.030				mg/L	1		SM 1030E	Total/NA
Calcium	1.7				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	1.3				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	1.4				meq/L	1		SM 1030E (meq)	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-16A (Continued) — Lab Sample ID: 280-155957-8

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Ammonia as N	0.0037				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	0.31				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.35				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	210				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	4.2				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.0079				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.0016				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	210		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	270		10		mg/L	1		SM 2540C	Total/NA
Field pH	6.44				SU	1		Field Sampling	Total/NA
Field Conductivity	448.0				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	12.4				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	9.54				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	180.2				millivolts	1		Field Sampling	Total/NA

Client Sample ID: MW-16B — Lab Sample ID: 280-155957-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	100000		500		ug/L	1		6010B	Dissolved
Iron	1000		30		ug/L	1		6010B	Dissolved
Magnesium	36000		200		ug/L	1		6010B	Dissolved
Manganese	3000		3.0		ug/L	1		6010B	Dissolved
Potassium	600		500		ug/L	1		6010B	Dissolved
Sodium	70000		1000		ug/L	1		6010B	Dissolved
Chloride	140		0.50		mg/L	1		300.0	Total/NA
Sulfate	4.6		1.0		mg/L	1		300.0	Total/NA
Ammonia as N	0.21		0.030		mg/L	1		350.1	Total/NA
Total Organic Carbon - Average	1.9		1.0		mg/L	1		9060	Total/NA
Total Anions	11				meq/L	1		SM 1030E	Total/NA
Total Cations	11				meq/L	1		SM 1030E	Total/NA
Percent Difference	-0.70				%	1		SM 1030E	Total/NA
Calcium	100				mg/L	1		SM 1030E	Total/NA
Magnesium	36				mg/L	1		SM 1030E	Total/NA
Potassium	0.60				mg/L	1		SM 1030E	Total/NA
Sodium	70				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.21				mg/L	1		SM 1030E	Total/NA
Chloride	140				mg/L	1		SM 1030E	Total/NA
Sulfate	4.6				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	360				mg/L	1		SM 1030E	Total/NA
Alkalinity	360				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.00				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	-0.70				%	1		SM 1030E	Total/NA
Calculated TDS	560				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.0				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	580				mg/L	1		SM 1030E	Total/NA
Iron	1.0				mg/L	1		SM 1030E	Total/NA
Calcium	5.0				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	3.0				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.015				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	3.0				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.015				meq/L	1		SM 1030E (meq)	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-16B (Continued) — Lab Sample ID: 280-155957-9

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Chloride	3.9				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.096				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	360				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	7.2				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.054				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	360		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	580		10		mg/L	1		SM 2540C	Total/NA
Field pH	7.00				SU	1		Field Sampling	Total/NA
Field Conductivity	1281.0				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	11.90				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	1.48				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	-1.3				millivolts	1		Field Sampling	Total/NA

Client Sample ID: DUP2 — Lab Sample ID: 280-155957-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	100000		500		ug/L	1		6010B	Dissolved
Iron	1000		30		ug/L	1		6010B	Dissolved
Magnesium	37000		200		ug/L	1		6010B	Dissolved
Manganese	3100		3.0		ug/L	1		6010B	Dissolved
Potassium	580		500		ug/L	1		6010B	Dissolved
Sodium	69000		1000		ug/L	1		6010B	Dissolved
Chloride	140		0.50		mg/L	1		300.0	Total/NA
Sulfate	4.5		1.0		mg/L	1		300.0	Total/NA
Ammonia as N	0.19		0.030		mg/L	1		350.1	Total/NA
Total Organic Carbon - Average	1.9		1.0		mg/L	1		9060	Total/NA
Total Anions	12				meq/L	1		SM 1030E	Total/NA
Total Cations	11				meq/L	1		SM 1030E	Total/NA
Percent Difference	-3.1				%	1		SM 1030E	Total/NA
Calcium	100				mg/L	1		SM 1030E	Total/NA
Magnesium	37				mg/L	1		SM 1030E	Total/NA
Potassium	0.58				mg/L	1		SM 1030E	Total/NA
Sodium	69				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.19				mg/L	1		SM 1030E	Total/NA
Chloride	140				mg/L	1		SM 1030E	Total/NA
Sulfate	4.5				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	390				mg/L	1		SM 1030E	Total/NA
Alkalinity	390				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.00				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	-3.1				%	1		SM 1030E	Total/NA
Calculated TDS	580				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.0				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	590				mg/L	1		SM 1030E	Total/NA
Iron	1.0				mg/L	1		SM 1030E	Total/NA
Calcium	5.0				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	3.0				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.015				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	3.0				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.014				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	3.9				meq/L	1		SM 1030E (meq)	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DUP2 (Continued) — Lab Sample ID: 280-155957-10

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Sulfate	0.094				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	390				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	7.8				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.054				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	390		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	590		10		mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-21A — Lab Sample ID: 280-155957-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	25000		500		ug/L	1		6010B	Dissolved
Magnesium	9400		200		ug/L	1		6010B	Dissolved
Sodium	13000		1000		ug/L	1		6010B	Dissolved
Chloride	5.2		0.50		mg/L	1		300.0	Total/NA
Sulfate	12		1.0		mg/L	1		300.0	Total/NA
Nitrate/Nitrite	2.7		0.050		mg/L	1		353.2	Total/NA
Total Organic Carbon - Average	2.3		1.0		mg/L	1		9060	Total/NA
Total Anions	2.8				meq/L	1		SM 1030E	Total/NA
Total Cations	2.6				meq/L	1		SM 1030E	Total/NA
Percent Difference	-3.7				%	1		SM 1030E	Total/NA
Calcium	25				mg/L	1		SM 1030E	Total/NA
Magnesium	9.4				mg/L	1		SM 1030E	Total/NA
Potassium	0.00				mg/L	1		SM 1030E	Total/NA
Sodium	13				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.00				mg/L	1		SM 1030E	Total/NA
Chloride	5.2				mg/L	1		SM 1030E	Total/NA
Sulfate	12				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	110				mg/L	1		SM 1030E	Total/NA
Alkalinity	110				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	2.7				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	-3.7				%	1		SM 1030E	Total/NA
Calculated TDS	120				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.4				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	170				mg/L	1		SM 1030E	Total/NA
Iron	0.00				mg/L	1		SM 1030E	Total/NA
Calcium	1.2				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	0.77				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	0.57				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	0.15				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.25				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	110				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	2.2				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.19				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	110		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	170		10		mg/L	1		SM 2540C	Total/NA
Field pH	6.20				SU	1		Field Sampling	Total/NA
Field Conductivity	279.0				umhos/cm	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-21A (Continued) — Lab Sample ID: 280-155957-11

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Field Temperature	14.0				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	8.07				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	201.3				millivolts	1		Field Sampling	Total/NA

Client Sample ID: FB3 — Lab Sample ID: 280-155957-12

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Total Anions	0.00				meq/L	1		SM 1030E	Total/NA
Total Cations	0.00				meq/L	1		SM 1030E	Total/NA
Percent Difference	NC				%	1		SM 1030E	Total/NA
Calcium	0.00				mg/L	1		SM 1030E	Total/NA
Magnesium	0.00				mg/L	1		SM 1030E	Total/NA
Potassium	0.00				mg/L	1		SM 1030E	Total/NA
Sodium	0.00				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.00				mg/L	1		SM 1030E	Total/NA
Chloride	0.00				mg/L	1		SM 1030E	Total/NA
Sulfate	0.00				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	0.00				mg/L	1		SM 1030E	Total/NA
Alkalinity	0.00				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.00				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	NC				%	1		SM 1030E	Total/NA
Calculated TDS	0.00				mg/L	1		SM 1030E	Total/NA
TDS Ratio	NC				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	0.00				mg/L	1		SM 1030E	Total/NA
Iron	0.00				mg/L	1		SM 1030E	Total/NA
Calcium	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	0.00				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.00				meq/L	1		SM 1030E (meq)	Total/NA

Client Sample ID: MW-21B — Lab Sample ID: 280-155957-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	49000		500		ug/L	1		6010B	Dissolved
Iron	320		30		ug/L	1		6010B	Dissolved
Magnesium	20000		200		ug/L	1		6010B	Dissolved
Manganese	1800		3.0		ug/L	1		6010B	Dissolved
Potassium	990		500		ug/L	1		6010B	Dissolved
Sodium	29000		1000		ug/L	1		6010B	Dissolved
Chloride	12		0.50		mg/L	1		300.0	Total/NA
Ammonia as N	0.44		0.030		mg/L	1		350.1	Total/NA
Total Organic Carbon - Average	3.0		1.0		mg/L	1		9060	Total/NA
Total Anions	5.5				meq/L	1		SM 1030E	Total/NA
Total Cations	5.4				meq/L	1		SM 1030E	Total/NA
Percent Difference	-0.98				%	1		SM 1030E	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-21B (Continued)

Lab Sample ID: 280-155957-13

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Calcium	49				mg/L	1		SM 1030E	Total/NA
Magnesium	20				mg/L	1		SM 1030E	Total/NA
Potassium	0.99				mg/L	1		SM 1030E	Total/NA
Sodium	29				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.44				mg/L	1		SM 1030E	Total/NA
Chloride	12				mg/L	1		SM 1030E	Total/NA
Sulfate	0.00				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	260				mg/L	1		SM 1030E	Total/NA
Alkalinity	260				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.00				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	-0.98				%	1		SM 1030E	Total/NA
Calculated TDS	270				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.1				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	300				mg/L	1		SM 1030E	Total/NA
Iron	0.32				mg/L	1		SM 1030E	Total/NA
Calcium	2.4				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	1.6				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.025				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	1.3				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.031				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	0.34				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	260				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	5.2				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.017				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	260		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	300		10		mg/L	1		SM 2540C	Total/NA
Field pH	6.82				SU	1		Field Sampling	Total/NA
Field Conductivity	543.0				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	13.7				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	0.49				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	39.4				millivolts	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Waste Management
Job ID: 280-155957-1
Project/Site: 1003|Riverbend Landfill - Groundwater

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-155957-1	TB1	Water	11/16/21 07:00	11/19/21 10:25
280-155957-2	MW-14A	Water	11/17/21 15:25	11/19/21 10:25
280-155957-3	MW-14B	Water	11/18/21 08:35	11/19/21 10:25
280-155957-4	DUP3	Water	11/18/21 08:40	11/19/21 10:25
280-155957-5	MW-15A	Water	11/17/21 11:25	11/19/21 10:25
280-155957-6	MW-15B	Water	11/17/21 12:05	11/19/21 10:25
280-155957-7	FB2	Water	11/17/21 12:20	11/19/21 10:25
280-155957-8	MW-16A	Water	11/17/21 08:55	11/19/21 10:25
280-155957-9	MW-16B	Water	11/17/21 09:40	11/19/21 10:25
280-155957-10	DUP2	Water	11/17/21 09:45	11/19/21 10:25
280-155957-11	MW-21A	Water	11/18/21 10:15	11/19/21 10:25
280-155957-12	FB3	Water	11/18/21 09:50	11/19/21 10:25
280-155957-13	MW-21B	Water	11/16/21 13:00	11/19/21 10:25

Method Summary

Client: Waste Management
Job ID: 280-155957-1
Project/Site: 1003|Riverbend Landfill - Groundwater

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL DEN
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	TAL DEN
6010B	Metals (ICP)	SW846	TAL DEN
300.0	Anions, Ion Chromatography	MCAWW	TAL BUF
350.1	Nitrogen, Ammonia	MCAWW	TAL DEN
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	TAL DEN
9060	Organic Carbon, Total (TOC)	SW846	TAL DEN
SM 1030E	Cation Anion Balance	SM	TAL DEN
SM 1030E (meq)	Cation Anion Balance	SM	TAL DEN
SM 2320B	Alkalinity	SM	TAL DEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL DEN
Field Sampling	Field Sampling	EPA	TAL DEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL DEN
5030B	Purge and Trap	SW846	TAL DEN
8011	Microextraction	SW846	TAL DEN

Protocol 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.

Laboratory References:

TAL BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Client Sample ID: TB1

Date Collected: 11/16/21 07:00
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155957-1

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			11/29/21 11:39	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/29/21 11:39	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/29/21 11:39	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/29/21 11:39	1
1,1-Dichloroethane	ND		1.0		ug/L			11/29/21 11:39	1
1,1-Dichloroethene	ND		1.0		ug/L			11/29/21 11:39	1
1,1-Dichloropropene	ND		1.0		ug/L			11/29/21 11:39	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/29/21 11:39	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/29/21 11:39	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/29/21 11:39	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/29/21 11:39	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/29/21 11:39	1
1,2-Dichloroethane	ND		1.0		ug/L			11/29/21 11:39	1
1,2-Dichloropropane	ND		1.0		ug/L			11/29/21 11:39	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/29/21 11:39	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/29/21 11:39	1
1,3-Dichloropropane	ND		1.0		ug/L			11/29/21 11:39	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/29/21 11:39	1
2,2-Dichloropropane	ND		5.0		ug/L			11/29/21 11:39	1
2-Butanone (MEK)	ND		6.0		ug/L			11/29/21 11:39	1
2-Chlorotoluene	ND		1.0		ug/L			11/29/21 11:39	1
2-Hexanone	ND		5.0		ug/L			11/29/21 11:39	1
4-Chlorotoluene	ND		1.0		ug/L			11/29/21 11:39	1
4-Isopropyltoluene	ND		1.0		ug/L			11/29/21 11:39	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/29/21 11:39	1
Acetone	ND		10		ug/L			11/29/21 11:39	1
Benzene	ND		1.0		ug/L			11/29/21 11:39	1
Bromobenzene	ND		1.0		ug/L			11/29/21 11:39	1
Bromochloromethane	ND		1.0		ug/L			11/29/21 11:39	1
Bromodichloromethane	ND		1.0		ug/L			11/29/21 11:39	1
Bromoform	ND		1.0		ug/L			11/29/21 11:39	1
Bromomethane	ND		2.0		ug/L			11/29/21 11:39	1
Carbon disulfide	ND		2.0		ug/L			11/29/21 11:39	1
Carbon tetrachloride	ND		1.0		ug/L			11/29/21 11:39	1
Chlorobenzene	ND		1.0		ug/L			11/29/21 11:39	1
Chloroethane	ND		2.0		ug/L			11/29/21 11:39	1
Chloroform	ND		1.0		ug/L			11/29/21 11:39	1
Chloromethane	ND		2.0		ug/L			11/29/21 11:39	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/29/21 11:39	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/29/21 11:39	1
Dibromochloromethane	ND		1.0		ug/L			11/29/21 11:39	1
Dibromomethane	ND		1.0		ug/L			11/29/21 11:39	1
Dichlorodifluoromethane	ND		2.0		ug/L			11/29/21 11:39	1
Ethylbenzene	ND		1.0		ug/L			11/29/21 11:39	1
Hexachlorobutadiene	ND		1.0		ug/L			11/29/21 11:39	1
Isopropylbenzene	ND		1.0		ug/L			11/29/21 11:39	1
Methylene Chloride	ND		5.0		ug/L			11/29/21 11:39	1
Naphthalene	ND		1.0		ug/L			11/29/21 11:39	1
n-Butylbenzene	ND		1.0		ug/L			11/29/21 11:39	1

Client Sample ID: TB1

Lab Sample ID: 280-155957-1

Date Collected: 11/16/21 07:00

Matrix: Water

Date Received: 11/19/21 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		1.0		ug/L			11/29/21 11:39	1
sec-Butylbenzene	ND		1.0		ug/L			11/29/21 11:39	1
Styrene	ND		1.0		ug/L			11/29/21 11:39	1
tert-Butylbenzene	ND		1.0		ug/L			11/29/21 11:39	1
Tetrachloroethene	ND		1.0		ug/L			11/29/21 11:39	1
Toluene	ND		1.0		ug/L			11/29/21 11:39	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/29/21 11:39	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/29/21 11:39	1
Trichloroethene	ND		1.0		ug/L			11/29/21 11:39	1
Trichlorofluoromethane	ND		2.0		ug/L			11/29/21 11:39	1
Vinyl chloride	ND		1.0		ug/L			11/29/21 11:39	1
Xylenes (total)	ND		2.0		ug/L			11/29/21 11:39	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*11/29/21 11:39*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 127*		*11/29/21 11:39*	*1*
4-Bromofluorobenzene (Surr)	*93*		*78 - 120*		*11/29/21 11:39*	*1*
Dibromofluoromethane (Surr)	*109*		*77 - 120*		*11/29/21 11:39*	*1*
Toluene-d8 (Surr)	*92*		*80 - 125*		*11/29/21 11:39*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		11/29/21 14:19	11/29/21 22:38	1
1,2-Dibromoethane	ND		0.050		ug/L		11/29/21 14:19	11/29/21 22:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*109*		*70 - 130*	*11/29/21 14:19*	*11/29/21 22:38*	*1*

Client Sample ID: MW-14A

Lab Sample ID: 280-155957-2

Date Collected: 11/17/21 15:25

Matrix: Water

Date Received: 11/19/21 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			11/29/21 12:23	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/29/21 12:23	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/29/21 12:23	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/29/21 12:23	1
1,1-Dichloroethane	ND		1.0		ug/L			11/29/21 12:23	1
1,1-Dichloroethene	ND		1.0		ug/L			11/29/21 12:23	1
1,1-Dichloropropene	ND		1.0		ug/L			11/29/21 12:23	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/29/21 12:23	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/29/21 12:23	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/29/21 12:23	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/29/21 12:23	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/29/21 12:23	1
1,2-Dichloroethane	ND		1.0		ug/L			11/29/21 12:23	1
1,2-Dichloropropane	ND		1.0		ug/L			11/29/21 12:23	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/29/21 12:23	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Groundwater

Job ID: 280-155957-1

Client Sample ID: MW-14A
Date Collected: 11/17/21 15:25
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155957-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0		ug/L			11/29/21 12:23	1
1,3-Dichloropropane	ND		1.0		ug/L			11/29/21 12:23	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/29/21 12:23	1
2,2-Dichloropropane	ND		5.0		ug/L			11/29/21 12:23	1
2-Butanone (MEK)	ND		6.0		ug/L			11/29/21 12:23	1
2-Chlorotoluene	ND		1.0		ug/L			11/29/21 12:23	1
2-Hexanone	ND		5.0		ug/L			11/29/21 12:23	1
4-Chlorotoluene	ND		1.0		ug/L			11/29/21 12:23	1
4-Isopropyltoluene	ND		1.0		ug/L			11/29/21 12:23	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/29/21 12:23	1
Acetone	ND		10		ug/L			11/29/21 12:23	1
Benzene	ND		1.0		ug/L			11/29/21 12:23	1
Bromobenzene	ND		1.0		ug/L			11/29/21 12:23	1
Bromochloromethane	ND		1.0		ug/L			11/29/21 12:23	1
Bromodichloromethane	ND		1.0		ug/L			11/29/21 12:23	1
Bromoform	ND		1.0		ug/L			11/29/21 12:23	1
Bromomethane	ND		2.0		ug/L			11/29/21 12:23	1
Carbon disulfide	ND		2.0		ug/L			11/29/21 12:23	1
Carbon tetrachloride	ND		1.0		ug/L			11/29/21 12:23	1
Chlorobenzene	ND		1.0		ug/L			11/29/21 12:23	1
Chloroethane	ND		2.0		ug/L			11/29/21 12:23	1
Chloroform	ND		1.0		ug/L			11/29/21 12:23	1
Chloromethane	ND		2.0		ug/L			11/29/21 12:23	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/29/21 12:23	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/29/21 12:23	1
Dibromochloromethane	ND		1.0		ug/L			11/29/21 12:23	1
Dibromomethane	ND		1.0		ug/L			11/29/21 12:23	1
Dichlorodifluoromethane	ND		2.0		ug/L			11/29/21 12:23	1
Ethylbenzene	ND		1.0		ug/L			11/29/21 12:23	1
Hexachlorobutadiene	ND		1.0		ug/L			11/29/21 12:23	1
Isopropylbenzene	ND		1.0		ug/L			11/29/21 12:23	1
Methylene Chloride	ND		5.0		ug/L			11/29/21 12:23	1
Naphthalene	ND		1.0		ug/L			11/29/21 12:23	1
n-Butylbenzene	ND		1.0		ug/L			11/29/21 12:23	1
N-Propylbenzene	ND		1.0		ug/L			11/29/21 12:23	1
sec-Butylbenzene	ND		1.0		ug/L			11/29/21 12:23	1
Styrene	ND		1.0		ug/L			11/29/21 12:23	1
tert-Butylbenzene	ND		1.0		ug/L			11/29/21 12:23	1
Tetrachloroethene	ND		1.0		ug/L			11/29/21 12:23	1
Toluene	ND		1.0		ug/L			11/29/21 12:23	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/29/21 12:23	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/29/21 12:23	1
Trichloroethene	ND		1.0		ug/L			11/29/21 12:23	1
Trichlorofluoromethane	ND		2.0		ug/L			11/29/21 12:23	1
Vinyl chloride	ND		1.0		ug/L			11/29/21 12:23	1
Xylenes (total)	ND		2.0		ug/L			11/29/21 12:23	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*11/29/21 12:23*	*1*

Client Sample ID: MW-14A

Date Collected: 11/17/21 15:25
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155957-2

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 127*		*11/29/21 12:23*	*1*
4-Bromofluorobenzene (Surr)	*93*		*78 - 120*		*11/29/21 12:23*	*1*
Dibromofluoromethane (Surr)	*111*		*77 - 120*		*11/29/21 12:23*	*1*
Toluene-d8 (Surr)	*92*		*80 - 125*		*11/29/21 12:23*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		11/29/21 14:19	11/29/21 23:03	1
1,2-Dibromoethane	ND		0.050		ug/L		11/29/21 14:19	11/29/21 23:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*108*		*70 - 130*	*11/29/21 14:19*	*11/29/21 23:03*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**29000**		500		ug/L		11/29/21 08:00	11/30/21 02:31	1
Iron	ND		30		ug/L		11/29/21 08:00	11/30/21 02:31	1
Magnesium	**11000**		200		ug/L		11/29/21 08:00	11/30/21 02:31	1
Manganese	ND		3.0		ug/L		11/29/21 08:00	11/30/21 02:31	1
Potassium	ND		500		ug/L		11/29/21 08:00	11/30/21 02:31	1
Sodium	**10000**		1000		ug/L		11/29/21 08:00	11/30/21 02:31	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	**2.9**				meq/L			12/09/21 14:58	1
Total Cations	**2.8**				meq/L			12/09/21 14:58	1
Percent Difference	**-1.8**				%			12/09/21 14:58	1
Calcium	**29**				mg/L			12/09/21 14:58	1
Magnesium	**11**				mg/L			12/09/21 14:58	1
Potassium	**0.00**				mg/L			12/09/21 14:58	1
Sodium	**10**				mg/L			12/09/21 14:58	1
Ammonia as N	**0.00**				mg/L			12/09/21 14:58	1
Chloride	**6.9**				mg/L			12/09/21 14:58	1
Sulfate	**16**				mg/L			12/09/21 14:58	1
Bicarbonate Alkalinity	**110**				mg/L			12/09/21 14:58	1
Alkalinity	**110**				mg/L			12/09/21 14:58	1
Nitrate/Nitrite	**2.3**				mg/L			12/09/21 14:58	1
Anion/Cation Balance	**-1.8**				%			12/09/21 14:58	1
Calculated TDS	**130**				mg/L			12/09/21 14:58	1
TDS Ratio	**1.4**				NONE			12/09/21 14:58	1
Total Dissolved Solids	**170**				mg/L			12/09/21 14:58	1
Iron	**0.00**				mg/L			12/09/21 14:58	1
Calcium	**1.4**				meq/L			12/09/21 14:58	1
Magnesium	**0.91**				meq/L			12/09/21 14:58	1
Potassium	**0.00**				meq/L			12/09/21 14:58	1
Sodium	**0.43**				meq/L			12/09/21 14:58	1
Ammonia as N	**0.00**				meq/L			12/09/21 14:58	1
Chloride	**0.19**				meq/L			12/09/21 14:58	1
Sulfate	**0.33**				meq/L			12/09/21 14:58	1
Alkalinity	**110**				mg/L			12/09/21 14:58	1
Bicarbonate Alkalinity	**2.2**				meq/L			12/09/21 14:58	1

Client Sample ID: MW-14A
Lab Sample ID: 280-155957-2
Date Collected: 11/17/21 15:25
Matrix: Water
Date Received: 11/19/21 10:25

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate/Nitrite	0.16				meq/L			12/09/21 14:58	1
Iron	0.00				meq/L			12/09/21 14:58	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.9		0.50		mg/L			11/29/21 22:26	1
Sulfate	16		1.0		mg/L			11/29/21 22:26	1
Ammonia as N	ND		0.030		mg/L			12/04/21 11:15	1
Nitrate/Nitrite	2.3		0.050		mg/L			12/08/21 17:34	1
Total Organic Carbon - Average	1.7		1.0		mg/L			12/08/21 22:04	1
Bicarbonate Alkalinity	110		10		mg/L			12/01/21 17:34	1
Total Dissolved Solids	170		10		mg/L			11/23/21 09:49	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.17				SU			11/17/21 16:25	1
Field Conductivity	300.0				umhos/cm			11/17/21 16:25	1
Field Temperature	11.6				Degrees C			11/17/21 16:25	1
Field Dissolved Oxygen	6.70				mg/L			11/17/21 16:25	1
Field EH/ORP	197.8				millivolts			11/17/21 16:25	1

Client Sample ID: MW-14B
Lab Sample ID: 280-155957-3
Date Collected: 11/18/21 08:35
Matrix: Water
Date Received: 11/19/21 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			11/29/21 12:46	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/29/21 12:46	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/29/21 12:46	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/29/21 12:46	1
1,1-Dichloroethane	ND		1.0		ug/L			11/29/21 12:46	1
1,1-Dichloroethene	ND		1.0		ug/L			11/29/21 12:46	1
1,1-Dichloropropene	ND		1.0		ug/L			11/29/21 12:46	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/29/21 12:46	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/29/21 12:46	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/29/21 12:46	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/29/21 12:46	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/29/21 12:46	1
1,2-Dichloroethane	ND		1.0		ug/L			11/29/21 12:46	1
1,2-Dichloropropane	ND		1.0		ug/L			11/29/21 12:46	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/29/21 12:46	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/29/21 12:46	1
1,3-Dichloropropane	ND		1.0		ug/L			11/29/21 12:46	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/29/21 12:46	1
2,2-Dichloropropane	ND		5.0		ug/L			11/29/21 12:46	1
2-Butanone (MEK)	ND		6.0		ug/L			11/29/21 12:46	1
2-Chlorotoluene	ND		1.0		ug/L			11/29/21 12:46	1
2-Hexanone	ND		5.0		ug/L			11/29/21 12:46	1
4-Chlorotoluene	ND		1.0		ug/L			11/29/21 12:46	1
4-Isopropyltoluene	ND		1.0		ug/L			11/29/21 12:46	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/29/21 12:46	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Groundwater

Job ID: 280-155957-1

Client Sample ID: MW-14B
Date Collected: 11/18/21 08:35
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155957-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10		ug/L			11/29/21 12:46	1
Benzene	ND		1.0		ug/L			11/29/21 12:46	1
Bromobenzene	ND		1.0		ug/L			11/29/21 12:46	1
Bromochloromethane	ND		1.0		ug/L			11/29/21 12:46	1
Bromodichloromethane	ND		1.0		ug/L			11/29/21 12:46	1
Bromoform	ND		1.0		ug/L			11/29/21 12:46	1
Bromomethane	ND		2.0		ug/L			11/29/21 12:46	1
Carbon disulfide	ND		2.0		ug/L			11/29/21 12:46	1
Carbon tetrachloride	ND		1.0		ug/L			11/29/21 12:46	1
Chlorobenzene	ND		1.0		ug/L			11/29/21 12:46	1
Chloroethane	ND		2.0		ug/L			11/29/21 12:46	1
Chloroform	ND		1.0		ug/L			11/29/21 12:46	1
Chloromethane	ND		2.0		ug/L			11/29/21 12:46	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/29/21 12:46	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/29/21 12:46	1
Dibromochloromethane	ND		1.0		ug/L			11/29/21 12:46	1
Dibromomethane	ND		1.0		ug/L			11/29/21 12:46	1
Dichlorodifluoromethane	ND		2.0		ug/L			11/29/21 12:46	1
Ethylbenzene	ND		1.0		ug/L			11/29/21 12:46	1
Hexachlorobutadiene	ND		1.0		ug/L			11/29/21 12:46	1
Isopropylbenzene	ND		1.0		ug/L			11/29/21 12:46	1
Methylene Chloride	ND		5.0		ug/L			11/29/21 12:46	1
Naphthalene	ND		1.0		ug/L			11/29/21 12:46	1
n-Butylbenzene	ND		1.0		ug/L			11/29/21 12:46	1
N-Propylbenzene	ND		1.0		ug/L			11/29/21 12:46	1
sec-Butylbenzene	ND		1.0		ug/L			11/29/21 12:46	1
Styrene	ND		1.0		ug/L			11/29/21 12:46	1
tert-Butylbenzene	ND		1.0		ug/L			11/29/21 12:46	1
Tetrachloroethene	ND		1.0		ug/L			11/29/21 12:46	1
Toluene	ND		1.0		ug/L			11/29/21 12:46	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/29/21 12:46	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/29/21 12:46	1
Trichloroethene	ND		1.0		ug/L			11/29/21 12:46	1
Trichlorofluoromethane	ND		2.0		ug/L			11/29/21 12:46	1
Vinyl chloride	ND		1.0		ug/L			11/29/21 12:46	1
Xylenes (total)	ND		2.0		ug/L			11/29/21 12:46	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*11/29/21 12:46*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 127*		*11/29/21 12:46*	*1*
4-Bromofluorobenzene (Surr)	*94*		*78 - 120*		*11/29/21 12:46*	*1*
Dibromofluoromethane (Surr)	*110*		*77 - 120*		*11/29/21 12:46*	*1*
Toluene-d8 (Surr)	*93*		*80 - 125*		*11/29/21 12:46*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		11/29/21 14:19	11/29/21 23:27	1
1,2-Dibromoethane	ND		0.050		ug/L		11/29/21 14:19	11/29/21 23:27	1

Client Sample ID: MW-14B

Date Collected: 11/18/21 08:35
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155957-3

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*108*		*70 - 130*	*11/29/21 14:19*	*11/29/21 23:27*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	49000		500		ug/L		11/29/21 08:00	11/30/21 02:48	1
Iron	4000		30		ug/L		11/29/21 08:00	11/30/21 02:48	1
Magnesium	15000		200		ug/L		11/29/21 08:00	11/30/21 02:48	1
Manganese	2000		3.0		ug/L		11/29/21 08:00	11/30/21 02:48	1
Potassium	640		500		ug/L		11/29/21 08:00	11/30/21 02:48	1
Sodium	29000		1000		ug/L		11/29/21 08:00	11/30/21 02:48	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	4.9				meq/L			12/09/21 14:58	1
Total Cations	5.2				meq/L			12/09/21 14:58	1
Percent Difference	2.6				%			12/09/21 14:58	1
Calcium	49				mg/L			12/09/21 14:58	1
Magnesium	15				mg/L			12/09/21 14:58	1
Potassium	0.64				mg/L			12/09/21 14:58	1
Sodium	29				mg/L			12/09/21 14:58	1
Ammonia as N	0.35				mg/L			12/09/21 14:58	1
Chloride	24				mg/L			12/09/21 14:58	1
Sulfate	2.9				mg/L			12/09/21 14:58	1
Bicarbonate Alkalinity	210				mg/L			12/09/21 14:58	1
Alkalinity	210				mg/L			12/09/21 14:58	1
Nitrate/Nitrite	0.00				mg/L			12/09/21 14:58	1
Anion/Cation Balance	2.6				%			12/09/21 14:58	1
Calculated TDS	250				mg/L			12/09/21 14:58	1
TDS Ratio	1.1				NONE			12/09/21 14:58	1
Total Dissolved Solids	280				mg/L			12/09/21 14:58	1
Iron	4.0				mg/L			12/09/21 14:58	1
Calcium	2.4				meq/L			12/09/21 14:58	1
Magnesium	1.2				meq/L			12/09/21 14:58	1
Potassium	0.016				meq/L			12/09/21 14:58	1
Sodium	1.3				meq/L			12/09/21 14:58	1
Ammonia as N	0.025				meq/L			12/09/21 14:58	1
Chloride	0.68				meq/L			12/09/21 14:58	1
Sulfate	0.060				meq/L			12/09/21 14:58	1
Alkalinity	210				mg/L			12/09/21 14:58	1
Bicarbonate Alkalinity	4.2				meq/L			12/09/21 14:58	1
Nitrate/Nitrite	0.00				meq/L			12/09/21 14:58	1
Iron	0.21				meq/L			12/09/21 14:58	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	24		0.50		mg/L			11/29/21 23:37	1
Sulfate	2.9		1.0		mg/L			11/29/21 23:37	1
Ammonia as N	0.35		0.030		mg/L			12/04/21 11:21	1
Nitrate/Nitrite	ND		0.050		mg/L			12/07/21 17:35	1
Total Organic Carbon - Average	2.1		1.0		mg/L			12/08/21 04:10	1
Bicarbonate Alkalinity	210		10		mg/L			12/01/21 17:29	1
Total Dissolved Solids	280		10		mg/L			11/23/21 09:49	1

Client Sample ID: MW-14B

Lab Sample ID: 280-155957-3

Date Collected: 11/18/21 08:35

Matrix: Water

Date Received: 11/19/21 10:25

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**7.42**				SU			11/18/21 09:35	1
Field Conductivity	**533.6**				umhos/cm			11/18/21 09:35	1
Field Temperature	**10.9**				Degrees C			11/18/21 09:35	1
Field Dissolved Oxygen	**2.20**				mg/L			11/18/21 09:35	1
Field EH/ORP	**-42.7**				millivolts			11/18/21 09:35	1

Client Sample ID: DUP3

Lab Sample ID: 280-155957-4

Date Collected: 11/18/21 08:40

Matrix: Water

Date Received: 11/19/21 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			11/29/21 13:08	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/29/21 13:08	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/29/21 13:08	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/29/21 13:08	1
1,1-Dichloroethane	ND		1.0		ug/L			11/29/21 13:08	1
1,1-Dichloroethene	ND		1.0		ug/L			11/29/21 13:08	1
1,1-Dichloropropene	ND		1.0		ug/L			11/29/21 13:08	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/29/21 13:08	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/29/21 13:08	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/29/21 13:08	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/29/21 13:08	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/29/21 13:08	1
1,2-Dichloroethane	ND		1.0		ug/L			11/29/21 13:08	1
1,2-Dichloropropane	ND		1.0		ug/L			11/29/21 13:08	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/29/21 13:08	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/29/21 13:08	1
1,3-Dichloropropane	ND		1.0		ug/L			11/29/21 13:08	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/29/21 13:08	1
2,2-Dichloropropane	ND		5.0		ug/L			11/29/21 13:08	1
2-Butanone (MEK)	ND		6.0		ug/L			11/29/21 13:08	1
2-Chlorotoluene	ND		1.0		ug/L			11/29/21 13:08	1
2-Hexanone	ND		5.0		ug/L			11/29/21 13:08	1
4-Chlorotoluene	ND		1.0		ug/L			11/29/21 13:08	1
4-Isopropyltoluene	ND		1.0		ug/L			11/29/21 13:08	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/29/21 13:08	1
Acetone	ND		10		ug/L			11/29/21 13:08	1
Benzene	ND		1.0		ug/L			11/29/21 13:08	1
Bromobenzene	ND		1.0		ug/L			11/29/21 13:08	1
Bromochloromethane	ND		1.0		ug/L			11/29/21 13:08	1
Bromodichloromethane	ND		1.0		ug/L			11/29/21 13:08	1
Bromoform	ND		1.0		ug/L			11/29/21 13:08	1
Bromomethane	ND		2.0		ug/L			11/29/21 13:08	1
Carbon disulfide	ND		2.0		ug/L			11/29/21 13:08	1
Carbon tetrachloride	ND		1.0		ug/L			11/29/21 13:08	1
Chlorobenzene	ND		1.0		ug/L			11/29/21 13:08	1
Chloroethane	ND		2.0		ug/L			11/29/21 13:08	1
Chloroform	ND		1.0		ug/L			11/29/21 13:08	1
Chloromethane	ND		2.0		ug/L			11/29/21 13:08	1

Client Sample ID: DUP3

Date Collected: 11/18/21 08:40
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155957-4

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/29/21 13:08	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/29/21 13:08	1
Dibromochloromethane	ND		1.0		ug/L			11/29/21 13:08	1
Dibromomethane	ND		1.0		ug/L			11/29/21 13:08	1
Dichlorodifluoromethane	ND		2.0		ug/L			11/29/21 13:08	1
Ethylbenzene	ND		1.0		ug/L			11/29/21 13:08	1
Hexachlorobutadiene	ND		1.0		ug/L			11/29/21 13:08	1
Isopropylbenzene	ND		1.0		ug/L			11/29/21 13:08	1
Methylene Chloride	ND		5.0		ug/L			11/29/21 13:08	1
Naphthalene	ND		1.0		ug/L			11/29/21 13:08	1
n-Butylbenzene	ND		1.0		ug/L			11/29/21 13:08	1
N-Propylbenzene	ND		1.0		ug/L			11/29/21 13:08	1
sec-Butylbenzene	ND		1.0		ug/L			11/29/21 13:08	1
Styrene	ND		1.0		ug/L			11/29/21 13:08	1
tert-Butylbenzene	ND		1.0		ug/L			11/29/21 13:08	1
Tetrachloroethene	ND		1.0		ug/L			11/29/21 13:08	1
Toluene	ND		1.0		ug/L			11/29/21 13:08	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/29/21 13:08	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/29/21 13:08	1
Trichloroethene	ND		1.0		ug/L			11/29/21 13:08	1
Trichlorofluoromethane	ND		2.0		ug/L			11/29/21 13:08	1
Vinyl chloride	ND		1.0		ug/L			11/29/21 13:08	1
Xylenes (total)	ND		2.0		ug/L			11/29/21 13:08	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*11/29/21 13:08*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 127*		*11/29/21 13:08*	*1*
4-Bromofluorobenzene (Surr)	*93*		*78 - 120*		*11/29/21 13:08*	*1*
Dibromofluoromethane (Surr)	*109*		*77 - 120*		*11/29/21 13:08*	*1*
Toluene-d8 (Surr)	*92*		*80 - 125*		*11/29/21 13:08*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		11/29/21 14:19	11/29/21 23:52	1
1,2-Dibromoethane	ND		0.050		ug/L		11/29/21 14:19	11/29/21 23:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*108*		*70 - 130*	*11/29/21 14:19*	*11/29/21 23:52*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**49000**		500		ug/L		11/29/21 08:00	11/30/21 02:52	1
Iron	**4100**		30		ug/L		11/29/21 08:00	11/30/21 02:52	1
Magnesium	**15000**		200		ug/L		11/29/21 08:00	11/30/21 02:52	1
Manganese	**2000**		3.0		ug/L		11/29/21 08:00	11/30/21 02:52	1
Potassium	**570**		500		ug/L		11/29/21 08:00	11/30/21 02:52	1
Sodium	**29000**		1000		ug/L		11/29/21 08:00	11/30/21 02:52	1

Client Sample ID: DUP3
Lab Sample ID: 280-155957-4
Date Collected: 11/18/21 08:40
Matrix: Water
Date Received: 11/19/21 10:25

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	4.9				meq/L			12/09/21 14:58	1
Total Cations	5.2				meq/L			12/09/21 14:58	1
Percent Difference	2.6				%			12/09/21 14:58	1
Calcium	49				mg/L			12/09/21 14:58	1
Magnesium	15				mg/L			12/09/21 14:58	1
Potassium	0.57				mg/L			12/09/21 14:58	1
Sodium	29				mg/L			12/09/21 14:58	1
Ammonia as N	0.35				mg/L			12/09/21 14:58	1
Chloride	24				mg/L			12/09/21 14:58	1
Sulfate	2.9				mg/L			12/09/21 14:58	1
Bicarbonate Alkalinity	210				mg/L			12/09/21 14:58	1
Alkalinity	210				mg/L			12/09/21 14:58	1
Nitrate/Nitrite	0.00				mg/L			12/09/21 14:58	1
Anion/Cation Balance	2.6				%			12/09/21 14:58	1
Calculated TDS	250				mg/L			12/09/21 14:58	1
TDS Ratio	1.1				NONE			12/09/21 14:58	1
Total Dissolved Solids	270				mg/L			12/09/21 14:58	1
Iron	4.1				mg/L			12/09/21 14:58	1
Calcium	2.4				meq/L			12/09/21 14:58	1
Magnesium	1.2				meq/L			12/09/21 14:58	1
Potassium	0.015				meq/L			12/09/21 14:58	1
Sodium	1.3				meq/L			12/09/21 14:58	1
Ammonia as N	0.025				meq/L			12/09/21 14:58	1
Chloride	0.68				meq/L			12/09/21 14:58	1
Sulfate	0.060				meq/L			12/09/21 14:58	1
Alkalinity	210				mg/L			12/09/21 14:58	1
Bicarbonate Alkalinity	4.2				meq/L			12/09/21 14:58	1
Nitrate/Nitrite	0.00				meq/L			12/09/21 14:58	1
Iron	0.22				meq/L			12/09/21 14:58	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	24		0.50		mg/L			11/29/21 23:51	1
Sulfate	2.9		1.0		mg/L			11/29/21 23:51	1
Ammonia as N	0.35		0.030		mg/L			12/04/21 11:23	1
Nitrate/Nitrite	ND		0.050		mg/L			12/07/21 17:37	1
Total Organic Carbon - Average	2.1		1.0		mg/L			12/08/21 04:29	1
Bicarbonate Alkalinity	210		10		mg/L			12/01/21 18:01	1
Total Dissolved Solids	270		10		mg/L			11/23/21 09:49	1

Client Sample ID: MW-15A
Lab Sample ID: 280-155957-5
Date Collected: 11/17/21 11:25
Matrix: Water
Date Received: 11/19/21 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			11/29/21 13:30	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/29/21 13:30	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/29/21 13:30	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/29/21 13:30	1
1,1-Dichloroethane	ND		1.0		ug/L			11/29/21 13:30	1
1,1-Dichloroethene	ND		1.0		ug/L			11/29/21 13:30	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Groundwater

Job ID: 280-155957-1

Client Sample ID: MW-15A
Date Collected: 11/17/21 11:25
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155957-5
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloropropene	ND		1.0		ug/L			11/29/21 13:30	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/29/21 13:30	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/29/21 13:30	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/29/21 13:30	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/29/21 13:30	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/29/21 13:30	1
1,2-Dichloroethane	ND		1.0		ug/L			11/29/21 13:30	1
1,2-Dichloropropane	ND		1.0		ug/L			11/29/21 13:30	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/29/21 13:30	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/29/21 13:30	1
1,3-Dichloropropane	ND		1.0		ug/L			11/29/21 13:30	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/29/21 13:30	1
2,2-Dichloropropane	ND		5.0		ug/L			11/29/21 13:30	1
2-Butanone (MEK)	ND		6.0		ug/L			11/29/21 13:30	1
2-Chlorotoluene	ND		1.0		ug/L			11/29/21 13:30	1
2-Hexanone	ND		5.0		ug/L			11/29/21 13:30	1
4-Chlorotoluene	ND		1.0		ug/L			11/29/21 13:30	1
4-Isopropyltoluene	ND		1.0		ug/L			11/29/21 13:30	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/29/21 13:30	1
Acetone	ND		10		ug/L			11/29/21 13:30	1
Benzene	ND		1.0		ug/L			11/29/21 13:30	1
Bromobenzene	ND		1.0		ug/L			11/29/21 13:30	1
Bromochloromethane	ND		1.0		ug/L			11/29/21 13:30	1
Bromodichloromethane	ND		1.0		ug/L			11/29/21 13:30	1
Bromoform	ND		1.0		ug/L			11/29/21 13:30	1
Bromomethane	ND		2.0		ug/L			11/29/21 13:30	1
Carbon disulfide	ND		2.0		ug/L			11/29/21 13:30	1
Carbon tetrachloride	ND		1.0		ug/L			11/29/21 13:30	1
Chlorobenzene	ND		1.0		ug/L			11/29/21 13:30	1
Chloroethane	ND		2.0		ug/L			11/29/21 13:30	1
Chloroform	ND		1.0		ug/L			11/29/21 13:30	1
Chloromethane	ND		2.0		ug/L			11/29/21 13:30	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/29/21 13:30	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/29/21 13:30	1
Dibromochloromethane	ND		1.0		ug/L			11/29/21 13:30	1
Dibromomethane	ND		1.0		ug/L			11/29/21 13:30	1
Dichlorodifluoromethane	ND		2.0		ug/L			11/29/21 13:30	1
Ethylbenzene	ND		1.0		ug/L			11/29/21 13:30	1
Hexachlorobutadiene	ND		1.0		ug/L			11/29/21 13:30	1
Isopropylbenzene	ND		1.0		ug/L			11/29/21 13:30	1
Methylene Chloride	ND		5.0		ug/L			11/29/21 13:30	1
Naphthalene	ND		1.0		ug/L			11/29/21 13:30	1
n-Butylbenzene	ND		1.0		ug/L			11/29/21 13:30	1
N-Propylbenzene	ND		1.0		ug/L			11/29/21 13:30	1
sec-Butylbenzene	ND		1.0		ug/L			11/29/21 13:30	1
Styrene	ND		1.0		ug/L			11/29/21 13:30	1
tert-Butylbenzene	ND		1.0		ug/L			11/29/21 13:30	1
Tetrachloroethene	ND		1.0		ug/L			11/29/21 13:30	1
Toluene	ND		1.0		ug/L			11/29/21 13:30	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Groundwater

Job ID: 280-155957-1

Client Sample ID: MW-15A

Date Collected: 11/17/21 11:25
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155957-5

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/29/21 13:30	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/29/21 13:30	1
Trichloroethene	ND		1.0		ug/L			11/29/21 13:30	1
Trichlorofluoromethane	ND		2.0		ug/L			11/29/21 13:30	1
Vinyl chloride	ND		1.0		ug/L			11/29/21 13:30	1
Xylenes (total)	ND		2.0		ug/L			11/29/21 13:30	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*11/29/21 13:30*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 127*		*11/29/21 13:30*	*1*
4-Bromofluorobenzene (Surr)	*94*		*78 - 120*		*11/29/21 13:30*	*1*
Dibromofluoromethane (Surr)	*109*		*77 - 120*		*11/29/21 13:30*	*1*
Toluene-d8 (Surr)	*92*		*80 - 125*		*11/29/21 13:30*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		11/29/21 14:19	11/30/21 00:17	1
1,2-Dibromoethane	ND		0.050		ug/L		11/29/21 14:19	11/30/21 00:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*104*		*70 - 130*	*11/29/21 14:19*	*11/30/21 00:17*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**6400**		500		ug/L		11/29/21 08:00	11/30/21 02:57	1
Iron	**96**		30		ug/L		11/29/21 08:00	11/30/21 02:57	1
Magnesium	**2200**		200		ug/L		11/29/21 08:00	11/30/21 02:57	1
Manganese	ND		3.0		ug/L		11/29/21 08:00	11/30/21 02:57	1
Potassium	ND		500		ug/L		11/29/21 08:00	11/30/21 02:57	1
Sodium	**19000**		1000		ug/L		11/29/21 08:00	11/30/21 02:57	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	**1.6**				meq/L			12/09/21 14:58	1
Total Cations	**1.3**				meq/L			12/09/21 14:58	1
Percent Difference	**-8.9**				%			12/09/21 14:58	1
Calcium	**6.4**				mg/L			12/09/21 14:58	1
Magnesium	**2.2**				mg/L			12/09/21 14:58	1
Potassium	**0.00**				mg/L			12/09/21 14:58	1
Sodium	**19**				mg/L			12/09/21 14:58	1
Ammonia as N	**0.00**				mg/L			12/09/21 14:58	1
Chloride	**3.1**				mg/L			12/09/21 14:58	1
Sulfate	**20**				mg/L			12/09/21 14:58	1
Bicarbonate Alkalinity	**53**				mg/L			12/09/21 14:58	1
Alkalinity	**53**				mg/L			12/09/21 14:58	1
Nitrate/Nitrite	**0.42**				mg/L			12/09/21 14:58	1
Anion/Cation Balance	**-8.9**				%			12/09/21 14:58	1
Calculated TDS	**63**				mg/L			12/09/21 14:58	1
TDS Ratio	**5.7**				NONE			12/09/21 14:58	1

Client Sample ID: MW-15A
Lab Sample ID: 280-155957-5
Date Collected: 11/17/21 11:25
Matrix: Water
Date Received: 11/19/21 10:25

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	360				mg/L			12/09/21 14:58	1
Iron	0.096				mg/L			12/09/21 14:58	1
Calcium	0.32				meq/L			12/09/21 14:58	1
Magnesium	0.18				meq/L			12/09/21 14:58	1
Potassium	0.00				meq/L			12/09/21 14:58	1
Sodium	0.83				meq/L			12/09/21 14:58	1
Ammonia as N	0.00				meq/L			12/09/21 14:58	1
Chloride	0.087				meq/L			12/09/21 14:58	1
Sulfate	0.42				meq/L			12/09/21 14:58	1
Alkalinity	53				mg/L			12/09/21 14:58	1
Bicarbonate Alkalinity	1.1				meq/L			12/09/21 14:58	1
Nitrate/Nitrite	0.030				meq/L			12/09/21 14:58	1
Iron	0.0052				meq/L			12/09/21 14:58	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.1		0.50		mg/L			11/30/21 00:05	1
Sulfate	20		1.0		mg/L			11/30/21 00:05	1
Ammonia as N	ND		0.030		mg/L			12/04/21 11:25	1
Nitrate/Nitrite	0.42		0.050		mg/L			12/07/21 17:39	1
Total Organic Carbon - Average	2.4		1.0		mg/L			12/08/21 04:45	1
Bicarbonate Alkalinity	53		10		mg/L			12/01/21 20:49	1
Total Dissolved Solids	360	H	10		mg/L			11/29/21 11:22	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.21				SU			11/17/21 12:25	1
Field Conductivity	197.0				umhos/cm			11/17/21 12:25	1
Field Temperature	14.8				Degrees C			11/17/21 12:25	1
Field Dissolved Oxygen	9.63				mg/L			11/17/21 12:25	1
Field EH/ORP	201.5				millivolts			11/17/21 12:25	1

Client Sample ID: MW-15B
Lab Sample ID: 280-155957-6
Date Collected: 11/17/21 12:05
Matrix: Water
Date Received: 11/19/21 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			11/29/21 13:52	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/29/21 13:52	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/29/21 13:52	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/29/21 13:52	1
1,1-Dichloroethane	ND		1.0		ug/L			11/29/21 13:52	1
1,1-Dichloroethene	ND		1.0		ug/L			11/29/21 13:52	1
1,1-Dichloropropene	ND		1.0		ug/L			11/29/21 13:52	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/29/21 13:52	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/29/21 13:52	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/29/21 13:52	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/29/21 13:52	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/29/21 13:52	1
1,2-Dichloroethane	ND		1.0		ug/L			11/29/21 13:52	1
1,2-Dichloropropane	ND		1.0		ug/L			11/29/21 13:52	1

Client Sample ID: MW-15B
Date Collected: 11/17/21 12:05
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155957-6
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/29/21 13:52	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/29/21 13:52	1
1,3-Dichloropropane	ND		1.0		ug/L			11/29/21 13:52	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/29/21 13:52	1
2,2-Dichloropropane	ND		5.0		ug/L			11/29/21 13:52	1
2-Butanone (MEK)	ND		6.0		ug/L			11/29/21 13:52	1
2-Chlorotoluene	ND		1.0		ug/L			11/29/21 13:52	1
2-Hexanone	ND		5.0		ug/L			11/29/21 13:52	1
4-Chlorotoluene	ND		1.0		ug/L			11/29/21 13:52	1
4-Isopropyltoluene	ND		1.0		ug/L			11/29/21 13:52	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/29/21 13:52	1
Acetone	ND		10		ug/L			11/29/21 13:52	1
Benzene	ND		1.0		ug/L			11/29/21 13:52	1
Bromobenzene	ND		1.0		ug/L			11/29/21 13:52	1
Bromochloromethane	ND		1.0		ug/L			11/29/21 13:52	1
Bromodichloromethane	ND		1.0		ug/L			11/29/21 13:52	1
Bromoform	ND		1.0		ug/L			11/29/21 13:52	1
Bromomethane	ND		2.0		ug/L			11/29/21 13:52	1
Carbon disulfide	ND		2.0		ug/L			11/29/21 13:52	1
Carbon tetrachloride	ND		1.0		ug/L			11/29/21 13:52	1
Chlorobenzene	ND		1.0		ug/L			11/29/21 13:52	1
Chloroethane	ND		2.0		ug/L			11/29/21 13:52	1
Chloroform	ND		1.0		ug/L			11/29/21 13:52	1
Chloromethane	ND		2.0		ug/L			11/29/21 13:52	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/29/21 13:52	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/29/21 13:52	1
Dibromochloromethane	ND		1.0		ug/L			11/29/21 13:52	1
Dibromomethane	ND		1.0		ug/L			11/29/21 13:52	1
Dichlorodifluoromethane	ND		2.0		ug/L			11/29/21 13:52	1
Ethylbenzene	ND		1.0		ug/L			11/29/21 13:52	1
Hexachlorobutadiene	ND		1.0		ug/L			11/29/21 13:52	1
Isopropylbenzene	ND		1.0		ug/L			11/29/21 13:52	1
Methylene Chloride	ND		5.0		ug/L			11/29/21 13:52	1
Naphthalene	ND		1.0		ug/L			11/29/21 13:52	1
n-Butylbenzene	ND		1.0		ug/L			11/29/21 13:52	1
N-Propylbenzene	ND		1.0		ug/L			11/29/21 13:52	1
sec-Butylbenzene	ND		1.0		ug/L			11/29/21 13:52	1
Styrene	ND		1.0		ug/L			11/29/21 13:52	1
tert-Butylbenzene	ND		1.0		ug/L			11/29/21 13:52	1
Tetrachloroethene	ND		1.0		ug/L			11/29/21 13:52	1
Toluene	ND		1.0		ug/L			11/29/21 13:52	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/29/21 13:52	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/29/21 13:52	1
Trichloroethene	ND		1.0		ug/L			11/29/21 13:52	1
Trichlorofluoromethane	ND		2.0		ug/L			11/29/21 13:52	1
Vinyl chloride	ND		1.0		ug/L			11/29/21 13:52	1
Xylenes (total)	ND		2.0		ug/L			11/29/21 13:52	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*11/29/21 13:52*	*1*

Client Sample ID: MW-15B

Date Collected: 11/17/21 12:05
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155957-6

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 127*		*11/29/21 13:52*	*1*
4-Bromofluorobenzene (Surr)	*94*		*78 - 120*		*11/29/21 13:52*	*1*
Dibromofluoromethane (Surr)	*109*		*77 - 120*		*11/29/21 13:52*	*1*
Toluene-d8 (Surr)	*92*		*80 - 125*		*11/29/21 13:52*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		11/29/21 14:19	11/30/21 00:42	1
1,2-Dibromoethane	ND		0.050		ug/L		11/29/21 14:19	11/30/21 00:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*112*		*70 - 130*	*11/29/21 14:19*	*11/30/21 00:42*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**78000**		500		ug/L		11/29/21 08:00	11/30/21 03:17	1
Iron	**500**		30		ug/L		11/29/21 08:00	11/30/21 03:17	1
Magnesium	**31000**		200		ug/L		11/29/21 08:00	11/30/21 03:17	1
Manganese	**980**		3.0		ug/L		11/29/21 08:00	11/30/21 03:17	1
Potassium	ND		500		ug/L		11/29/21 08:00	11/30/21 03:17	1
Sodium	**37000**		1000		ug/L		11/29/21 08:00	11/30/21 03:17	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	**8.8**				meq/L			12/09/21 14:58	1
Total Cations	**8.1**				meq/L			12/09/21 14:58	1
Percent Difference	**-4.2**				%			12/09/21 14:58	1
Calcium	**78**				mg/L			12/09/21 14:58	1
Magnesium	**31**				mg/L			12/09/21 14:58	1
Potassium	**0.00**				mg/L			12/09/21 14:58	1
Sodium	**37**				mg/L			12/09/21 14:58	1
Ammonia as N	**0.00**				mg/L			12/09/21 14:58	1
Chloride	**41**				mg/L			12/09/21 14:58	1
Sulfate	**1.8**				mg/L			12/09/21 14:58	1
Bicarbonate Alkalinity	**380**				mg/L			12/09/21 14:58	1
Alkalinity	**380**				mg/L			12/09/21 14:58	1
Nitrate/Nitrite	**0.00**				mg/L			12/09/21 14:58	1
Anion/Cation Balance	**-4.2**				%			12/09/21 14:58	1
Calculated TDS	**420**				mg/L			12/09/21 14:58	1
TDS Ratio	**0.99**				NONE			12/09/21 14:58	1
Total Dissolved Solids	**410**				mg/L			12/09/21 14:58	1
Iron	**0.50**				mg/L			12/09/21 14:58	1
Calcium	**3.9**				meq/L			12/09/21 14:58	1
Magnesium	**2.6**				meq/L			12/09/21 14:58	1
Potassium	**0.00**				meq/L			12/09/21 14:58	1
Sodium	**1.6**				meq/L			12/09/21 14:58	1
Ammonia as N	**0.00**				meq/L			12/09/21 14:58	1
Chloride	**1.2**				meq/L			12/09/21 14:58	1
Sulfate	**0.037**				meq/L			12/09/21 14:58	1
Alkalinity	**380**				mg/L			12/09/21 14:58	1
Bicarbonate Alkalinity	**7.6**				meq/L			12/09/21 14:58	1

Client Sample ID: MW-15B

Lab Sample ID: 280-155957-6

Date Collected: 11/17/21 12:05

Matrix: Water

Date Received: 11/19/21 10:25

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate/Nitrite	0.00				meq/L			12/09/21 14:58	1
Iron	0.027				meq/L			12/09/21 14:58	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	41		0.50		mg/L			11/30/21 00:19	1
Sulfate	1.8		1.0		mg/L			11/30/21 00:19	1
Ammonia as N	ND		0.030		mg/L			12/03/21 14:33	1
Nitrate/Nitrite	ND		0.050		mg/L			12/07/21 17:41	1
Total Organic Carbon - Average	1.4		1.0		mg/L			12/08/21 05:02	1
Bicarbonate Alkalinity	380		10		mg/L			12/01/21 20:43	1
Total Dissolved Solids	410	H	10		mg/L			11/29/21 11:22	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.98				SU			11/17/21 13:05	1
Field Conductivity	865.0				umhos/cm			11/17/21 13:05	1
Field Temperature	13.5				Degrees C			11/17/21 13:05	1
Field Dissolved Oxygen	0.59				mg/L			11/17/21 13:05	1
Field EH/ORP	13.7				millivolts			11/17/21 13:05	1

Client Sample ID: FB2

Lab Sample ID: 280-155957-7

Date Collected: 11/17/21 12:20

Matrix: Water

Date Received: 11/19/21 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			11/29/21 12:01	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/29/21 12:01	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/29/21 12:01	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/29/21 12:01	1
1,1-Dichloroethane	ND		1.0		ug/L			11/29/21 12:01	1
1,1-Dichloroethene	ND		1.0		ug/L			11/29/21 12:01	1
1,1-Dichloropropene	ND		1.0		ug/L			11/29/21 12:01	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/29/21 12:01	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/29/21 12:01	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/29/21 12:01	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/29/21 12:01	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/29/21 12:01	1
1,2-Dichloroethane	ND		1.0		ug/L			11/29/21 12:01	1
1,2-Dichloropropane	ND		1.0		ug/L			11/29/21 12:01	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/29/21 12:01	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/29/21 12:01	1
1,3-Dichloropropane	ND		1.0		ug/L			11/29/21 12:01	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/29/21 12:01	1
2,2-Dichloropropane	ND		5.0		ug/L			11/29/21 12:01	1
2-Butanone (MEK)	ND		6.0		ug/L			11/29/21 12:01	1
2-Chlorotoluene	ND		1.0		ug/L			11/29/21 12:01	1
2-Hexanone	ND		5.0		ug/L			11/29/21 12:01	1
4-Chlorotoluene	ND		1.0		ug/L			11/29/21 12:01	1
4-Isopropyltoluene	ND		1.0		ug/L			11/29/21 12:01	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/29/21 12:01	1

Client Sample ID: FB2
Date Collected: 11/17/21 12:20
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155957-7
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10		ug/L			11/29/21 12:01	1
Benzene	ND		1.0		ug/L			11/29/21 12:01	1
Bromobenzene	ND		1.0		ug/L			11/29/21 12:01	1
Bromochloromethane	ND		1.0		ug/L			11/29/21 12:01	1
Bromodichloromethane	ND		1.0		ug/L			11/29/21 12:01	1
Bromoform	ND		1.0		ug/L			11/29/21 12:01	1
Bromomethane	ND		2.0		ug/L			11/29/21 12:01	1
Carbon disulfide	ND		2.0		ug/L			11/29/21 12:01	1
Carbon tetrachloride	ND		1.0		ug/L			11/29/21 12:01	1
Chlorobenzene	ND		1.0		ug/L			11/29/21 12:01	1
Chloroethane	ND		2.0		ug/L			11/29/21 12:01	1
Chloroform	ND		1.0		ug/L			11/29/21 12:01	1
Chloromethane	ND		2.0		ug/L			11/29/21 12:01	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/29/21 12:01	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/29/21 12:01	1
Dibromochloromethane	ND		1.0		ug/L			11/29/21 12:01	1
Dibromomethane	ND		1.0		ug/L			11/29/21 12:01	1
Dichlorodifluoromethane	ND		2.0		ug/L			11/29/21 12:01	1
Ethylbenzene	ND		1.0		ug/L			11/29/21 12:01	1
Hexachlorobutadiene	ND		1.0		ug/L			11/29/21 12:01	1
Isopropylbenzene	ND		1.0		ug/L			11/29/21 12:01	1
Methylene Chloride	ND		5.0		ug/L			11/29/21 12:01	1
Naphthalene	ND		1.0		ug/L			11/29/21 12:01	1
n-Butylbenzene	ND		1.0		ug/L			11/29/21 12:01	1
N-Propylbenzene	ND		1.0		ug/L			11/29/21 12:01	1
sec-Butylbenzene	ND		1.0		ug/L			11/29/21 12:01	1
Styrene	ND		1.0		ug/L			11/29/21 12:01	1
tert-Butylbenzene	ND		1.0		ug/L			11/29/21 12:01	1
Tetrachloroethene	ND		1.0		ug/L			11/29/21 12:01	1
Toluene	ND		1.0		ug/L			11/29/21 12:01	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/29/21 12:01	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/29/21 12:01	1
Trichloroethene	ND		1.0		ug/L			11/29/21 12:01	1
Trichlorofluoromethane	ND		2.0		ug/L			11/29/21 12:01	1
Vinyl chloride	ND		1.0		ug/L			11/29/21 12:01	1
Xylenes (total)	ND		2.0		ug/L			11/29/21 12:01	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*11/29/21 12:01*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 127*		*11/29/21 12:01*	*1*
4-Bromofluorobenzene (Surr)	*93*		*78 - 120*		*11/29/21 12:01*	*1*
Dibromofluoromethane (Surr)	*108*		*77 - 120*		*11/29/21 12:01*	*1*
Toluene-d8 (Surr)	*92*		*80 - 125*		*11/29/21 12:01*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		11/29/21 14:19	11/30/21 01:06	1
1,2-Dibromoethane	ND		0.050		ug/L		11/29/21 14:19	11/30/21 01:06	1

Client Sample ID: FB2

Date Collected: 11/17/21 12:20
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155957-7

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*110*		*70 - 130*	*11/29/21 14:19*	*11/30/21 01:06*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		500		ug/L		11/29/21 08:00	11/30/21 03:21	1
Iron	ND		30		ug/L		11/29/21 08:00	11/30/21 03:21	1
Magnesium	ND		200		ug/L		11/29/21 08:00	11/30/21 03:21	1
Manganese	ND		3.0		ug/L		11/29/21 08:00	11/30/21 03:21	1
Potassium	ND		500		ug/L		11/29/21 08:00	11/30/21 03:21	1
Sodium	ND		1000		ug/L		11/29/21 08:00	11/30/21 03:21	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	**0.00**				meq/L			12/09/21 14:58	1
Total Cations	**0.00**				meq/L			12/09/21 14:58	1
Percent Difference	**NC**				%			12/09/21 14:58	1
Calcium	**0.00**				mg/L			12/09/21 14:58	1
Magnesium	**0.00**				mg/L			12/09/21 14:58	1
Potassium	**0.00**				mg/L			12/09/21 14:58	1
Sodium	**0.00**				mg/L			12/09/21 14:58	1
Ammonia as N	**0.00**				mg/L			12/09/21 14:58	1
Chloride	**0.00**				mg/L			12/09/21 14:58	1
Sulfate	**0.00**				mg/L			12/09/21 14:58	1
Bicarbonate Alkalinity	**0.00**				mg/L			12/09/21 14:58	1
Alkalinity	**0.00**				mg/L			12/09/21 14:58	1
Nitrate/Nitrite	**0.00**				mg/L			12/09/21 14:58	1
Anion/Cation Balance	**NC**				%			12/09/21 14:58	1
Calculated TDS	**0.00**				mg/L			12/09/21 14:58	1
TDS Ratio	**NC**				NONE			12/09/21 14:58	1
Total Dissolved Solids	**0.00**				mg/L			12/09/21 14:58	1
Iron	**0.00**				mg/L			12/09/21 14:58	1
Calcium	**0.00**				meq/L			12/09/21 14:58	1
Magnesium	**0.00**				meq/L			12/09/21 14:58	1
Potassium	**0.00**				meq/L			12/09/21 14:58	1
Sodium	**0.00**				meq/L			12/09/21 14:58	1
Ammonia as N	**0.00**				meq/L			12/09/21 14:58	1
Chloride	**0.00**				meq/L			12/09/21 14:58	1
Sulfate	**0.00**				meq/L			12/09/21 14:58	1
Alkalinity	**0.00**				mg/L			12/09/21 14:58	1
Bicarbonate Alkalinity	**0.00**				meq/L			12/09/21 14:58	1
Nitrate/Nitrite	**0.00**				meq/L			12/09/21 14:58	1
Iron	**0.00**				meq/L			12/09/21 14:58	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			11/30/21 00:33	1
Sulfate	ND		1.0		mg/L			11/30/21 00:33	1
Ammonia as N	ND		0.030		mg/L			12/03/21 11:25	1
Nitrate/Nitrite	ND		0.050		mg/L			12/07/21 17:43	1
Total Organic Carbon - Average	ND		1.0		mg/L			12/08/21 06:15	1
Bicarbonate Alkalinity	ND		10		mg/L			12/01/21 20:35	1
Total Dissolved Solids	ND		10		mg/L			11/22/21 09:42	1

Client Sample ID: MW-16A

Date Collected: 11/17/21 08:55
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155957-8

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			11/29/21 14:14	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/29/21 14:14	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/29/21 14:14	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/29/21 14:14	1
1,1-Dichloroethane	ND		1.0		ug/L			11/29/21 14:14	1
1,1-Dichloroethene	ND		1.0		ug/L			11/29/21 14:14	1
1,1-Dichloropropene	ND		1.0		ug/L			11/29/21 14:14	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/29/21 14:14	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/29/21 14:14	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/29/21 14:14	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/29/21 14:14	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/29/21 14:14	1
1,2-Dichloroethane	ND		1.0		ug/L			11/29/21 14:14	1
1,2-Dichloropropane	ND		1.0		ug/L			11/29/21 14:14	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/29/21 14:14	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/29/21 14:14	1
1,3-Dichloropropane	ND		1.0		ug/L			11/29/21 14:14	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/29/21 14:14	1
2,2-Dichloropropane	ND		5.0		ug/L			11/29/21 14:14	1
2-Butanone (MEK)	ND		6.0		ug/L			11/29/21 14:14	1
2-Chlorotoluene	ND		1.0		ug/L			11/29/21 14:14	1
2-Hexanone	ND		5.0		ug/L			11/29/21 14:14	1
4-Chlorotoluene	ND		1.0		ug/L			11/29/21 14:14	1
4-Isopropyltoluene	ND		1.0		ug/L			11/29/21 14:14	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/29/21 14:14	1
Acetone	ND		10		ug/L			11/29/21 14:14	1
Benzene	ND		1.0		ug/L			11/29/21 14:14	1
Bromobenzene	ND		1.0		ug/L			11/29/21 14:14	1
Bromochloromethane	ND		1.0		ug/L			11/29/21 14:14	1
Bromodichloromethane	ND		1.0		ug/L			11/29/21 14:14	1
Bromoform	ND		1.0		ug/L			11/29/21 14:14	1
Bromomethane	ND		2.0		ug/L			11/29/21 14:14	1
Carbon disulfide	ND		2.0		ug/L			11/29/21 14:14	1
Carbon tetrachloride	ND		1.0		ug/L			11/29/21 14:14	1
Chlorobenzene	ND		1.0		ug/L			11/29/21 14:14	1
Chloroethane	ND		2.0		ug/L			11/29/21 14:14	1
Chloroform	ND		1.0		ug/L			11/29/21 14:14	1
Chloromethane	ND		2.0		ug/L			11/29/21 14:14	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/29/21 14:14	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/29/21 14:14	1
Dibromochloromethane	ND		1.0		ug/L			11/29/21 14:14	1
Dibromomethane	ND		1.0		ug/L			11/29/21 14:14	1
Dichlorodifluoromethane	ND		2.0		ug/L			11/29/21 14:14	1
Ethylbenzene	ND		1.0		ug/L			11/29/21 14:14	1
Hexachlorobutadiene	ND		1.0		ug/L			11/29/21 14:14	1
Isopropylbenzene	ND		1.0		ug/L			11/29/21 14:14	1
Methylene Chloride	ND		5.0		ug/L			11/29/21 14:14	1
Naphthalene	ND		1.0		ug/L			11/29/21 14:14	1
n-Butylbenzene	ND		1.0		ug/L			11/29/21 14:14	1

Client Sample ID: MW-16A

Date Collected: 11/17/21 08:55
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155957-8

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		1.0		ug/L			11/29/21 14:14	1
sec-Butylbenzene	ND		1.0		ug/L			11/29/21 14:14	1
Styrene	ND		1.0		ug/L			11/29/21 14:14	1
tert-Butylbenzene	ND		1.0		ug/L			11/29/21 14:14	1
Tetrachloroethene	ND		1.0		ug/L			11/29/21 14:14	1
Toluene	ND		1.0		ug/L			11/29/21 14:14	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/29/21 14:14	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/29/21 14:14	1
Trichloroethene	ND		1.0		ug/L			11/29/21 14:14	1
Trichlorofluoromethane	ND		2.0		ug/L			11/29/21 14:14	1
Vinyl chloride	ND		1.0		ug/L			11/29/21 14:14	1
Xylenes (total)	ND		2.0		ug/L			11/29/21 14:14	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*11/29/21 14:14*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 127*		*11/29/21 14:14*	*1*
4-Bromofluorobenzene (Surr)	*93*		*78 - 120*		*11/29/21 14:14*	*1*
Dibromofluoromethane (Surr)	*108*		*77 - 120*		*11/29/21 14:14*	*1*
Toluene-d8 (Surr)	*92*		*80 - 125*		*11/29/21 14:14*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		11/29/21 14:19	11/30/21 01:31	1
1,2-Dibromoethane	ND		0.050		ug/L		11/29/21 14:19	11/30/21 01:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*117*		*70 - 130*	*11/29/21 14:19*	*11/30/21 01:31*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**35000**		500		ug/L		11/29/21 08:00	11/30/21 03:25	1
Iron	**30**		30		ug/L		11/29/21 08:00	11/30/21 03:25	1
Magnesium	**16000**		200		ug/L		11/29/21 08:00	11/30/21 03:25	1
Manganese	**1600**		3.0		ug/L		11/29/21 08:00	11/30/21 03:25	1
Potassium	ND		500		ug/L		11/29/21 08:00	11/30/21 03:25	1
Sodium	**33000**		1000		ug/L		11/29/21 08:00	11/30/21 03:25	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	**4.9**				meq/L			12/09/21 14:58	1
Total Cations	**4.5**				meq/L			12/09/21 14:58	1
Percent Difference	**-3.9**				%			12/09/21 14:58	1
Calcium	**35**				mg/L			12/09/21 14:58	1
Magnesium	**16**				mg/L			12/09/21 14:58	1
Potassium	**0.00**				mg/L			12/09/21 14:58	1
Sodium	**33**				mg/L			12/09/21 14:58	1
Ammonia as N	**0.052**				mg/L			12/09/21 14:58	1
Chloride	**11**				mg/L			12/09/21 14:58	1
Sulfate	**17**				mg/L			12/09/21 14:58	1

Client Sample ID: MW-16A

Date Collected: 11/17/21 08:55
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155957-8

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity	210				mg/L			12/09/21 14:58	1
Alkalinity	210				mg/L			12/09/21 14:58	1
Nitrate/Nitrite	0.11				mg/L			12/09/21 14:58	1
Anion/Cation Balance	-3.9				%			12/09/21 14:58	1
Calculated TDS	220				mg/L			12/09/21 14:58	1
TDS Ratio	1.2				NONE			12/09/21 14:58	1
Total Dissolved Solids	270				mg/L			12/09/21 14:58	1
Iron	0.030				mg/L			12/09/21 14:58	1
Calcium	1.7				meq/L			12/09/21 14:58	1
Magnesium	1.3				meq/L			12/09/21 14:58	1
Potassium	0.00				meq/L			12/09/21 14:58	1
Sodium	1.4				meq/L			12/09/21 14:58	1
Ammonia as N	0.0037				meq/L			12/09/21 14:58	1
Chloride	0.31				meq/L			12/09/21 14:58	1
Sulfate	0.35				meq/L			12/09/21 14:58	1
Alkalinity	210				mg/L			12/09/21 14:58	1
Bicarbonate Alkalinity	4.2				meq/L			12/09/21 14:58	1
Nitrate/Nitrite	0.0079				meq/L			12/09/21 14:58	1
Iron	0.0016				meq/L			12/09/21 14:58	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11		0.50		mg/L			11/30/21 00:47	1
Sulfate	17		1.0		mg/L			11/30/21 00:47	1
Ammonia as N	0.052		0.030		mg/L			12/03/21 14:35	1
Nitrate/Nitrite	0.11		0.050		mg/L			12/07/21 17:57	1
Total Organic Carbon - Average	2.1		1.0		mg/L			12/08/21 22:19	1
Bicarbonate Alkalinity	210		10		mg/L			12/01/21 20:30	1
Total Dissolved Solids	270		10		mg/L			11/22/21 09:42	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.44				SU			11/17/21 09:55	1
Field Conductivity	448.0				umhos/cm			11/17/21 09:55	1
Field Temperature	12.4				Degrees C			11/17/21 09:55	1
Field Dissolved Oxygen	9.54				mg/L			11/17/21 09:55	1
Field EH/ORP	180.2				millivolts			11/17/21 09:55	1

Client Sample ID: MW-16B

Date Collected: 11/17/21 09:40
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155957-9

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			11/29/21 14:37	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/29/21 14:37	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/29/21 14:37	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/29/21 14:37	1
1,1-Dichloroethane	ND		1.0		ug/L			11/29/21 14:37	1
1,1-Dichloroethene	ND		1.0		ug/L			11/29/21 14:37	1
1,1-Dichloropropene	ND		1.0		ug/L			11/29/21 14:37	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/29/21 14:37	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Groundwater

Job ID: 280-155957-1

Client Sample ID: MW-16B
Date Collected: 11/17/21 09:40
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155957-9
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		1.0		ug/L			11/29/21 14:37	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/29/21 14:37	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/29/21 14:37	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/29/21 14:37	1
1,2-Dichloroethane	ND		1.0		ug/L			11/29/21 14:37	1
1,2-Dichloropropane	ND		1.0		ug/L			11/29/21 14:37	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/29/21 14:37	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/29/21 14:37	1
1,3-Dichloropropane	ND		1.0		ug/L			11/29/21 14:37	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/29/21 14:37	1
2,2-Dichloropropane	ND		5.0		ug/L			11/29/21 14:37	1
2-Butanone (MEK)	ND		6.0		ug/L			11/29/21 14:37	1
2-Chlorotoluene	ND		1.0		ug/L			11/29/21 14:37	1
2-Hexanone	ND		5.0		ug/L			11/29/21 14:37	1
4-Chlorotoluene	ND		1.0		ug/L			11/29/21 14:37	1
4-Isopropyltoluene	ND		1.0		ug/L			11/29/21 14:37	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/29/21 14:37	1
Acetone	ND		10		ug/L			11/29/21 14:37	1
Benzene	ND		1.0		ug/L			11/29/21 14:37	1
Bromobenzene	ND		1.0		ug/L			11/29/21 14:37	1
Bromochloromethane	ND		1.0		ug/L			11/29/21 14:37	1
Bromodichloromethane	ND		1.0		ug/L			11/29/21 14:37	1
Bromoform	ND		1.0		ug/L			11/29/21 14:37	1
Bromomethane	ND		2.0		ug/L			11/29/21 14:37	1
Carbon disulfide	ND		2.0		ug/L			11/29/21 14:37	1
Carbon tetrachloride	ND		1.0		ug/L			11/29/21 14:37	1
Chlorobenzene	ND		1.0		ug/L			11/29/21 14:37	1
Chloroethane	ND		2.0		ug/L			11/29/21 14:37	1
Chloroform	ND		1.0		ug/L			11/29/21 14:37	1
Chloromethane	ND		2.0		ug/L			11/29/21 14:37	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/29/21 14:37	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/29/21 14:37	1
Dibromochloromethane	ND		1.0		ug/L			11/29/21 14:37	1
Dibromomethane	ND		1.0		ug/L			11/29/21 14:37	1
Dichlorodifluoromethane	ND		2.0		ug/L			11/29/21 14:37	1
Ethylbenzene	ND		1.0		ug/L			11/29/21 14:37	1
Hexachlorobutadiene	ND		1.0		ug/L			11/29/21 14:37	1
Isopropylbenzene	ND		1.0		ug/L			11/29/21 14:37	1
Methylene Chloride	ND		5.0		ug/L			11/29/21 14:37	1
Naphthalene	ND		1.0		ug/L			11/29/21 14:37	1
n-Butylbenzene	ND		1.0		ug/L			11/29/21 14:37	1
N-Propylbenzene	ND		1.0		ug/L			11/29/21 14:37	1
sec-Butylbenzene	ND		1.0		ug/L			11/29/21 14:37	1
Styrene	ND		1.0		ug/L			11/29/21 14:37	1
tert-Butylbenzene	ND		1.0		ug/L			11/29/21 14:37	1
Tetrachloroethene	ND		1.0		ug/L			11/29/21 14:37	1
Toluene	ND		1.0		ug/L			11/29/21 14:37	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/29/21 14:37	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/29/21 14:37	1

Client Sample ID: MW-16B

Date Collected: 11/17/21 09:40
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155957-9

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		1.0		ug/L			11/29/21 14:37	1
Trichlorofluoromethane	ND		2.0		ug/L			11/29/21 14:37	1
Vinyl chloride	ND		1.0		ug/L			11/29/21 14:37	1
Xylenes (total)	ND		2.0		ug/L			11/29/21 14:37	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*11/29/21 14:37*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 127*		*11/29/21 14:37*	*1*
4-Bromofluorobenzene (Surr)	*95*		*78 - 120*		*11/29/21 14:37*	*1*
Dibromofluoromethane (Surr)	*108*		*77 - 120*		*11/29/21 14:37*	*1*
Toluene-d8 (Surr)	*92*		*80 - 125*		*11/29/21 14:37*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		11/29/21 14:19	11/30/21 01:55	1
1,2-Dibromoethane	ND		0.050		ug/L		11/29/21 14:19	11/30/21 01:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*118*		*70 - 130*	*11/29/21 14:19*	*11/30/21 01:55*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**100000**		500		ug/L		11/29/21 08:00	11/30/21 03:29	1
Iron	**1000**		30		ug/L		11/29/21 08:00	11/30/21 03:29	1
Magnesium	**36000**		200		ug/L		11/29/21 08:00	11/30/21 03:29	1
Manganese	**3000**		3.0		ug/L		11/29/21 08:00	11/30/21 03:29	1
Potassium	**600**		500		ug/L		11/29/21 08:00	11/30/21 03:29	1
Sodium	**70000**		1000		ug/L		11/29/21 08:00	11/30/21 03:29	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	**11**				meq/L			12/09/21 14:58	1
Total Cations	**11**				meq/L			12/09/21 14:58	1
Percent Difference	**-0.70**				%			12/09/21 14:58	1
Calcium	**100**				mg/L			12/09/21 14:58	1
Magnesium	**36**				mg/L			12/09/21 14:58	1
Potassium	**0.60**				mg/L			12/09/21 14:58	1
Sodium	**70**				mg/L			12/09/21 14:58	1
Ammonia as N	**0.21**				mg/L			12/09/21 14:58	1
Chloride	**140**				mg/L			12/09/21 14:58	1
Sulfate	**4.6**				mg/L			12/09/21 14:58	1
Bicarbonate Alkalinity	**360**				mg/L			12/09/21 14:58	1
Alkalinity	**360**				mg/L			12/09/21 14:58	1
Nitrate/Nitrite	**0.00**				mg/L			12/09/21 14:58	1
Anion/Cation Balance	**-0.70**				%			12/09/21 14:58	1
Calculated TDS	**560**				mg/L			12/09/21 14:58	1
TDS Ratio	**1.0**				NONE			12/09/21 14:58	1
Total Dissolved Solids	**580**				mg/L			12/09/21 14:58	1
Iron	**1.0**				mg/L			12/09/21 14:58	1

Client Sample ID: MW-16B

Lab Sample ID: 280-155957-9

Date Collected: 11/17/21 09:40

Matrix: Water

Date Received: 11/19/21 10:25

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	5.0				meq/L			12/09/21 14:58	1
Magnesium	3.0				meq/L			12/09/21 14:58	1
Potassium	0.015				meq/L			12/09/21 14:58	1
Sodium	3.0				meq/L			12/09/21 14:58	1
Ammonia as N	0.015				meq/L			12/09/21 14:58	1
Chloride	3.9				meq/L			12/09/21 14:58	1
Sulfate	0.096				meq/L			12/09/21 14:58	1
Alkalinity	360				mg/L			12/09/21 14:58	1
Bicarbonate Alkalinity	7.2				meq/L			12/09/21 14:58	1
Nitrate/Nitrite	0.00				meq/L			12/09/21 14:58	1
Iron	0.054				meq/L			12/09/21 14:58	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	140		0.50		mg/L			11/30/21 01:01	1
Sulfate	4.6		1.0		mg/L			11/30/21 01:01	1
Ammonia as N	0.21		0.030		mg/L			12/03/21 11:29	1
Nitrate/Nitrite	ND		0.050		mg/L			12/07/21 17:59	1
Total Organic Carbon - Average	1.9		1.0		mg/L			12/08/21 15:31	1
Bicarbonate Alkalinity	360		10		mg/L			12/01/21 17:23	1
Total Dissolved Solids	580		10		mg/L			11/22/21 09:42	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.00				SU			11/17/21 10:40	1
Field Conductivity	1281.0				umhos/cm			11/17/21 10:40	1
Field Temperature	11.90				Degrees C			11/17/21 10:40	1
Field Dissolved Oxygen	1.48				mg/L			11/17/21 10:40	1
Field EH/ORP	-1.3				millivolts			11/17/21 10:40	1

Client Sample ID: DUP2

Lab Sample ID: 280-155957-10

Date Collected: 11/17/21 09:45

Matrix: Water

Date Received: 11/19/21 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			11/29/21 14:59	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/29/21 14:59	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/29/21 14:59	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/29/21 14:59	1
1,1-Dichloroethane	ND		1.0		ug/L			11/29/21 14:59	1
1,1-Dichloroethene	ND		1.0		ug/L			11/29/21 14:59	1
1,1-Dichloropropene	ND		1.0		ug/L			11/29/21 14:59	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/29/21 14:59	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/29/21 14:59	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/29/21 14:59	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/29/21 14:59	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/29/21 14:59	1
1,2-Dichloroethane	ND		1.0		ug/L			11/29/21 14:59	1
1,2-Dichloropropane	ND		1.0		ug/L			11/29/21 14:59	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/29/21 14:59	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/29/21 14:59	1

Client Sample ID: DUP2
Date Collected: 11/17/21 09:45
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155957-10
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichloropropane	ND		1.0		ug/L			11/29/21 14:59	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/29/21 14:59	1
2,2-Dichloropropane	ND		5.0		ug/L			11/29/21 14:59	1
2-Butanone (MEK)	ND		6.0		ug/L			11/29/21 14:59	1
2-Chlorotoluene	ND		1.0		ug/L			11/29/21 14:59	1
2-Hexanone	ND		5.0		ug/L			11/29/21 14:59	1
4-Chlorotoluene	ND		1.0		ug/L			11/29/21 14:59	1
4-Isopropyltoluene	ND		1.0		ug/L			11/29/21 14:59	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/29/21 14:59	1
Acetone	ND		10		ug/L			11/29/21 14:59	1
Benzene	ND		1.0		ug/L			11/29/21 14:59	1
Bromobenzene	ND		1.0		ug/L			11/29/21 14:59	1
Bromochloromethane	ND		1.0		ug/L			11/29/21 14:59	1
Bromodichloromethane	ND		1.0		ug/L			11/29/21 14:59	1
Bromoform	ND		1.0		ug/L			11/29/21 14:59	1
Bromomethane	ND		2.0		ug/L			11/29/21 14:59	1
Carbon disulfide	ND		2.0		ug/L			11/29/21 14:59	1
Carbon tetrachloride	ND		1.0		ug/L			11/29/21 14:59	1
Chlorobenzene	ND		1.0		ug/L			11/29/21 14:59	1
Chloroethane	ND		2.0		ug/L			11/29/21 14:59	1
Chloroform	ND		1.0		ug/L			11/29/21 14:59	1
Chloromethane	ND		2.0		ug/L			11/29/21 14:59	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/29/21 14:59	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/29/21 14:59	1
Dibromochloromethane	ND		1.0		ug/L			11/29/21 14:59	1
Dibromomethane	ND		1.0		ug/L			11/29/21 14:59	1
Dichlorodifluoromethane	ND		2.0		ug/L			11/29/21 14:59	1
Ethylbenzene	ND		1.0		ug/L			11/29/21 14:59	1
Hexachlorobutadiene	ND		1.0		ug/L			11/29/21 14:59	1
Isopropylbenzene	ND		1.0		ug/L			11/29/21 14:59	1
Methylene Chloride	ND		5.0		ug/L			11/29/21 14:59	1
Naphthalene	ND		1.0		ug/L			11/29/21 14:59	1
n-Butylbenzene	ND		1.0		ug/L			11/29/21 14:59	1
N-Propylbenzene	ND		1.0		ug/L			11/29/21 14:59	1
sec-Butylbenzene	ND		1.0		ug/L			11/29/21 14:59	1
Styrene	ND		1.0		ug/L			11/29/21 14:59	1
tert-Butylbenzene	ND		1.0		ug/L			11/29/21 14:59	1
Tetrachloroethene	ND		1.0		ug/L			11/29/21 14:59	1
Toluene	ND		1.0		ug/L			11/29/21 14:59	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/29/21 14:59	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/29/21 14:59	1
Trichloroethene	ND		1.0		ug/L			11/29/21 14:59	1
Trichlorofluoromethane	ND		2.0		ug/L			11/29/21 14:59	1
Vinyl chloride	ND		1.0		ug/L			11/29/21 14:59	1
Xylenes (total)	ND		2.0		ug/L			11/29/21 14:59	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*11/29/21 14:59*	*1*

Client Sample ID: DUP2

Date Collected: 11/17/21 09:45
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155957-10

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 127*		*11/29/21 14:59*	*1*
4-Bromofluorobenzene (Surr)	*94*		*78 - 120*		*11/29/21 14:59*	*1*
Dibromofluoromethane (Surr)	*110*		*77 - 120*		*11/29/21 14:59*	*1*
Toluene-d8 (Surr)	*90*		*80 - 125*		*11/29/21 14:59*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		11/29/21 14:19	11/30/21 02:20	1
1,2-Dibromoethane	ND		0.050		ug/L		11/29/21 14:19	11/30/21 02:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*110*		*70 - 130*	*11/29/21 14:19*	*11/30/21 02:20*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**100000**		500		ug/L		11/29/21 08:00	11/30/21 03:33	1
Iron	**1000**		30		ug/L		11/29/21 08:00	11/30/21 03:33	1
Magnesium	**37000**		200		ug/L		11/29/21 08:00	11/30/21 03:33	1
Manganese	**3100**		3.0		ug/L		11/29/21 08:00	11/30/21 03:33	1
Potassium	**580**		500		ug/L		11/29/21 08:00	11/30/21 03:33	1
Sodium	**69000**		1000		ug/L		11/29/21 08:00	11/30/21 03:33	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	**12**				meq/L			12/09/21 14:58	1
Total Cations	**11**				meq/L			12/09/21 14:58	1
Percent Difference	**-3.1**				%			12/09/21 14:58	1
Calcium	**100**				mg/L			12/09/21 14:58	1
Magnesium	**37**				mg/L			12/09/21 14:58	1
Potassium	**0.58**				mg/L			12/09/21 14:58	1
Sodium	**69**				mg/L			12/09/21 14:58	1
Ammonia as N	**0.19**				mg/L			12/09/21 14:58	1
Chloride	**140**				mg/L			12/09/21 14:58	1
Sulfate	**4.5**				mg/L			12/09/21 14:58	1
Bicarbonate Alkalinity	**390**				mg/L			12/09/21 14:58	1
Alkalinity	**390**				mg/L			12/09/21 14:58	1
Nitrate/Nitrite	**0.00**				mg/L			12/09/21 14:58	1
Anion/Cation Balance	**-3.1**				%			12/09/21 14:58	1
Calculated TDS	**580**				mg/L			12/09/21 14:58	1
TDS Ratio	**1.0**				NONE			12/09/21 14:58	1
Total Dissolved Solids	**590**				mg/L			12/09/21 14:58	1
Iron	**1.0**				mg/L			12/09/21 14:58	1
Calcium	**5.0**				meq/L			12/09/21 14:58	1
Magnesium	**3.0**				meq/L			12/09/21 14:58	1
Potassium	**0.015**				meq/L			12/09/21 14:58	1
Sodium	**3.0**				meq/L			12/09/21 14:58	1
Ammonia as N	**0.014**				meq/L			12/09/21 14:58	1
Chloride	**3.9**				meq/L			12/09/21 14:58	1
Sulfate	**0.094**				meq/L			12/09/21 14:58	1
Alkalinity	**390**				mg/L			12/09/21 14:58	1
Bicarbonate Alkalinity	**7.8**				meq/L			12/09/21 14:58	1

Client Sample ID: DUP2

Date Collected: 11/17/21 09:45
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155957-10

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate/Nitrite	0.00				meq/L			12/09/21 14:58	1
Iron	0.054				meq/L			12/09/21 14:58	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	140		0.50		mg/L			11/30/21 01:16	1
Sulfate	4.5		1.0		mg/L			11/30/21 01:16	1
Ammonia as N	0.19		0.030		mg/L			12/03/21 13:35	1
Nitrate/Nitrite	ND		0.050		mg/L			12/07/21 18:01	1
Total Organic Carbon - Average	1.9		1.0		mg/L			12/08/21 15:48	1
Bicarbonate Alkalinity	390		10		mg/L			12/01/21 20:23	1
Total Dissolved Solids	590		10		mg/L			11/22/21 09:42	1

Client Sample ID: MW-21A

Date Collected: 11/18/21 10:15
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155957-11

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			11/29/21 15:21	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/29/21 15:21	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/29/21 15:21	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/29/21 15:21	1
1,1-Dichloroethane	ND		1.0		ug/L			11/29/21 15:21	1
1,1-Dichloroethene	ND		1.0		ug/L			11/29/21 15:21	1
1,1-Dichloropropene	ND		1.0		ug/L			11/29/21 15:21	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/29/21 15:21	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/29/21 15:21	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/29/21 15:21	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/29/21 15:21	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/29/21 15:21	1
1,2-Dichloroethane	ND		1.0		ug/L			11/29/21 15:21	1
1,2-Dichloropropane	ND		1.0		ug/L			11/29/21 15:21	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/29/21 15:21	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/29/21 15:21	1
1,3-Dichloropropane	ND		1.0		ug/L			11/29/21 15:21	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/29/21 15:21	1
2,2-Dichloropropane	ND		5.0		ug/L			11/29/21 15:21	1
2-Butanone (MEK)	ND		6.0		ug/L			11/29/21 15:21	1
2-Chlorotoluene	ND		1.0		ug/L			11/29/21 15:21	1
2-Hexanone	ND		5.0		ug/L			11/29/21 15:21	1
4-Chlorotoluene	ND		1.0		ug/L			11/29/21 15:21	1
4-Isopropyltoluene	ND		1.0		ug/L			11/29/21 15:21	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/29/21 15:21	1
Acetone	ND		10		ug/L			11/29/21 15:21	1
Benzene	ND		1.0		ug/L			11/29/21 15:21	1
Bromobenzene	ND		1.0		ug/L			11/29/21 15:21	1
Bromochloromethane	ND		1.0		ug/L			11/29/21 15:21	1
Bromodichloromethane	ND		1.0		ug/L			11/29/21 15:21	1
Bromoform	ND		1.0		ug/L			11/29/21 15:21	1
Bromomethane	ND		2.0		ug/L			11/29/21 15:21	1
Carbon disulfide	ND		2.0		ug/L			11/29/21 15:21	1

Client Sample ID: MW-21A

Date Collected: 11/18/21 10:15
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155957-11

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	ND		1.0		ug/L			11/29/21 15:21	1
Chlorobenzene	ND		1.0		ug/L			11/29/21 15:21	1
Chloroethane	ND		2.0		ug/L			11/29/21 15:21	1
Chloroform	ND		1.0		ug/L			11/29/21 15:21	1
Chloromethane	ND		2.0		ug/L			11/29/21 15:21	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/29/21 15:21	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/29/21 15:21	1
Dibromochloromethane	ND		1.0		ug/L			11/29/21 15:21	1
Dibromomethane	ND		1.0		ug/L			11/29/21 15:21	1
Dichlorodifluoromethane	ND		2.0		ug/L			11/29/21 15:21	1
Ethylbenzene	ND		1.0		ug/L			11/29/21 15:21	1
Hexachlorobutadiene	ND		1.0		ug/L			11/29/21 15:21	1
Isopropylbenzene	ND		1.0		ug/L			11/29/21 15:21	1
Methylene Chloride	ND		5.0		ug/L			11/29/21 15:21	1
Naphthalene	ND		1.0		ug/L			11/29/21 15:21	1
n-Butylbenzene	ND		1.0		ug/L			11/29/21 15:21	1
N-Propylbenzene	ND		1.0		ug/L			11/29/21 15:21	1
sec-Butylbenzene	ND		1.0		ug/L			11/29/21 15:21	1
Styrene	ND		1.0		ug/L			11/29/21 15:21	1
tert-Butylbenzene	ND		1.0		ug/L			11/29/21 15:21	1
Tetrachloroethene	ND		1.0		ug/L			11/29/21 15:21	1
Toluene	ND		1.0		ug/L			11/29/21 15:21	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/29/21 15:21	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/29/21 15:21	1
Trichloroethene	ND		1.0		ug/L			11/29/21 15:21	1
Trichlorofluoromethane	ND		2.0		ug/L			11/29/21 15:21	1
Vinyl chloride	ND		1.0		ug/L			11/29/21 15:21	1
Xylenes (total)	ND		2.0		ug/L			11/29/21 15:21	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*11/29/21 15:21*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 127*		*11/29/21 15:21*	*1*
4-Bromofluorobenzene (Surr)	*93*		*78 - 120*		*11/29/21 15:21*	*1*
Dibromofluoromethane (Surr)	*107*		*77 - 120*		*11/29/21 15:21*	*1*
Toluene-d8 (Surr)	*92*		*80 - 125*		*11/29/21 15:21*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		11/29/21 14:19	11/30/21 03:09	1
1,2-Dibromoethane	ND		0.050		ug/L		11/29/21 14:19	11/30/21 03:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*109*		*70 - 130*	*11/29/21 14:19*	*11/30/21 03:09*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**25000**		500		ug/L		11/29/21 08:00	11/30/21 03:38	1
Iron	ND		30		ug/L		11/29/21 08:00	11/30/21 03:38	1
Magnesium	**9400**		200		ug/L		11/29/21 08:00	11/30/21 03:38	1

Client Sample ID: MW-21A
Lab Sample ID: 280-155957-11

Date Collected: 11/18/21 10:15
Matrix: Water
Date Received: 11/19/21 10:25

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	ND		3.0		ug/L		11/29/21 08:00	11/30/21 03:38	1
Potassium	ND		500		ug/L		11/29/21 08:00	11/30/21 03:38	1
Sodium	**13000**		1000		ug/L		11/29/21 08:00	11/30/21 03:38	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	**2.8**				meq/L			12/09/21 14:58	1
Total Cations	**2.6**				meq/L			12/09/21 14:58	1
Percent Difference	**-3.7**				%			12/09/21 14:58	1
Calcium	**25**				mg/L			12/09/21 14:58	1
Magnesium	**9.4**				mg/L			12/09/21 14:58	1
Potassium	**0.00**				mg/L			12/09/21 14:58	1
Sodium	**13**				mg/L			12/09/21 14:58	1
Ammonia as N	**0.00**				mg/L			12/09/21 14:58	1
Chloride	**5.2**				mg/L			12/09/21 14:58	1
Sulfate	**12**				mg/L			12/09/21 14:58	1
Bicarbonate Alkalinity	**110**				mg/L			12/09/21 14:58	1
Alkalinity	**110**				mg/L			12/09/21 14:58	1
Nitrate/Nitrite	**2.7**				mg/L			12/09/21 14:58	1
Anion/Cation Balance	**-3.7**				%			12/09/21 14:58	1
Calculated TDS	**120**				mg/L			12/09/21 14:58	1
TDS Ratio	**1.4**				NONE			12/09/21 14:58	1
Total Dissolved Solids	**170**				mg/L			12/09/21 14:58	1
Iron	**0.00**				mg/L			12/09/21 14:58	1
Calcium	**1.2**				meq/L			12/09/21 14:58	1
Magnesium	**0.77**				meq/L			12/09/21 14:58	1
Potassium	**0.00**				meq/L			12/09/21 14:58	1
Sodium	**0.57**				meq/L			12/09/21 14:58	1
Ammonia as N	**0.00**				meq/L			12/09/21 14:58	1
Chloride	**0.15**				meq/L			12/09/21 14:58	1
Sulfate	**0.25**				meq/L			12/09/21 14:58	1
Alkalinity	**110**				mg/L			12/09/21 14:58	1
Bicarbonate Alkalinity	**2.2**				meq/L			12/09/21 14:58	1
Nitrate/Nitrite	**0.19**				meq/L			12/09/21 14:58	1
Iron	**0.00**				meq/L			12/09/21 14:58	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.2**		0.50		mg/L			11/30/21 01:30	1
Sulfate	**12**		1.0		mg/L			11/30/21 01:30	1
Ammonia as N	ND		0.030		mg/L			12/03/21 13:37	1
Nitrate/Nitrite	**2.7**		0.050		mg/L			12/07/21 18:03	1
Total Organic Carbon - Average	**2.3**		1.0		mg/L			12/09/21 22:33	1
Bicarbonate Alkalinity	**110**		10		mg/L			12/01/21 18:12	1
Total Dissolved Solids	**170**		10		mg/L			11/24/21 09:11	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**6.20**				SU			11/18/21 11:15	1
Field Conductivity	**279.0**				umhos/cm			11/18/21 11:15	1
Field Temperature	**14.0**				Degrees C			11/18/21 11:15	1
Field Dissolved Oxygen	**8.07**				mg/L			11/18/21 11:15	1

Client Sample ID: MW-21A
Lab Sample ID: 280-155957-11
Date Collected: 11/18/21 10:15
Matrix: Water
Date Received: 11/19/21 10:25

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field EH/ORP	201.3				millivolts			11/18/21 11:15	1

Client Sample ID: FB3
Lab Sample ID: 280-155957-12
Date Collected: 11/18/21 09:50
Matrix: Water
Date Received: 11/19/21 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			12/02/21 01:05	1
1,1,1-Trichloroethane	ND		1.0		ug/L			12/02/21 01:05	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			12/02/21 01:05	1
1,1,2-Trichloroethane	ND		1.0		ug/L			12/02/21 01:05	1
1,1-Dichloroethane	ND		1.0		ug/L			12/02/21 01:05	1
1,1-Dichloroethene	ND		1.0		ug/L			12/02/21 01:05	1
1,1-Dichloropropene	ND		1.0		ug/L			12/02/21 01:05	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			12/02/21 01:05	1
1,2,3-Trichloropropane	ND		1.0		ug/L			12/02/21 01:05	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			12/02/21 01:05	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			12/02/21 01:05	1
1,2-Dichlorobenzene	ND		1.0		ug/L			12/02/21 01:05	1
1,2-Dichloroethane	ND		1.0		ug/L			12/02/21 01:05	1
1,2-Dichloropropane	ND		1.0		ug/L			12/02/21 01:05	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			12/02/21 01:05	1
1,3-Dichlorobenzene	ND		1.0		ug/L			12/02/21 01:05	1
1,3-Dichloropropane	ND		1.0		ug/L			12/02/21 01:05	1
1,4-Dichlorobenzene	ND		1.0		ug/L			12/02/21 01:05	1
2,2-Dichloropropane	ND		5.0		ug/L			12/02/21 01:05	1
2-Butanone (MEK)	ND		6.0		ug/L			12/02/21 01:05	1
2-Chlorotoluene	ND		1.0		ug/L			12/02/21 01:05	1
2-Hexanone	ND		5.0		ug/L			12/02/21 01:05	1
4-Chlorotoluene	ND		1.0		ug/L			12/02/21 01:05	1
4-Isopropyltoluene	ND		1.0		ug/L			12/02/21 01:05	1
4-Methyl-2-pentanone	ND		5.0		ug/L			12/02/21 01:05	1
Acetone	ND		10		ug/L			12/02/21 01:05	1
Benzene	ND		1.0		ug/L			12/02/21 01:05	1
Bromobenzene	ND		1.0		ug/L			12/02/21 01:05	1
Bromochloromethane	ND		1.0		ug/L			12/02/21 01:05	1
Bromodichloromethane	ND		1.0		ug/L			12/02/21 01:05	1
Bromoform	ND		1.0		ug/L			12/02/21 01:05	1
Bromomethane	ND		2.0		ug/L			12/02/21 01:05	1
Carbon disulfide	ND		2.0		ug/L			12/02/21 01:05	1
Carbon tetrachloride	ND		1.0		ug/L			12/02/21 01:05	1
Chlorobenzene	ND		1.0		ug/L			12/02/21 01:05	1
Chloroethane	ND		2.0		ug/L			12/02/21 01:05	1
Chloroform	ND		1.0		ug/L			12/02/21 01:05	1
Chloromethane	ND		2.0		ug/L			12/02/21 01:05	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			12/02/21 01:05	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			12/02/21 01:05	1
Dibromochloromethane	ND		1.0		ug/L			12/02/21 01:05	1
Dibromomethane	ND		1.0		ug/L			12/02/21 01:05	1

Client Sample ID: FB3

Date Collected: 11/18/21 09:50
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155957-12

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		2.0		ug/L			12/02/21 01:05	1
Ethylbenzene	ND		1.0		ug/L			12/02/21 01:05	1
Hexachlorobutadiene	ND		1.0		ug/L			12/02/21 01:05	1
Isopropylbenzene	ND		1.0		ug/L			12/02/21 01:05	1
Methylene Chloride	ND		5.0		ug/L			12/02/21 01:05	1
Naphthalene	ND		1.0		ug/L			12/02/21 01:05	1
n-Butylbenzene	ND		1.0		ug/L			12/02/21 01:05	1
N-Propylbenzene	ND		1.0		ug/L			12/02/21 01:05	1
sec-Butylbenzene	ND		1.0		ug/L			12/02/21 01:05	1
Styrene	ND		1.0		ug/L			12/02/21 01:05	1
tert-Butylbenzene	ND		1.0		ug/L			12/02/21 01:05	1
Tetrachloroethene	ND		1.0		ug/L			12/02/21 01:05	1
Toluene	ND		1.0		ug/L			12/02/21 01:05	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			12/02/21 01:05	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			12/02/21 01:05	1
Trichloroethene	ND		1.0		ug/L			12/02/21 01:05	1
Trichlorofluoromethane	ND		2.0		ug/L			12/02/21 01:05	1
Vinyl chloride	ND		1.0		ug/L			12/02/21 01:05	1
Xylenes (total)	ND		2.0		ug/L			12/02/21 01:05	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*12/02/21 01:05*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 127*		*12/02/21 01:05*	*1*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*		*12/02/21 01:05*	*1*
Dibromofluoromethane (Surr)	*107*		*77 - 120*		*12/02/21 01:05*	*1*
Toluene-d8 (Surr)	*98*		*80 - 125*		*12/02/21 01:05*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		11/29/21 14:19	11/30/21 03:33	1
1,2-Dibromoethane	ND		0.050		ug/L		11/29/21 14:19	11/30/21 03:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*113*		*70 - 130*	*11/29/21 14:19*	*11/30/21 03:33*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		500		ug/L		11/29/21 08:00	11/30/21 03:42	1
Iron	ND		30		ug/L		11/29/21 08:00	11/30/21 03:42	1
Magnesium	ND		200		ug/L		11/29/21 08:00	11/30/21 03:42	1
Manganese	ND		3.0		ug/L		11/29/21 08:00	11/30/21 03:42	1
Potassium	ND		500		ug/L		11/29/21 08:00	11/30/21 03:42	1
Sodium	ND		1000		ug/L		11/29/21 08:00	11/30/21 03:42	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	**0.00**				meq/L			12/09/21 14:58	1
Total Cations	**0.00**				meq/L			12/09/21 14:58	1
Percent Difference	**NC**				%			12/09/21 14:58	1

Client Sample ID: FB3

Lab Sample ID: 280-155957-12

Date Collected: 11/18/21 09:50

Matrix: Water

Date Received: 11/19/21 10:25

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	0.00				mg/L			12/09/21 14:58	1
Magnesium	0.00				mg/L			12/09/21 14:58	1
Potassium	0.00				mg/L			12/09/21 14:58	1
Sodium	0.00				mg/L			12/09/21 14:58	1
Ammonia as N	0.00				mg/L			12/09/21 14:58	1
Chloride	0.00				mg/L			12/09/21 14:58	1
Sulfate	0.00				mg/L			12/09/21 14:58	1
Bicarbonate Alkalinity	0.00				mg/L			12/09/21 14:58	1
Alkalinity	0.00				mg/L			12/09/21 14:58	1
Nitrate/Nitrite	0.00				mg/L			12/09/21 14:58	1
Anion/Cation Balance	NC				%			12/09/21 14:58	1
Calculated TDS	0.00				mg/L			12/09/21 14:58	1
TDS Ratio	NC				NONE			12/09/21 14:58	1
Total Dissolved Solids	0.00				mg/L			12/09/21 14:58	1
Iron	0.00				mg/L			12/09/21 14:58	1
Calcium	0.00				meq/L			12/09/21 14:58	1
Magnesium	0.00				meq/L			12/09/21 14:58	1
Potassium	0.00				meq/L			12/09/21 14:58	1
Sodium	0.00				meq/L			12/09/21 14:58	1
Ammonia as N	0.00				meq/L			12/09/21 14:58	1
Chloride	0.00				meq/L			12/09/21 14:58	1
Sulfate	0.00				meq/L			12/09/21 14:58	1
Alkalinity	0.00				mg/L			12/09/21 14:58	1
Bicarbonate Alkalinity	0.00				meq/L			12/09/21 14:58	1
Nitrate/Nitrite	0.00				meq/L			12/09/21 14:58	1
Iron	0.00				meq/L			12/09/21 14:58	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			11/30/21 08:24	1
Sulfate	ND		1.0		mg/L			11/30/21 08:24	1
Ammonia as N	ND		0.030		mg/L			12/03/21 13:39	1
Nitrate/Nitrite	ND		0.050		mg/L			12/07/21 18:15	1
Total Organic Carbon - Average	ND		1.0		mg/L			12/08/21 16:51	1
Bicarbonate Alkalinity	ND		10		mg/L			12/02/21 19:12	1
Total Dissolved Solids	ND	H	10		mg/L			12/01/21 08:31	1

Client Sample ID: MW-21B

Lab Sample ID: 280-155957-13

Date Collected: 11/16/21 13:00

Matrix: Water

Date Received: 11/19/21 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			11/29/21 15:43	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/29/21 15:43	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/29/21 15:43	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/29/21 15:43	1
1,1-Dichloroethane	ND		1.0		ug/L			11/29/21 15:43	1
1,1-Dichloroethene	ND		1.0		ug/L			11/29/21 15:43	1
1,1-Dichloropropene	ND		1.0		ug/L			11/29/21 15:43	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/29/21 15:43	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/29/21 15:43	1

Client Sample ID: MW-21B
Date Collected: 11/16/21 13:00
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155957-13
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/29/21 15:43	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/29/21 15:43	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/29/21 15:43	1
1,2-Dichloroethane	ND		1.0		ug/L			11/29/21 15:43	1
1,2-Dichloropropane	ND		1.0		ug/L			11/29/21 15:43	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/29/21 15:43	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/29/21 15:43	1
1,3-Dichloropropane	ND		1.0		ug/L			11/29/21 15:43	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/29/21 15:43	1
2,2-Dichloropropane	ND		5.0		ug/L			11/29/21 15:43	1
2-Butanone (MEK)	ND		6.0		ug/L			11/29/21 15:43	1
2-Chlorotoluene	ND		1.0		ug/L			11/29/21 15:43	1
2-Hexanone	ND		5.0		ug/L			11/29/21 15:43	1
4-Chlorotoluene	ND		1.0		ug/L			11/29/21 15:43	1
4-Isopropyltoluene	ND		1.0		ug/L			11/29/21 15:43	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/29/21 15:43	1
Acetone	ND		10		ug/L			11/29/21 15:43	1
Benzene	ND		1.0		ug/L			11/29/21 15:43	1
Bromobenzene	ND		1.0		ug/L			11/29/21 15:43	1
Bromochloromethane	ND		1.0		ug/L			11/29/21 15:43	1
Bromodichloromethane	ND		1.0		ug/L			11/29/21 15:43	1
Bromoform	ND		1.0		ug/L			11/29/21 15:43	1
Bromomethane	ND		2.0		ug/L			11/29/21 15:43	1
Carbon disulfide	ND		2.0		ug/L			11/29/21 15:43	1
Carbon tetrachloride	ND		1.0		ug/L			11/29/21 15:43	1
Chlorobenzene	ND		1.0		ug/L			11/29/21 15:43	1
Chloroethane	ND		2.0		ug/L			11/29/21 15:43	1
Chloroform	ND		1.0		ug/L			11/29/21 15:43	1
Chloromethane	ND		2.0		ug/L			11/29/21 15:43	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/29/21 15:43	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/29/21 15:43	1
Dibromochloromethane	ND		1.0		ug/L			11/29/21 15:43	1
Dibromomethane	ND		1.0		ug/L			11/29/21 15:43	1
Dichlorodifluoromethane	ND		2.0		ug/L			11/29/21 15:43	1
Ethylbenzene	ND		1.0		ug/L			11/29/21 15:43	1
Hexachlorobutadiene	ND		1.0		ug/L			11/29/21 15:43	1
Isopropylbenzene	ND		1.0		ug/L			11/29/21 15:43	1
Methylene Chloride	ND		5.0		ug/L			11/29/21 15:43	1
Naphthalene	ND		1.0		ug/L			11/29/21 15:43	1
n-Butylbenzene	ND		1.0		ug/L			11/29/21 15:43	1
N-Propylbenzene	ND		1.0		ug/L			11/29/21 15:43	1
sec-Butylbenzene	ND		1.0		ug/L			11/29/21 15:43	1
Styrene	ND		1.0		ug/L			11/29/21 15:43	1
tert-Butylbenzene	ND		1.0		ug/L			11/29/21 15:43	1
Tetrachloroethene	ND		1.0		ug/L			11/29/21 15:43	1
Toluene	ND		1.0		ug/L			11/29/21 15:43	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/29/21 15:43	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/29/21 15:43	1
Trichloroethene	ND		1.0		ug/L			11/29/21 15:43	1

Client Sample ID: MW-21B

Date Collected: 11/16/21 13:00
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155957-13

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	ND		2.0		ug/L			11/29/21 15:43	1
Vinyl chloride	ND		1.0		ug/L			11/29/21 15:43	1
Xylenes (total)	ND		2.0		ug/L			11/29/21 15:43	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*11/29/21 15:43*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 127*		*11/29/21 15:43*	*1*
4-Bromofluorobenzene (Surr)	*95*		*78 - 120*		*11/29/21 15:43*	*1*
Dibromofluoromethane (Surr)	*107*		*77 - 120*		*11/29/21 15:43*	*1*
Toluene-d8 (Surr)	*93*		*80 - 125*		*11/29/21 15:43*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		11/29/21 14:19	11/30/21 03:57	1
1,2-Dibromoethane	ND		0.050		ug/L		11/29/21 14:19	11/30/21 03:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*108*		*70 - 130*	*11/29/21 14:19*	*11/30/21 03:57*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**49000**		500		ug/L		11/29/21 08:00	11/30/21 03:46	1
Iron	**320**		30		ug/L		11/29/21 08:00	11/30/21 03:46	1
Magnesium	**20000**		200		ug/L		11/29/21 08:00	11/30/21 03:46	1
Manganese	**1800**		3.0		ug/L		11/29/21 08:00	11/30/21 03:46	1
Potassium	**990**		500		ug/L		11/29/21 08:00	11/30/21 03:46	1
Sodium	**29000**		1000		ug/L		11/29/21 08:00	11/30/21 03:46	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	**5.5**				meq/L			12/09/21 14:58	1
Total Cations	**5.4**				meq/L			12/09/21 14:58	1
Percent Difference	**-0.98**				%			12/09/21 14:58	1
Calcium	**49**				mg/L			12/09/21 14:58	1
Magnesium	**20**				mg/L			12/09/21 14:58	1
Potassium	**0.99**				mg/L			12/09/21 14:58	1
Sodium	**29**				mg/L			12/09/21 14:58	1
Ammonia as N	**0.44**				mg/L			12/09/21 14:58	1
Chloride	**12**				mg/L			12/09/21 14:58	1
Sulfate	**0.00**				mg/L			12/09/21 14:58	1
Bicarbonate Alkalinity	**260**				mg/L			12/09/21 14:58	1
Alkalinity	**260**				mg/L			12/09/21 14:58	1
Nitrate/Nitrite	**0.00**				mg/L			12/09/21 14:58	1
Anion/Cation Balance	**-0.98**				%			12/09/21 14:58	1
Calculated TDS	**270**				mg/L			12/09/21 14:58	1
TDS Ratio	**1.1**				NONE			12/09/21 14:58	1
Total Dissolved Solids	**300**				mg/L			12/09/21 14:58	1
Iron	**0.32**				mg/L			12/09/21 14:58	1
Calcium	**2.4**				meq/L			12/09/21 14:58	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Groundwater

Job ID: 280-155957-1

Client Sample ID: MW-21B

Date Collected: 11/16/21 13:00
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155957-13

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	1.6				meq/L			12/09/21 14:58	1
Potassium	0.025				meq/L			12/09/21 14:58	1
Sodium	1.3				meq/L			12/09/21 14:58	1
Ammonia as N	0.031				meq/L			12/09/21 14:58	1
Chloride	0.34				meq/L			12/09/21 14:58	1
Sulfate	0.00				meq/L			12/09/21 14:58	1
Alkalinity	260				mg/L			12/09/21 14:58	1
Bicarbonate Alkalinity	5.2				meq/L			12/09/21 14:58	1
Nitrate/Nitrite	0.00				meq/L			12/09/21 14:58	1
Iron	0.017				meq/L			12/09/21 14:58	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12		0.50		mg/L			11/30/21 08:43	1
Sulfate	ND		1.0		mg/L			11/30/21 08:43	1
Ammonia as N	0.44		0.030		mg/L			12/03/21 13:41	1
Nitrate/Nitrite	ND		0.050		mg/L			12/07/21 18:09	1
Total Organic Carbon - Average	3.0		1.0		mg/L			12/08/21 17:08	1
Bicarbonate Alkalinity	260		10		mg/L			11/30/21 22:33	1
Total Dissolved Solids	300		10		mg/L			11/22/21 09:42	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.82				SU			11/16/21 14:00	1
Field Conductivity	543.0				umhos/cm			11/16/21 14:00	1
Field Temperature	13.7				Degrees C			11/16/21 14:00	1
Field Dissolved Oxygen	0.49				mg/L			11/16/21 14:00	1
Field EH/ORP	39.4				millivolts			11/16/21 14:00	1

Surrogate Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Groundwater

Job ID: 280-155957-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-127)	(78-120)	(77-120)	(80-125)
280-155800-B-3 MS	Matrix Spike	105	92	112	92
280-155800-B-3 MSD	Matrix Spike Duplicate	101	91	111	92
280-155957-1	TB1	100	93	109	92
280-155957-2	MW-14A	102	93	111	92
280-155957-3	MW-14B	104	94	110	93
280-155957-4	DUP3	103	93	109	92
280-155957-5	MW-15A	102	94	109	92
280-155957-6	MW-15B	100	94	109	92
280-155957-7	FB2	101	93	108	92
280-155957-8	MW-16A	102	93	108	92
280-155957-9	MW-16B	102	95	108	92
280-155957-10	DUP2	104	94	110	90
280-155957-11	MW-21A	103	93	107	92
280-155957-12	FB3	112	97	107	98
280-155957-13	MW-21B	105	95	107	93
LCS 280-558921/4	Lab Control Sample	98	89	114	91
LCS 280-559320/4	Lab Control Sample	103	99	99	100
LCSD 280-558921/5	Lab Control Sample Dup	103	91	113	91
LCSD 280-559320/5	Lab Control Sample Dup	102	98	99	99
MB 280-558921/9	Method Blank	101	94	112	90
MB 280-559320/9	Method Blank	108	96	106	96

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		12DBP1
Lab Sample ID	Client Sample ID	(70-130)
280-155957-1	TB1	109
280-155957-2	MW-14A	108
280-155957-3	MW-14B	108
280-155957-4	DUP3	108
280-155957-5	MW-15A	104
280-155957-6	MW-15B	112
280-155957-7	FB2	110
280-155957-8	MW-16A	117
280-155957-9	MW-16B	118
280-155957-10	DUP2	110
280-155957-11	MW-21A	109
280-155957-12	FB3	113
280-155957-13	MW-21B	108
LCS 280-559015/2-A	Lab Control Sample	108
LCSD 280-559015/3-A	Lab Control Sample Dup	107
MB 280-559015/1-A	Method Blank	109

Surrogate Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Groundwater

Job ID: 280-155957-1

Surrogate Legend

12DBP = 1,2-Dibromopropane

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 280-558921/9
Matrix: Water
Analysis Batch: 558921

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			11/29/21 10:55	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/29/21 10:55	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/29/21 10:55	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/29/21 10:55	1
1,1-Dichloroethane	ND		1.0		ug/L			11/29/21 10:55	1
1,1-Dichloroethene	ND		1.0		ug/L			11/29/21 10:55	1
1,1-Dichloropropene	ND		1.0		ug/L			11/29/21 10:55	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/29/21 10:55	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/29/21 10:55	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/29/21 10:55	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/29/21 10:55	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/29/21 10:55	1
1,2-Dichloroethane	ND		1.0		ug/L			11/29/21 10:55	1
1,2-Dichloropropane	ND		1.0		ug/L			11/29/21 10:55	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/29/21 10:55	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/29/21 10:55	1
1,3-Dichloropropane	ND		1.0		ug/L			11/29/21 10:55	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/29/21 10:55	1
2,2-Dichloropropane	ND		5.0		ug/L			11/29/21 10:55	1
2-Butanone (MEK)	ND		6.0		ug/L			11/29/21 10:55	1
2-Chlorotoluene	ND		1.0		ug/L			11/29/21 10:55	1
2-Hexanone	ND		5.0		ug/L			11/29/21 10:55	1
4-Chlorotoluene	ND		1.0		ug/L			11/29/21 10:55	1
4-Isopropyltoluene	ND		1.0		ug/L			11/29/21 10:55	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/29/21 10:55	1
Acetone	ND		10		ug/L			11/29/21 10:55	1
Benzene	ND		1.0		ug/L			11/29/21 10:55	1
Bromobenzene	ND		1.0		ug/L			11/29/21 10:55	1
Bromochloromethane	ND		1.0		ug/L			11/29/21 10:55	1
Bromodichloromethane	ND		1.0		ug/L			11/29/21 10:55	1
Bromoform	ND		1.0		ug/L			11/29/21 10:55	1
Bromomethane	ND		2.0		ug/L			11/29/21 10:55	1
Carbon disulfide	ND		2.0		ug/L			11/29/21 10:55	1
Carbon tetrachloride	ND		1.0		ug/L			11/29/21 10:55	1
Chlorobenzene	ND		1.0		ug/L			11/29/21 10:55	1
Chloroethane	ND		2.0		ug/L			11/29/21 10:55	1
Chloroform	ND		1.0		ug/L			11/29/21 10:55	1
Chloromethane	ND		2.0		ug/L			11/29/21 10:55	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/29/21 10:55	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/29/21 10:55	1
Dibromochloromethane	ND		1.0		ug/L			11/29/21 10:55	1
Dibromomethane	ND		1.0		ug/L			11/29/21 10:55	1
Dichlorodifluoromethane	ND		2.0		ug/L			11/29/21 10:55	1
Ethylbenzene	ND		1.0		ug/L			11/29/21 10:55	1
Hexachlorobutadiene	ND		1.0		ug/L			11/29/21 10:55	1
Isopropylbenzene	ND		1.0		ug/L			11/29/21 10:55	1
Methylene Chloride	ND		5.0		ug/L			11/29/21 10:55	1
Naphthalene	ND		1.0		ug/L			11/29/21 10:55	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 280-558921/9
Matrix: Water
Analysis Batch: 558921

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		1.0		ug/L			11/29/21 10:55	1
N-Propylbenzene	ND		1.0		ug/L			11/29/21 10:55	1
sec-Butylbenzene	ND		1.0		ug/L			11/29/21 10:55	1
Styrene	ND		1.0		ug/L			11/29/21 10:55	1
tert-Butylbenzene	ND		1.0		ug/L			11/29/21 10:55	1
Tetrachloroethene	ND		1.0		ug/L			11/29/21 10:55	1
Toluene	ND		1.0		ug/L			11/29/21 10:55	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/29/21 10:55	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/29/21 10:55	1
Trichloroethene	ND		1.0		ug/L			11/29/21 10:55	1
Trichlorofluoromethane	ND		2.0		ug/L			11/29/21 10:55	1
Vinyl chloride	ND		1.0		ug/L			11/29/21 10:55	1
Xylenes (total)	ND		2.0		ug/L			11/29/21 10:55	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*11/29/21 10:55*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 127*		*11/29/21 10:55*	*1*
4-Bromofluorobenzene (Surr)	*94*		*78 - 120*		*11/29/21 10:55*	*1*
Dibromofluoromethane (Surr)	*112*		*77 - 120*		*11/29/21 10:55*	*1*
Toluene-d8 (Surr)	*90*		*80 - 125*		*11/29/21 10:55*	*1*

Lab Sample ID: LCS 280-558921/4
Matrix: Water
Analysis Batch: 558921

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	23.8		ug/L		95	65 - 135
1,1,1-Trichloroethane	25.0	28.5		ug/L		114	65 - 135
1,1,2,2-Tetrachloroethane	25.0	19.4		ug/L		77	58 - 135
1,1,2-Trichloroethane	25.0	26.9		ug/L		108	64 - 135
1,1-Dichloroethane	25.0	28.7		ug/L		115	65 - 135
1,1-Dichloroethene	25.0	25.6		ug/L		102	65 - 136
1,1-Dichloropropene	25.0	28.3		ug/L		113	65 - 135
1,2,3-Trichlorobenzene	25.0	21.9		ug/L		87	60 - 135
1,2,3-Trichloropropane	25.0	21.8		ug/L		87	65 - 135
1,2,4-Trichlorobenzene	25.0	21.7		ug/L		87	58 - 135
1,2,4-Trimethylbenzene	25.0	20.5		ug/L		82	65 - 135
1,2-Dichlorobenzene	25.0	21.9		ug/L		87	65 - 135
1,2-Dichloroethane	25.0	29.2		ug/L		117	65 - 135
1,2-Dichloropropane	25.0	26.7		ug/L		107	64 - 135
1,3,5-Trimethylbenzene	25.0	20.4		ug/L		82	65 - 135
1,3-Dichlorobenzene	25.0	21.9		ug/L		87	65 - 135
1,3-Dichloropropane	25.0	23.7		ug/L		95	64 - 135
1,4-Dichlorobenzene	25.0	22.2		ug/L		89	65 - 135
2,2-Dichloropropane	25.0	27.0		ug/L		108	65 - 135
2-Butanone (MEK)	100	116		ug/L		116	44 - 177

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-558921/4
Matrix: Water
Analysis Batch: 558921

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chlorotoluene	25.0	20.3		ug/L		81	65 - 135
2-Hexanone	100	98.4		ug/L		98	57 - 139
4-Chlorotoluene	25.0	20.3		ug/L		81	65 - 135
4-Isopropyltoluene	25.0	21.2		ug/L		85	65 - 135
4-Methyl-2-pentanone	100	109		ug/L		109	60 - 150
Acetone	100	125		ug/L		125	39 - 156
Benzene	25.0	27.9		ug/L		112	65 - 135
Bromobenzene	25.0	22.0		ug/L		88	65 - 135
Bromochloromethane	25.0	30.8		ug/L		123	65 - 135
Bromodichloromethane	25.0	26.7		ug/L		107	65 - 135
Bromoform	25.0	19.1		ug/L		76	62 - 135
Bromomethane	25.0	22.3		ug/L		89	45 - 135
Carbon disulfide	25.0	23.2		ug/L		93	55 - 143
Carbon tetrachloride	25.0	23.5		ug/L		94	65 - 135
Chlorobenzene	25.0	23.4		ug/L		94	65 - 135
Chloroethane	25.0	27.0		ug/L		108	46 - 136
Chloroform	25.0	29.2		ug/L		117	65 - 135
Chloromethane	25.0	23.7		ug/L		95	34 - 145
cis-1,2-Dichloroethene	25.0	28.1		ug/L		112	65 - 135
cis-1,3-Dichloropropene	25.0	22.3		ug/L		89	65 - 135
Dibromochloromethane	25.0	23.2		ug/L		93	65 - 135
Dibromomethane	25.0	26.8		ug/L		107	65 - 135
Dichlorodifluoromethane	25.0	25.8		ug/L		103	43 - 142
Ethylbenzene	25.0	22.9		ug/L		92	65 - 135
Hexachlorobutadiene	25.0	24.6		ug/L		99	65 - 135
Isopropylbenzene	25.0	20.5		ug/L		82	65 - 135
Methylene Chloride	25.0	27.1		ug/L		108	54 - 141
Naphthalene	25.0	19.1		ug/L		76	42 - 135
n-Butylbenzene	25.0	19.6		ug/L		79	64 - 135
N-Propylbenzene	25.0	20.3		ug/L		81	65 - 135
sec-Butylbenzene	25.0	20.6		ug/L		82	64 - 135
Styrene	25.0	23.4		ug/L		94	65 - 135
tert-Butylbenzene	25.0	21.0		ug/L		84	65 - 135
Tetrachloroethene	25.0	26.2		ug/L		105	65 - 135
Toluene	25.0	25.9		ug/L		104	65 - 135
trans-1,2-Dichloroethene	25.0	25.9		ug/L		104	65 - 135
trans-1,3-Dichloropropene	25.0	25.3		ug/L		101	65 - 135
Trichloroethene	25.0	28.7		ug/L		115	65 - 135
Trichlorofluoromethane	25.0	28.0		ug/L		112	53 - 137
Vinyl chloride	25.0	24.7		ug/L		99	40 - 137

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 127*
4-Bromofluorobenzene (Surr)	*89*		*78 - 120*
Dibromofluoromethane (Surr)	*114*		*77 - 120*
Toluene-d8 (Surr)	*91*		*80 - 125*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 280-558921/5
Matrix: Water
Analysis Batch: 558921

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane			25.0	23.6		ug/L		94	65 - 135	1	20
1,1,1-Trichloroethane			25.0	27.8		ug/L		111	65 - 135	3	20
1,1,2,2-Tetrachloroethane			25.0	20.2		ug/L		81	58 - 135	4	20
1,1,2-Trichloroethane			25.0	27.4		ug/L		110	64 - 135	2	27
1,1-Dichloroethane			25.0	28.9		ug/L		115	65 - 135	1	21
1,1-Dichloroethene			25.0	24.8		ug/L		99	65 - 136	3	20
1,1-Dichloropropene			25.0	27.8		ug/L		111	65 - 135	2	21
1,2,3-Trichlorobenzene			25.0	23.1		ug/L		92	60 - 135	6	36
1,2,3-Trichloropropane			25.0	22.2		ug/L		89	65 - 135	2	23
1,2,4-Trichlorobenzene			25.0	21.6		ug/L		86	58 - 135	1	25
1,2,4-Trimethylbenzene			25.0	21.1		ug/L		84	65 - 135	3	20
1,2-Dichlorobenzene			25.0	21.7		ug/L		87	65 - 135	1	20
1,2-Dichloroethane			25.0	29.9		ug/L		119	65 - 135	2	20
1,2-Dichloropropane			25.0	27.2		ug/L		109	64 - 135	2	20
1,3,5-Trimethylbenzene			25.0	20.9		ug/L		83	65 - 135	2	20
1,3-Dichlorobenzene			25.0	21.4		ug/L		86	65 - 135	2	20
1,3-Dichloropropane			25.0	23.6		ug/L		94	64 - 135	1	20
1,4-Dichlorobenzene			25.0	22.4		ug/L		90	65 - 135	1	23
2,2-Dichloropropane			25.0	26.5		ug/L		106	65 - 135	2	20
2-Butanone (MEK)			100	117		ug/L		117	44 - 177	1	32
2-Chlorotoluene			25.0	21.7		ug/L		87	65 - 135	7	20
2-Hexanone			100	97.3		ug/L		97	57 - 139	1	25
4-Chlorotoluene			25.0	21.3		ug/L		85	65 - 135	4	20
4-Isopropyltoluene			25.0	20.1		ug/L		80	65 - 135	5	20
4-Methyl-2-pentanone			100	110		ug/L		110	60 - 150	1	22
Acetone			100	126		ug/L		126	39 - 156	1	23
Benzene			25.0	28.8		ug/L		115	65 - 135	3	20
Bromobenzene			25.0	22.5		ug/L		90	65 - 135	2	26
Bromochloromethane			25.0	31.6		ug/L		126	65 - 135	3	29
Bromodichloromethane			25.0	27.3		ug/L		109	65 - 135	2	20
Bromoform			25.0	19.8		ug/L		79	62 - 135	3	27
Bromomethane			25.0	22.2		ug/L		89	45 - 135	1	33
Carbon disulfide			25.0	22.7		ug/L		91	55 - 143	2	20
Carbon tetrachloride			25.0	22.8		ug/L		91	65 - 135	3	21
Chlorobenzene			25.0	23.1		ug/L		92	65 - 135	1	20
Chloroethane			25.0	26.8		ug/L		107	46 - 136	1	25
Chloroform			25.0	29.6		ug/L		118	65 - 135	1	20
Chloromethane			25.0	23.2		ug/L		93	34 - 145	2	24
cis-1,2-Dichloroethene			25.0	28.0		ug/L		112	65 - 135	0	20
cis-1,3-Dichloropropene			25.0	22.1		ug/L		89	65 - 135	1	26
Dibromochloromethane			25.0	22.8		ug/L		91	65 - 135	2	20
Dibromomethane			25.0	26.8		ug/L		107	65 - 135	0	26
Dichlorodifluoromethane			25.0	21.0		ug/L		84	43 - 142	20	30
Ethylbenzene			25.0	22.3		ug/L		89	65 - 135	2	20
Hexachlorobutadiene			25.0	23.6		ug/L		94	65 - 135	4	25
Isopropylbenzene			25.0	20.4		ug/L		81	65 - 135	1	20
Methylene Chloride			25.0	27.4		ug/L		110	54 - 141	1	26
Naphthalene			25.0	19.7		ug/L		79	42 - 135	3	23

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 280-558921/5
Matrix: Water
Analysis Batch: 558921

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
n-Butylbenzene			25.0	19.2		ug/L		77	64 - 135	2	21
N-Propylbenzene			25.0	21.0		ug/L		84	65 - 135	3	20
sec-Butylbenzene			25.0	19.9		ug/L		80	64 - 135	3	21
Styrene			25.0	23.1		ug/L		92	65 - 135	1	26
tert-Butylbenzene			25.0	21.2		ug/L		85	65 - 135	1	21
Tetrachloroethene			25.0	25.0		ug/L		100	65 - 135	5	20
Toluene			25.0	25.8		ug/L		103	65 - 135	1	20
trans-1,2-Dichloroethene			25.0	26.1		ug/L		104	65 - 135	1	24
trans-1,3-Dichloropropene			25.0	25.3		ug/L		101	65 - 135	0	26
Trichloroethene			25.0	26.8		ug/L		107	65 - 135	7	20
Trichlorofluoromethane			25.0	23.5		ug/L		94	53 - 137	17	27
Vinyl chloride			25.0	22.6		ug/L		90	40 - 137	9	24

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 127*
4-Bromofluorobenzene (Surr)	*91*		*78 - 120*
Dibromofluoromethane (Surr)	*113*		*77 - 120*
Toluene-d8 (Surr)	*91*		*80 - 125*

Lab Sample ID: 280-155800-B-3 MS
Matrix: Water
Analysis Batch: 558921

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	ND		100	89.8		ug/L		90	65 - 135
1,1,1-Trichloroethane	ND		100	113		ug/L		113	65 - 135
1,1,2,2-Tetrachloroethane	ND		100	82.6		ug/L		83	58 - 135
1,1,2-Trichloroethane	ND		100	107		ug/L		107	64 - 135
1,1-Dichloroethane	ND		100	118		ug/L		118	65 - 135
1,1-Dichloroethene	ND		100	99.4		ug/L		99	65 - 136
1,1-Dichloropropene	ND		100	115		ug/L		115	65 - 135
1,2,3-Trichlorobenzene	ND		100	79.3		ug/L		79	60 - 135
1,2,3-Trichloropropane	ND		100	89.4		ug/L		89	65 - 135
1,2,4-Trichlorobenzene	ND		100	76.4		ug/L		76	58 - 135
1,2,4-Trimethylbenzene	ND		100	79.8		ug/L		80	65 - 135
1,2-Dichlorobenzene	ND		100	83.5		ug/L		84	65 - 135
1,2-Dichloroethane	ND		100	122		ug/L		122	65 - 135
1,2-Dichloropropane	ND		100	111		ug/L		111	64 - 135
1,3,5-Trimethylbenzene	ND		100	79.1		ug/L		79	65 - 135
1,3-Dichlorobenzene	ND		100	81.0		ug/L		81	65 - 135
1,3-Dichloropropane	ND		100	97.2		ug/L		97	64 - 135
1,4-Dichlorobenzene	ND		100	84.4		ug/L		84	65 - 135
2,2-Dichloropropane	ND		100	85.4		ug/L		85	65 - 135
2-Butanone (MEK)	ND		400	511		ug/L		128	44 - 177
2-Chlorotoluene	ND		100	79.7		ug/L		80	65 - 135
2-Hexanone	ND		400	455		ug/L		114	57 - 139
4-Chlorotoluene	ND		100	78.8		ug/L		79	65 - 135
4-Isopropyltoluene	ND		100	76.0		ug/L		76	65 - 135

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 280-155800-B-3 MS
Matrix: Water
Analysis Batch: 558921

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Methyl-2-pentanone	ND		400	500		ug/L		125	60 - 150
Acetone	ND		400	559		ug/L		140	39 - 156
Benzene	ND		100	112		ug/L		112	65 - 135
Bromobenzene	ND		100	84.8		ug/L		85	65 - 135
Bromochloromethane	ND		100	124		ug/L		124	65 - 135
Bromodichloromethane	ND		100	106		ug/L		106	65 - 135
Bromoform	ND		100	70.1		ug/L		70	62 - 135
Bromomethane	ND		100	63.4		ug/L		63	45 - 135
Carbon disulfide	ND		100	88.0		ug/L		88	55 - 143
Carbon tetrachloride	ND		100	90.7		ug/L		91	65 - 135
Chlorobenzene	ND		100	90.9		ug/L		91	65 - 135
Chloroethane	ND	F1	100	130		ug/L		130	46 - 136
Chloroform	ND		100	118		ug/L		118	65 - 135
Chloromethane	ND		100	108		ug/L		108	34 - 145
cis-1,2-Dichloroethene	ND		100	109		ug/L		109	65 - 135
cis-1,3-Dichloropropene	ND		100	85.9		ug/L		86	65 - 135
Dibromochloromethane	ND		100	86.5		ug/L		87	65 - 135
Dibromomethane	ND		100	107		ug/L		107	65 - 135
Dichlorodifluoromethane	ND		100	99.1		ug/L		99	43 - 142
Ethylbenzene	ND		100	88.4		ug/L		88	65 - 135
Hexachlorobutadiene	ND		100	83.5		ug/L		83	65 - 135
Isopropylbenzene	ND		100	80.0		ug/L		80	65 - 135
Methylene Chloride	ND		100	108		ug/L		108	54 - 141
Naphthalene	ND		100	73.9		ug/L		74	42 - 135
n-Butylbenzene	ND		100	72.2		ug/L		72	64 - 135
N-Propylbenzene	ND		100	78.2		ug/L		78	65 - 135
sec-Butylbenzene	ND		100	74.9		ug/L		75	64 - 135
Styrene	ND		100	90.2		ug/L		90	65 - 135
tert-Butylbenzene	ND		100	79.2		ug/L		79	65 - 135
Tetrachloroethene	250	F1	100	270	F1	ug/L		24	65 - 135
Toluene	ND		100	101		ug/L		101	65 - 135
trans-1,2-Dichloroethene	ND		100	102		ug/L		102	65 - 135
trans-1,3-Dichloropropene	ND		100	93.3		ug/L		93	65 - 135
Trichloroethene	ND		100	110		ug/L		110	65 - 135
Trichlorofluoromethane	ND		100	120		ug/L		120	53 - 137
Vinyl chloride	ND		100	113		ug/L		113	40 - 137

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 127*
4-Bromofluorobenzene (Surr)	*92*		*78 - 120*
Dibromofluoromethane (Surr)	*112*		*77 - 120*
Toluene-d8 (Surr)	*92*		*80 - 125*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 280-155800-B-3 MSD
Matrix: Water
Analysis Batch: 558921

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		100	90.6		ug/L		91	65 - 135	1	20
1,1,1-Trichloroethane	ND		100	115		ug/L		115	65 - 135	1	20
1,1,2,2-Tetrachloroethane	ND		100	83.3		ug/L		83	58 - 135	1	20
1,1,2-Trichloroethane	ND		100	106		ug/L		106	64 - 135	1	27
1,1-Dichloroethane	ND		100	118		ug/L		118	65 - 135	0	21
1,1-Dichloroethene	ND		100	102		ug/L		102	65 - 136	3	20
1,1-Dichloropropene	ND		100	118		ug/L		118	65 - 135	2	21
1,2,3-Trichlorobenzene	ND		100	81.9		ug/L		82	60 - 135	3	36
1,2,3-Trichloropropane	ND		100	91.8		ug/L		92	65 - 135	3	23
1,2,4-Trichlorobenzene	ND		100	81.7		ug/L		82	58 - 135	7	25
1,2,4-Trimethylbenzene	ND		100	80.6		ug/L		81	65 - 135	1	20
1,2-Dichlorobenzene	ND		100	83.6		ug/L		84	65 - 135	0	20
1,2-Dichloroethane	ND		100	121		ug/L		121	65 - 135	1	20
1,2-Dichloropropane	ND		100	110		ug/L		110	64 - 135	1	20
1,3,5-Trimethylbenzene	ND		100	81.3		ug/L		81	65 - 135	3	20
1,3-Dichlorobenzene	ND		100	84.2		ug/L		84	65 - 135	4	20
1,3-Dichloropropane	ND		100	95.9		ug/L		96	64 - 135	1	20
1,4-Dichlorobenzene	ND		100	86.1		ug/L		86	65 - 135	2	23
2,2-Dichloropropane	ND		100	85.8		ug/L		86	65 - 135	0	20
2-Butanone (MEK)	ND		400	504		ug/L		126	44 - 177	1	32
2-Chlorotoluene	ND		100	81.6		ug/L		82	65 - 135	2	20
2-Hexanone	ND		400	445		ug/L		111	57 - 139	2	25
4-Chlorotoluene	ND		100	79.6		ug/L		80	65 - 135	1	20
4-Isopropyltoluene	ND		100	77.8		ug/L		78	65 - 135	2	20
4-Methyl-2-pentanone	ND		400	491		ug/L		123	60 - 150	2	22
Acetone	ND		400	541		ug/L		135	39 - 156	3	23
Benzene	ND		100	113		ug/L		113	65 - 135	2	20
Bromobenzene	ND		100	86.2		ug/L		86	65 - 135	2	26
Bromochloromethane	ND		100	122		ug/L		122	65 - 135	2	29
Bromodichloromethane	ND		100	107		ug/L		107	65 - 135	1	20
Bromoform	ND		100	71.9		ug/L		72	62 - 135	3	27
Bromomethane	ND		100	60.0		ug/L		60	45 - 135	5	33
Carbon disulfide	ND		100	87.9		ug/L		88	55 - 143	0	20
Carbon tetrachloride	ND		100	94.8		ug/L		95	65 - 135	4	21
Chlorobenzene	ND		100	92.7		ug/L		93	65 - 135	2	20
Chloroethane	ND	F1	100	138	F1	ug/L		138	46 - 136	6	25
Chloroform	ND		100	118		ug/L		118	65 - 135	0	20
Chloromethane	ND		100	106		ug/L		106	34 - 145	2	24
cis-1,2-Dichloroethene	ND		100	109		ug/L		109	65 - 135	0	20
cis-1,3-Dichloropropene	ND		100	87.6		ug/L		88	65 - 135	2	26
Dibromochloromethane	ND		100	86.8		ug/L		87	65 - 135	0	20
Dibromomethane	ND		100	107		ug/L		107	65 - 135	0	26
Dichlorodifluoromethane	ND		100	96.3		ug/L		96	43 - 142	3	30
Ethylbenzene	ND		100	89.0		ug/L		89	65 - 135	1	20
Hexachlorobutadiene	ND		100	87.7		ug/L		88	65 - 135	5	25
Isopropylbenzene	ND		100	81.9		ug/L		82	65 - 135	2	20
Methylene Chloride	ND		100	108		ug/L		108	54 - 141	0	26
Naphthalene	ND		100	79.1		ug/L		79	42 - 135	7	23

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 280-155800-B-3 MSD
Matrix: Water
Analysis Batch: 558921

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
n-Butylbenzene	ND		100	73.1		ug/L		73	64 - 135	1	21
N-Propylbenzene	ND		100	79.2		ug/L		79	65 - 135	1	20
sec-Butylbenzene	ND		100	77.7		ug/L		78	64 - 135	4	21
Styrene	ND		100	91.5		ug/L		91	65 - 135	1	26
tert-Butylbenzene	ND		100	81.0		ug/L		81	65 - 135	2	21
Tetrachloroethene	250	F1	100	302	F1	ug/L		56	65 - 135	11	20
Toluene	ND		100	103		ug/L		103	65 - 135	2	20
trans-1,2-Dichloroethene	ND		100	105		ug/L		105	65 - 135	3	24
trans-1,3-Dichloropropene	ND		100	95.1		ug/L		95	65 - 135	2	26
Trichloroethene	ND		100	113		ug/L		113	65 - 135	2	20
Trichlorofluoromethane	ND		100	116		ug/L		116	53 - 137	4	27
Vinyl chloride	ND		100	112		ug/L		112	40 - 137	1	24

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 127*
4-Bromofluorobenzene (Surr)	*91*		*78 - 120*
Dibromofluoromethane (Surr)	*111*		*77 - 120*
Toluene-d8 (Surr)	*92*		*80 - 125*

Lab Sample ID: MB 280-559320/9
Matrix: Water
Analysis Batch: 559320

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			12/01/21 21:48	1
1,1,1-Trichloroethane	ND		1.0		ug/L			12/01/21 21:48	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			12/01/21 21:48	1
1,1,2-Trichloroethane	ND		1.0		ug/L			12/01/21 21:48	1
1,1-Dichloroethane	ND		1.0		ug/L			12/01/21 21:48	1
1,1-Dichloroethene	ND		1.0		ug/L			12/01/21 21:48	1
1,1-Dichloropropene	ND		1.0		ug/L			12/01/21 21:48	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			12/01/21 21:48	1
1,2,3-Trichloropropane	ND		1.0		ug/L			12/01/21 21:48	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			12/01/21 21:48	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			12/01/21 21:48	1
1,2-Dichlorobenzene	ND		1.0		ug/L			12/01/21 21:48	1
1,2-Dichloroethane	ND		1.0		ug/L			12/01/21 21:48	1
1,2-Dichloropropane	ND		1.0		ug/L			12/01/21 21:48	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			12/01/21 21:48	1
1,3-Dichlorobenzene	ND		1.0		ug/L			12/01/21 21:48	1
1,3-Dichloropropane	ND		1.0		ug/L			12/01/21 21:48	1
1,4-Dichlorobenzene	ND		1.0		ug/L			12/01/21 21:48	1
2,2-Dichloropropane	ND		5.0		ug/L			12/01/21 21:48	1
2-Butanone (MEK)	ND		6.0		ug/L			12/01/21 21:48	1
2-Chlorotoluene	ND		1.0		ug/L			12/01/21 21:48	1
2-Hexanone	ND		5.0		ug/L			12/01/21 21:48	1
4-Chlorotoluene	ND		1.0		ug/L			12/01/21 21:48	1
4-Isopropyltoluene	ND		1.0		ug/L			12/01/21 21:48	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 280-559320/9
Matrix: Water
Analysis Batch: 559320

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone	ND		5.0		ug/L			12/01/21 21:48	1
Acetone	ND		10		ug/L			12/01/21 21:48	1
Benzene	ND		1.0		ug/L			12/01/21 21:48	1
Bromobenzene	ND		1.0		ug/L			12/01/21 21:48	1
Bromochloromethane	ND		1.0		ug/L			12/01/21 21:48	1
Bromodichloromethane	ND		1.0		ug/L			12/01/21 21:48	1
Bromoform	ND		1.0		ug/L			12/01/21 21:48	1
Bromomethane	ND		2.0		ug/L			12/01/21 21:48	1
Carbon disulfide	ND		2.0		ug/L			12/01/21 21:48	1
Carbon tetrachloride	ND		1.0		ug/L			12/01/21 21:48	1
Chlorobenzene	ND		1.0		ug/L			12/01/21 21:48	1
Chloroethane	ND		2.0		ug/L			12/01/21 21:48	1
Chloroform	ND		1.0		ug/L			12/01/21 21:48	1
Chloromethane	ND		2.0		ug/L			12/01/21 21:48	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			12/01/21 21:48	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			12/01/21 21:48	1
Dibromochloromethane	ND		1.0		ug/L			12/01/21 21:48	1
Dibromomethane	ND		1.0		ug/L			12/01/21 21:48	1
Dichlorodifluoromethane	ND		2.0		ug/L			12/01/21 21:48	1
Ethylbenzene	ND		1.0		ug/L			12/01/21 21:48	1
Hexachlorobutadiene	ND		1.0		ug/L			12/01/21 21:48	1
Isopropylbenzene	ND		1.0		ug/L			12/01/21 21:48	1
Methylene Chloride	ND		5.0		ug/L			12/01/21 21:48	1
Naphthalene	ND		1.0		ug/L			12/01/21 21:48	1
n-Butylbenzene	ND		1.0		ug/L			12/01/21 21:48	1
N-Propylbenzene	ND		1.0		ug/L			12/01/21 21:48	1
sec-Butylbenzene	ND		1.0		ug/L			12/01/21 21:48	1
Styrene	ND		1.0		ug/L			12/01/21 21:48	1
tert-Butylbenzene	ND		1.0		ug/L			12/01/21 21:48	1
Tetrachloroethene	ND		1.0		ug/L			12/01/21 21:48	1
Toluene	ND		1.0		ug/L			12/01/21 21:48	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			12/01/21 21:48	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			12/01/21 21:48	1
Trichloroethene	ND		1.0		ug/L			12/01/21 21:48	1
Trichlorofluoromethane	ND		2.0		ug/L			12/01/21 21:48	1
Vinyl chloride	ND		1.0		ug/L			12/01/21 21:48	1
Xylenes (total)	ND		2.0		ug/L			12/01/21 21:48	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*12/01/21 21:48*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 127*		*12/01/21 21:48*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*12/01/21 21:48*	*1*
Dibromofluoromethane (Surr)	*106*		*77 - 120*		*12/01/21 21:48*	*1*
Toluene-d8 (Surr)	*96*		*80 - 125*		*12/01/21 21:48*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-559320/4
Matrix: Water
Analysis Batch: 559320

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	52.3		ug/L		105	65 - 135
1,1,1-Trichloroethane	50.0	53.2		ug/L		106	65 - 135
1,1,2,2-Tetrachloroethane	50.0	57.3		ug/L		115	58 - 135
1,1,2-Trichloroethane	50.0	55.1		ug/L		110	64 - 135
1,1-Dichloroethane	50.0	54.7		ug/L		109	65 - 135
1,1-Dichloroethene	50.0	53.2		ug/L		106	65 - 136
1,1-Dichloropropene	50.0	56.9		ug/L		114	65 - 135
1,2,3-Trichlorobenzene	50.0	46.2		ug/L		92	60 - 135
1,2,3-Trichloropropane	50.0	53.2		ug/L		106	65 - 135
1,2,4-Trichlorobenzene	50.0	46.8		ug/L		94	58 - 135
1,2,4-Trimethylbenzene	50.0	53.8		ug/L		108	65 - 135
1,2-Dichlorobenzene	50.0	50.8		ug/L		102	65 - 135
1,2-Dichloroethane	50.0	55.7		ug/L		111	65 - 135
1,2-Dichloropropane	50.0	57.2		ug/L		114	64 - 135
1,3,5-Trimethylbenzene	50.0	53.5		ug/L		107	65 - 135
1,3-Dichlorobenzene	50.0	52.3		ug/L		105	65 - 135
1,3-Dichloropropane	50.0	55.3		ug/L		111	64 - 135
1,4-Dichlorobenzene	50.0	51.2		ug/L		102	65 - 135
2,2-Dichloropropane	50.0	57.0		ug/L		114	65 - 135
2-Butanone (MEK)	200	237		ug/L		118	44 - 177
2-Chlorotoluene	50.0	51.8		ug/L		104	65 - 135
2-Hexanone	200	226		ug/L		113	57 - 139
4-Chlorotoluene	50.0	53.5		ug/L		107	65 - 135
4-Isopropyltoluene	50.0	55.5		ug/L		111	65 - 135
4-Methyl-2-pentanone	200	227		ug/L		113	60 - 150
Acetone	200	221		ug/L		110	39 - 156
Benzene	50.0	52.9		ug/L		106	65 - 135
Bromobenzene	50.0	52.1		ug/L		104	65 - 135
Bromochloromethane	50.0	54.3		ug/L		109	65 - 135
Bromodichloromethane	50.0	53.7		ug/L		107	65 - 135
Bromoform	50.0	54.9		ug/L		110	62 - 135
Bromomethane	50.0	43.5		ug/L		87	45 - 135
Carbon disulfide	50.0	50.4		ug/L		101	55 - 143
Carbon tetrachloride	50.0	54.9		ug/L		110	65 - 135
Chlorobenzene	50.0	52.2		ug/L		104	65 - 135
Chloroethane	50.0	46.8		ug/L		94	46 - 136
Chloroform	50.0	53.0		ug/L		106	65 - 135
Chloromethane	50.0	50.2		ug/L		100	34 - 145
cis-1,2-Dichloroethene	50.0	51.6		ug/L		103	65 - 135
cis-1,3-Dichloropropene	50.0	51.6		ug/L		103	65 - 135
Dibromochloromethane	50.0	53.6		ug/L		107	65 - 135
Dibromomethane	50.0	53.8		ug/L		108	65 - 135
Dichlorodifluoromethane	50.0	55.4		ug/L		111	43 - 142
Ethylbenzene	50.0	52.6		ug/L		105	65 - 135
Hexachlorobutadiene	50.0	51.0		ug/L		102	65 - 135
Isopropylbenzene	50.0	53.6		ug/L		107	65 - 135
Methylene Chloride	50.0	50.5		ug/L		101	54 - 141
Naphthalene	50.0	46.2		ug/L		92	42 - 135

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-559320/4
Matrix: Water
Analysis Batch: 559320

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
n-Butylbenzene			50.0	58.1		ug/L		116	64 - 135		
N-Propylbenzene			50.0	53.9		ug/L		108	65 - 135		
sec-Butylbenzene			50.0	54.7		ug/L		109	64 - 135		
Styrene			50.0	55.2		ug/L		110	65 - 135		
tert-Butylbenzene			50.0	52.3		ug/L		105	65 - 135		
Tetrachloroethene			50.0	54.1		ug/L		108	65 - 135		
Toluene			50.0	53.2		ug/L		106	65 - 135		
trans-1,2-Dichloroethene			50.0	51.7		ug/L		103	65 - 135		
trans-1,3-Dichloropropene			50.0	52.9		ug/L		106	65 - 135		
Trichloroethene			50.0	51.2		ug/L		102	65 - 135		
Trichlorofluoromethane			50.0	57.9		ug/L		116	53 - 137		
Vinyl chloride			50.0	51.9		ug/L		104	40 - 137		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 127*
4-Bromofluorobenzene (Surr)	*99*		*78 - 120*
Dibromofluoromethane (Surr)	*99*		*77 - 120*
Toluene-d8 (Surr)	*100*		*80 - 125*

Lab Sample ID: LCSD 280-559320/5
Matrix: Water
Analysis Batch: 559320

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane			50.0	51.9		ug/L		104	65 - 135	1	20
1,1,1-Trichloroethane			50.0	52.8		ug/L		106	65 - 135	1	20
1,1,2,2-Tetrachloroethane			50.0	56.9		ug/L		114	58 - 135	1	20
1,1,2-Trichloroethane			50.0	54.5		ug/L		109	64 - 135	1	27
1,1-Dichloroethane			50.0	55.0		ug/L		110	65 - 135	0	21
1,1-Dichloroethene			50.0	53.0		ug/L		106	65 - 136	0	20
1,1-Dichloropropene			50.0	56.4		ug/L		113	65 - 135	1	21
1,2,3-Trichlorobenzene			50.0	46.8		ug/L		94	60 - 135	1	36
1,2,3-Trichloropropane			50.0	54.8		ug/L		110	65 - 135	3	23
1,2,4-Trichlorobenzene			50.0	47.4		ug/L		95	58 - 135	1	25
1,2,4-Trimethylbenzene			50.0	53.2		ug/L		106	65 - 135	1	20
1,2-Dichlorobenzene			50.0	50.4		ug/L		101	65 - 135	1	20
1,2-Dichloroethane			50.0	56.0		ug/L		112	65 - 135	1	20
1,2-Dichloropropane			50.0	58.1		ug/L		116	64 - 135	2	20
1,3,5-Trimethylbenzene			50.0	52.9		ug/L		106	65 - 135	1	20
1,3-Dichlorobenzene			50.0	52.0		ug/L		104	65 - 135	1	20
1,3-Dichloropropane			50.0	54.9		ug/L		110	64 - 135	1	20
1,4-Dichlorobenzene			50.0	50.8		ug/L		102	65 - 135	1	23
2,2-Dichloropropane			50.0	56.4		ug/L		113	65 - 135	1	20
2-Butanone (MEK)			200	240		ug/L		120	44 - 177	1	32
2-Chlorotoluene			50.0	51.3		ug/L		103	65 - 135	1	20
2-Hexanone			200	230		ug/L		115	57 - 139	2	25
4-Chlorotoluene			50.0	52.3		ug/L		105	65 - 135	2	20
4-Isopropyltoluene			50.0	54.2		ug/L		108	65 - 135	2	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 280-559320/5
Matrix: Water
Analysis Batch: 559320

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Methyl-2-pentanone			200	232		ug/L		116	60 - 150	2	22
Acetone			200	217		ug/L		109	39 - 156	2	23
Benzene			50.0	53.5		ug/L		107	65 - 135	1	20
Bromobenzene			50.0	51.3		ug/L		103	65 - 135	1	26
Bromochloromethane			50.0	53.7		ug/L		107	65 - 135	1	29
Bromodichloromethane			50.0	54.5		ug/L		109	65 - 135	2	20
Bromoform			50.0	53.2		ug/L		106	62 - 135	3	27
Bromomethane			50.0	43.5		ug/L		87	45 - 135	0	33
Carbon disulfide			50.0	50.1		ug/L		100	55 - 143	1	20
Carbon tetrachloride			50.0	54.1		ug/L		108	65 - 135	1	21
Chlorobenzene			50.0	52.3		ug/L		105	65 - 135	0	20
Chloroethane			50.0	46.5		ug/L		93	46 - 136	1	25
Chloroform			50.0	53.3		ug/L		107	65 - 135	1	20
Chloromethane			50.0	49.4		ug/L		99	34 - 145	2	24
cis-1,2-Dichloroethene			50.0	52.1		ug/L		104	65 - 135	1	20
cis-1,3-Dichloropropene			50.0	52.3		ug/L		105	65 - 135	1	26
Dibromochloromethane			50.0	53.2		ug/L		106	65 - 135	1	20
Dibromomethane			50.0	53.8		ug/L		108	65 - 135	0	26
Dichlorodifluoromethane			50.0	50.5		ug/L		101	43 - 142	9	30
Ethylbenzene			50.0	53.3		ug/L		107	65 - 135	1	20
Hexachlorobutadiene			50.0	49.3		ug/L		99	65 - 135	3	25
Isopropylbenzene			50.0	52.3		ug/L		105	65 - 135	3	20
Methylene Chloride			50.0	51.1		ug/L		102	54 - 141	1	26
Naphthalene			50.0	48.0		ug/L		96	42 - 135	4	23
n-Butylbenzene			50.0	57.1		ug/L		114	64 - 135	2	21
N-Propylbenzene			50.0	53.1		ug/L		106	65 - 135	2	20
sec-Butylbenzene			50.0	53.7		ug/L		107	64 - 135	2	21
Styrene			50.0	55.5		ug/L		111	65 - 135	0	26
tert-Butylbenzene			50.0	51.5		ug/L		103	65 - 135	1	21
Tetrachloroethene			50.0	52.9		ug/L		106	65 - 135	2	20
Toluene			50.0	52.8		ug/L		106	65 - 135	1	20
trans-1,2-Dichloroethene			50.0	51.5		ug/L		103	65 - 135	0	24
trans-1,3-Dichloropropene			50.0	54.3		ug/L		109	65 - 135	3	26
Trichloroethene			50.0	50.2		ug/L		100	65 - 135	2	20
Trichlorofluoromethane			50.0	53.8		ug/L		108	53 - 137	7	27
Vinyl chloride			50.0	48.7		ug/L		97	40 - 137	7	24

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 127*
4-Bromofluorobenzene (Surr)	*98*		*78 - 120*
Dibromofluoromethane (Surr)	*99*		*77 - 120*
Toluene-d8 (Surr)	*99*		*80 - 125*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Lab Sample ID: MB 280-559015/1-A
Matrix: Water
Analysis Batch: 559026

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 559015

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		11/29/21 14:19	11/29/21 21:25	1
1,2-Dibromoethane	ND		0.050		ug/L		11/29/21 14:19	11/29/21 21:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*109*		*70 - 130*	*11/29/21 14:19*	*11/29/21 21:25*	*1*

Lab Sample ID: LCS 280-559015/2-A
Matrix: Water
Analysis Batch: 559026

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 559015

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2-Dibromo-3-Chloropropane			0.250	0.228		ug/L		91	60 - 140		
1,2-Dibromoethane			0.250	0.224		ug/L		90	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dibromopropane	*108*		*70 - 130*

Lab Sample ID: LCSD 280-559015/3-A
Matrix: Water
Analysis Batch: 559026

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 559015

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.250	0.236		ug/L		94	60 - 140	3	10
1,2-Dibromoethane			0.250	0.233		ug/L		93	60 - 140	4	10

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dibromopropane	*107*		*70 - 130*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 280-558903/1-A
Matrix: Water
Analysis Batch: 559066

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 558903

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		500		ug/L		11/29/21 08:00	11/30/21 02:23	1
Iron	ND		30		ug/L		11/29/21 08:00	11/30/21 02:23	1
Magnesium	ND		200		ug/L		11/29/21 08:00	11/30/21 02:23	1
Manganese	ND		3.0		ug/L		11/29/21 08:00	11/30/21 02:23	1
Potassium	ND		500		ug/L		11/29/21 08:00	11/30/21 02:23	1
Sodium	ND		1000		ug/L		11/29/21 08:00	11/30/21 02:23	1

Lab Sample ID: LCS 280-558903/2-A
Matrix: Water
Analysis Batch: 559066

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 558903

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Calcium			50000	51000		ug/L		102	90 - 111		

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 280-558903/2-A
Matrix: Water
Analysis Batch: 559066

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 558903

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	10000	10300		ug/L		103	89 - 115
Magnesium	50000	50500		ug/L		101	90 - 113
Manganese	1000	1040		ug/L		104	90 - 110
Potassium	50000	51500		ug/L		103	89 - 114
Sodium	50000	51300		ug/L		103	90 - 115

Lab Sample ID: 280-155957-2 MS
Matrix: Water
Analysis Batch: 559066

Client Sample ID: MW-14A
Prep Type: Dissolved
Prep Batch: 558903

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	29000		50000	78700		ug/L		99	48 - 153
Iron	ND		10000	10200		ug/L		102	52 - 155
Magnesium	11000		50000	61400		ug/L		101	62 - 146
Manganese	ND		1000	1030		ug/L		103	79 - 121
Potassium	ND		50000	51300		ug/L		102	76 - 132
Sodium	10000		50000	64600		ug/L		108	70 - 203

Lab Sample ID: 280-155957-2 MSD
Matrix: Water
Analysis Batch: 559066

Client Sample ID: MW-14A
Prep Type: Dissolved
Prep Batch: 558903

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium	29000		50000	81000		ug/L		104	48 - 153	3	20
Iron	ND		10000	10400		ug/L		104	52 - 155	2	20
Magnesium	11000		50000	62800		ug/L		103	62 - 146	2	20
Manganese	ND		1000	1030		ug/L		103	79 - 121	1	20
Potassium	ND		50000	51200		ug/L		102	76 - 132	0	20
Sodium	10000		50000	63600		ug/L		106	70 - 203	2	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 480-606957/4
Matrix: Water
Analysis Batch: 606957

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			11/29/21 21:01	1
Sulfate	ND		1.0		mg/L			11/29/21 21:01	1

Lab Sample ID: LCS 480-606957/3
Matrix: Water
Analysis Batch: 606957

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	50.8		mg/L		102	90 - 110
Sulfate	50.0	50.6		mg/L		101	90 - 110

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 280-155957-2 MS
Matrix: Water
Analysis Batch: 606957

Client Sample ID: MW-14A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	6.9		50.0	57.1		mg/L		100	81 - 120
Sulfate	16		50.0	65.0		mg/L		99	80 - 120

Lab Sample ID: 280-155957-2 MSD
Matrix: Water
Analysis Batch: 606957

Client Sample ID: MW-14A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	6.9		50.0	57.8		mg/L		102	81 - 120	1	15
Sulfate	16		50.0	65.7		mg/L		100	80 - 120	1	15

Lab Sample ID: 280-155957-11 MS
Matrix: Water
Analysis Batch: 606957

Client Sample ID: MW-21A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	5.2		50.0	56.3		mg/L		102	81 - 120
Sulfate	12		50.0	62.4		mg/L		101	80 - 120

Lab Sample ID: MB 480-606967/4
Matrix: Water
Analysis Batch: 606967

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			11/30/21 07:10	1
Sulfate	ND		1.0		mg/L			11/30/21 07:10	1

Lab Sample ID: LCS 480-606967/3
Matrix: Water
Analysis Batch: 606967

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	49.3		mg/L		99	90 - 110
Sulfate	50.0	49.1		mg/L		98	90 - 110

Lab Sample ID: 280-155958-E-2 MS
Matrix: Water
Analysis Batch: 606967

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	ND		50.0	48.8		mg/L		98	81 - 120
Sulfate	ND		50.0	48.4		mg/L		97	80 - 120

Lab Sample ID: 280-155958-E-2 MSD
Matrix: Water
Analysis Batch: 606967

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	ND		50.0	49.1		mg/L		98	81 - 120	1	15
Sulfate	ND		50.0	48.9		mg/L		98	80 - 120	1	15

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-559533/20
Matrix: Water
Analysis Batch: 559533

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.030		mg/L			12/03/21 10:37	1

Lab Sample ID: LCS 280-559533/18
Matrix: Water
Analysis Batch: 559533

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia as N			2.50	2.56		mg/L		102	90 - 110		

Lab Sample ID: LCSD 280-559533/19
Matrix: Water
Analysis Batch: 559533

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N			2.50	2.57		mg/L		103	90 - 110	0	10

Lab Sample ID: 280-155801-B-7 MS
Matrix: Water
Analysis Batch: 559533

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia as N	0.037		1.00	1.08		mg/L		104	90 - 110		

Lab Sample ID: 280-155801-B-7 MSD
Matrix: Water
Analysis Batch: 559533

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N	0.037		1.00	1.10		mg/L		106	90 - 110	1	10

Lab Sample ID: MB 280-559569/20
Matrix: Water
Analysis Batch: 559569

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.030		mg/L			12/03/21 13:21	1

Lab Sample ID: LCS 280-559569/18
Matrix: Water
Analysis Batch: 559569

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia as N			2.50	2.44		mg/L		98	90 - 110		

Lab Sample ID: LCSD 280-559569/19
Matrix: Water
Analysis Batch: 559569

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N			2.50	2.46		mg/L		98	90 - 110	1	10

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: 280-155883-B-1 MS
Matrix: Water
Analysis Batch: 559569

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia as N	0.069		1.00	1.00		mg/L		94	90 - 110		

Lab Sample ID: 280-155883-B-1 MSD
Matrix: Water
Analysis Batch: 559569

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N	0.069		1.00	1.04		mg/L		97	90 - 110	4	10

Lab Sample ID: MB 280-559615/20
Matrix: Water
Analysis Batch: 559615

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.030		mg/L			12/04/21 10:37	1

Lab Sample ID: LCS 280-559615/18
Matrix: Water
Analysis Batch: 559615

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia as N			2.50	2.54		mg/L		101	90 - 110		

Lab Sample ID: LCSD 280-559615/19
Matrix: Water
Analysis Batch: 559615

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N			2.50	2.53		mg/L		101	90 - 110	0	10

Lab Sample ID: 280-155957-2 MS
Matrix: Water
Analysis Batch: 559615

Client Sample ID: MW-14A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia as N	ND		1.00	1.06		mg/L		106	90 - 110		

Lab Sample ID: 280-155957-2 MSD
Matrix: Water
Analysis Batch: 559615

Client Sample ID: MW-14A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N	ND		1.00	1.08		mg/L		108	90 - 110	2	10

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-559905/22
Matrix: Water
Analysis Batch: 559905

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate/Nitrite	ND		0.050		mg/L			12/07/21 16:51	1

Lab Sample ID: MB 280-559905/60
Matrix: Water
Analysis Batch: 559905

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate/Nitrite	ND		0.050		mg/L			12/07/21 18:07	1

Lab Sample ID: LCS 280-559905/21
Matrix: Water
Analysis Batch: 559905

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate/Nitrite	5.00	4.87		mg/L		97	90 - 110

Lab Sample ID: LCS 280-559905/59
Matrix: Water
Analysis Batch: 559905

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate/Nitrite	5.00	5.23		mg/L		105	90 - 110

Lab Sample ID: 280-155957-2 MS
Matrix: Water
Analysis Batch: 559905

Client Sample ID: MW-14A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate/Nitrite	2.5		4.00	6.17		mg/L		92	90 - 110

Lab Sample ID: 280-155957-2 MSD
Matrix: Water
Analysis Batch: 559905

Client Sample ID: MW-14A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate/Nitrite	2.5		4.00	6.16		mg/L		92	90 - 110	0	10

Lab Sample ID: 280-155957-13 MS
Matrix: Water
Analysis Batch: 559905

Client Sample ID: MW-21B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate/Nitrite	ND		4.00	4.06		mg/L		102	90 - 110

Lab Sample ID: 280-155957-13 MSD
Matrix: Water
Analysis Batch: 559905

Client Sample ID: MW-21B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate/Nitrite	ND		4.00	4.18		mg/L		104	90 - 110	3	10

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-560062/22
Matrix: Water
Analysis Batch: 560062

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate/Nitrite	ND		0.050		mg/L			12/08/21 17:22	1

Lab Sample ID: LCS 280-560062/21
Matrix: Water
Analysis Batch: 560062

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate/Nitrite			5.00	4.84		mg/L		97	90 - 110		

Lab Sample ID: 280-156232-B-2 MS
Matrix: Water
Analysis Batch: 560062

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate/Nitrite	570		400	946		mg/L		95	90 - 110		

Lab Sample ID: 280-156232-B-2 MSD
Matrix: Water
Analysis Batch: 560062

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate/Nitrite	570		400	931		mg/L		91	90 - 110	2	10

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 280-559987/37
Matrix: Water
Analysis Batch: 559987

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Average	ND		1.0		mg/L			12/08/21 02:03	1

Lab Sample ID: MB 280-559987/4
Matrix: Water
Analysis Batch: 559987

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Average	ND		1.0		mg/L			12/07/21 17:17	1

Lab Sample ID: LCS 280-559987/36
Matrix: Water
Analysis Batch: 559987

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon - Average			25.0	25.2		mg/L		101	88 - 112		

Method: 9060 - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: 280-155957-6 MS
Matrix: Water
Analysis Batch: 559987

Client Sample ID: MW-15B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Average	1.4		25.0	27.1		mg/L		102	88 - 112

Lab Sample ID: 280-155957-6 MSD
Matrix: Water
Analysis Batch: 559987

Client Sample ID: MW-15B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Average	1.4		25.0	27.2		mg/L		103	88 - 112	1	15

Lab Sample ID: MB 280-560085/4
Matrix: Water
Analysis Batch: 560085

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Average	ND		1.0		mg/L			12/08/21 13:15	1

Lab Sample ID: LCS 280-560085/3
Matrix: Water
Analysis Batch: 560085

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Average	25.0	24.8		mg/L		99	88 - 112

Lab Sample ID: 280-155750-A-3 MS
Matrix: Water
Analysis Batch: 560085

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Average	18		25.0	43.3		mg/L		99	88 - 112

Lab Sample ID: 280-155750-A-3 MSD
Matrix: Water
Analysis Batch: 560085

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Average	18		25.0	43.4		mg/L		100	88 - 112	0	15

Lab Sample ID: MB 280-560125/4
Matrix: Water
Analysis Batch: 560125

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Average	ND		1.0		mg/L			12/08/21 17:31	1

Lab Sample ID: LCS 280-560125/3
Matrix: Water
Analysis Batch: 560125

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Average	25.0	24.1		mg/L		96	88 - 112

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: 280-156049-A-2 MS
Matrix: Water
Analysis Batch: 560125

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon - Average	2.1		25.0	26.6		mg/L		98	88 - 112		

Lab Sample ID: 280-156049-A-2 MSD
Matrix: Water
Analysis Batch: 560125

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Average	2.1		25.0	26.6		mg/L		98	88 - 112	0	15

Lab Sample ID: MB 280-560298/4
Matrix: Water
Analysis Batch: 560298

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Average	ND		1.0		mg/L			12/09/21 17:30	1

Lab Sample ID: LCS 280-560298/3
Matrix: Water
Analysis Batch: 560298

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon - Average			25.0	25.0		mg/L		100	88 - 112		

Lab Sample ID: 280-156013-D-2 MS
Matrix: Water
Analysis Batch: 560298

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon - Average	3.1		25.0	27.5		mg/L		98	88 - 112		

Lab Sample ID: 280-156013-D-2 MSD
Matrix: Water
Analysis Batch: 560298

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Average	3.1		25.0	27.7		mg/L		99	88 - 112	1	15

Method: SM 1030E (meq) - Cation Anion Balance

Lab Sample ID: MB 280-560188/1
Matrix: Water
Analysis Batch: 560188

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	0.000				meq/L			12/09/21 14:58	1
Magnesium	0.000				meq/L			12/09/21 14:58	1
Potassium	0.000				meq/L			12/09/21 14:58	1
Sodium	0.000				meq/L			12/09/21 14:58	1
Ammonia as N	0.000				meq/L			12/09/21 14:58	1
Chloride	0.000				meq/L			12/09/21 14:58	1

Method: SM 1030E (meq) - Cation Anion Balance (Continued)

Lab Sample ID: MB 280-560188/1
Matrix: Water
Analysis Batch: 560188

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	0.000				meq/L			12/09/21 14:58	1
Alkalinity	0.000				mg/L			12/09/21 14:58	1
Bicarbonate Alkalinity	0.000				meq/L			12/09/21 14:58	1
Nitrate/Nitrite	0.000				meq/L			12/09/21 14:58	1
Iron	0.000				meq/L			12/09/21 14:58	1

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-559218/33
Matrix: Water
Analysis Batch: 559218

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity	ND		10		mg/L			11/30/21 20:29	1

Lab Sample ID: MB 280-559365/31
Matrix: Water
Analysis Batch: 559365

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity	ND		10		mg/L			12/01/21 15:44	1

Lab Sample ID: MB 280-559365/57
Matrix: Water
Analysis Batch: 559365

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity	ND		10		mg/L			12/01/21 18:50	1

Lab Sample ID: 280-155806-A-6 DU
Matrix: Water
Analysis Batch: 559365

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Bicarbonate Alkalinity	520			521		mg/L				0.9	20

Lab Sample ID: MB 280-559366/31
Matrix: Water
Analysis Batch: 559366

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity	ND		10		mg/L			12/01/21 17:56	1

Lab Sample ID: MB 280-559366/5
Matrix: Water
Analysis Batch: 559366

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity	ND		10		mg/L			12/01/21 15:17	1

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: 280-155957-4 DU
Matrix: Water
Analysis Batch: 559366

Client Sample ID: DUP3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Bicarbonate Alkalinity	210			221		mg/L				3	20

Lab Sample ID: MB 280-559468/31
Matrix: Water
Analysis Batch: 559468

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity	ND		10		mg/L			12/02/21 17:23	1

Lab Sample ID: 280-155961-A-7 DU
Matrix: Water
Analysis Batch: 559468

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Bicarbonate Alkalinity	320			317		mg/L				0	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 280-558321/1
Matrix: Water
Analysis Batch: 558321

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10		mg/L			11/22/21 08:42	1

Lab Sample ID: LCS 280-558321/2
Matrix: Water
Analysis Batch: 558321

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			501	501		mg/L		100	88 - 114		

Lab Sample ID: 280-155717-A-4 DU
Matrix: Water
Analysis Batch: 558321

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	ND			ND		mg/L				NC	10

Lab Sample ID: MB 280-558481/1
Matrix: Water
Analysis Batch: 558481

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10		mg/L			11/23/21 08:49	1

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 280-558481/2
Matrix: Water
Analysis Batch: 558481

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			501	496		mg/L		99	88 - 114		

Lab Sample ID: 280-155957-4 DU
Matrix: Water
Analysis Batch: 558481

Client Sample ID: DUP3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	270			283		mg/L				5	10

Lab Sample ID: MB 280-558625/1
Matrix: Water
Analysis Batch: 558625

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10		mg/L			11/24/21 08:11	1

Lab Sample ID: LCS 280-558625/2
Matrix: Water
Analysis Batch: 558625

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			501	572		mg/L		114	88 - 114		

Lab Sample ID: LCSD 280-558625/3
Matrix: Water
Analysis Batch: 558625

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Dissolved Solids			501	517		mg/L		103	88 - 114	10	20

Lab Sample ID: 280-155961-A-5 DU
Matrix: Water
Analysis Batch: 558625

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	430			409		mg/L				5	10

Lab Sample ID: MB 280-558963/1
Matrix: Water
Analysis Batch: 558963

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10		mg/L			11/29/21 10:22	1

Lab Sample ID: LCS 280-558963/2
Matrix: Water
Analysis Batch: 558963

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			503	502		mg/L		100	88 - 114		

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 280-559216/1
Matrix: Water
Analysis Batch: 559216

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10		mg/L			12/01/21 07:31	1

Lab Sample ID: LCS 280-559216/2
Matrix: Water
Analysis Batch: 559216

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			503	511		mg/L		102	88 - 114		

Lab Sample ID: LCSD 280-559216/3
Matrix: Water
Analysis Batch: 559216

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Dissolved Solids			503	501		mg/L		100	88 - 114	2	20

Lab Sample ID: 280-155883-A-4 DU
Matrix: Water
Analysis Batch: 559216

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	ND			16.0		mg/L				NC	10

GC/MS VOA

Analysis Batch: 558921

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155957-1	TB1	Total/NA	Water	8260B	
280-155957-2	MW-14A	Total/NA	Water	8260B	
280-155957-3	MW-14B	Total/NA	Water	8260B	
280-155957-4	DUP3	Total/NA	Water	8260B	
280-155957-5	MW-15A	Total/NA	Water	8260B	
280-155957-6	MW-15B	Total/NA	Water	8260B	
280-155957-7	FB2	Total/NA	Water	8260B	
280-155957-8	MW-16A	Total/NA	Water	8260B	
280-155957-9	MW-16B	Total/NA	Water	8260B	
280-155957-10	DUP2	Total/NA	Water	8260B	
280-155957-11	MW-21A	Total/NA	Water	8260B	
280-155957-13	MW-21B	Total/NA	Water	8260B	
MB 280-558921/9	Method Blank	Total/NA	Water	8260B	
LCS 280-558921/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-558921/5	Lab Control Sample Dup	Total/NA	Water	8260B	
280-155800-B-3 MS	Matrix Spike	Total/NA	Water	8260B	
280-155800-B-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Analysis Batch: 559320

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155957-12	FB3	Total/NA	Water	8260B	
MB 280-559320/9	Method Blank	Total/NA	Water	8260B	
LCS 280-559320/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-559320/5	Lab Control Sample Dup	Total/NA	Water	8260B	

GC Semi VOA

Prep Batch: 559015

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155957-1	TB1	Total/NA	Water	8011	
280-155957-2	MW-14A	Total/NA	Water	8011	
280-155957-3	MW-14B	Total/NA	Water	8011	
280-155957-4	DUP3	Total/NA	Water	8011	
280-155957-5	MW-15A	Total/NA	Water	8011	
280-155957-6	MW-15B	Total/NA	Water	8011	
280-155957-7	FB2	Total/NA	Water	8011	
280-155957-8	MW-16A	Total/NA	Water	8011	
280-155957-9	MW-16B	Total/NA	Water	8011	
280-155957-10	DUP2	Total/NA	Water	8011	
280-155957-11	MW-21A	Total/NA	Water	8011	
280-155957-12	FB3	Total/NA	Water	8011	
280-155957-13	MW-21B	Total/NA	Water	8011	
MB 280-559015/1-A	Method Blank	Total/NA	Water	8011	
LCS 280-559015/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 280-559015/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 559026

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155957-1	TB1	Total/NA	Water	8011	559015
280-155957-2	MW-14A	Total/NA	Water	8011	559015
280-155957-3	MW-14B	Total/NA	Water	8011	559015

GC Semi VOA (Continued)

Analysis Batch: 559026 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155957-4	DUP3	Total/NA	Water	8011	559015
280-155957-5	MW-15A	Total/NA	Water	8011	559015
280-155957-6	MW-15B	Total/NA	Water	8011	559015
280-155957-7	FB2	Total/NA	Water	8011	559015
280-155957-8	MW-16A	Total/NA	Water	8011	559015
280-155957-9	MW-16B	Total/NA	Water	8011	559015
280-155957-10	DUP2	Total/NA	Water	8011	559015
280-155957-11	MW-21A	Total/NA	Water	8011	559015
280-155957-12	FB3	Total/NA	Water	8011	559015
280-155957-13	MW-21B	Total/NA	Water	8011	559015
MB 280-559015/1-A	Method Blank	Total/NA	Water	8011	559015
LCS 280-559015/2-A	Lab Control Sample	Total/NA	Water	8011	559015
LCSD 280-559015/3-A	Lab Control Sample Dup	Total/NA	Water	8011	559015

Metals

Prep Batch: 558903

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155957-2	MW-14A	Dissolved	Water	3005A	
280-155957-3	MW-14B	Dissolved	Water	3005A	
280-155957-4	DUP3	Dissolved	Water	3005A	
280-155957-5	MW-15A	Dissolved	Water	3005A	
280-155957-6	MW-15B	Dissolved	Water	3005A	
280-155957-7	FB2	Dissolved	Water	3005A	
280-155957-8	MW-16A	Dissolved	Water	3005A	
280-155957-9	MW-16B	Dissolved	Water	3005A	
280-155957-10	DUP2	Dissolved	Water	3005A	
280-155957-11	MW-21A	Dissolved	Water	3005A	
280-155957-12	FB3	Dissolved	Water	3005A	
280-155957-13	MW-21B	Dissolved	Water	3005A	
MB 280-558903/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-558903/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-155957-2 MS	MW-14A	Dissolved	Water	3005A	
280-155957-2 MSD	MW-14A	Dissolved	Water	3005A	

Analysis Batch: 559066

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155957-2	MW-14A	Dissolved	Water	6010B	558903
280-155957-3	MW-14B	Dissolved	Water	6010B	558903
280-155957-4	DUP3	Dissolved	Water	6010B	558903
280-155957-5	MW-15A	Dissolved	Water	6010B	558903
280-155957-6	MW-15B	Dissolved	Water	6010B	558903
280-155957-7	FB2	Dissolved	Water	6010B	558903
280-155957-8	MW-16A	Dissolved	Water	6010B	558903
280-155957-9	MW-16B	Dissolved	Water	6010B	558903
280-155957-10	DUP2	Dissolved	Water	6010B	558903
280-155957-11	MW-21A	Dissolved	Water	6010B	558903
280-155957-12	FB3	Dissolved	Water	6010B	558903
280-155957-13	MW-21B	Dissolved	Water	6010B	558903
MB 280-558903/1-A	Method Blank	Total Recoverable	Water	6010B	558903
LCS 280-558903/2-A	Lab Control Sample	Total Recoverable	Water	6010B	558903

Metals (Continued)

Analysis Batch: 559066 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155957-2 MS	MW-14A	Dissolved	Water	6010B	558903
280-155957-2 MSD	MW-14A	Dissolved	Water	6010B	558903

General Chemistry

Analysis Batch: 558321

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155957-7	FB2	Total/NA	Water	SM 2540C	
280-155957-8	MW-16A	Total/NA	Water	SM 2540C	
280-155957-9	MW-16B	Total/NA	Water	SM 2540C	
280-155957-10	DUP2	Total/NA	Water	SM 2540C	
280-155957-13	MW-21B	Total/NA	Water	SM 2540C	
MB 280-558321/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-558321/2	Lab Control Sample	Total/NA	Water	SM 2540C	
280-155717-A-4 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 558481

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155957-2	MW-14A	Total/NA	Water	SM 2540C	
280-155957-3	MW-14B	Total/NA	Water	SM 2540C	
280-155957-4	DUP3	Total/NA	Water	SM 2540C	
MB 280-558481/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-558481/2	Lab Control Sample	Total/NA	Water	SM 2540C	
280-155957-4 DU	DUP3	Total/NA	Water	SM 2540C	

Analysis Batch: 558625

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155957-11	MW-21A	Total/NA	Water	SM 2540C	
MB 280-558625/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-558625/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 280-558625/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
280-155961-A-5 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 558963

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155957-5	MW-15A	Total/NA	Water	SM 2540C	
280-155957-6	MW-15B	Total/NA	Water	SM 2540C	
MB 280-558963/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-558963/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 559216

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155957-12	FB3	Total/NA	Water	SM 2540C	
MB 280-559216/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-559216/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 280-559216/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
280-155883-A-4 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 559218

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155957-13	MW-21B	Total/NA	Water	SM 2320B	

General Chemistry (Continued)

Analysis Batch: 559218 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-559218/33	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-559218/31	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 280-559218/32	Lab Control Sample Dup	Total/NA	Water	SM 2320B	

Analysis Batch: 559365

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155957-5	MW-15A	Total/NA	Water	SM 2320B	
280-155957-6	MW-15B	Total/NA	Water	SM 2320B	
280-155957-7	FB2	Total/NA	Water	SM 2320B	
280-155957-8	MW-16A	Total/NA	Water	SM 2320B	
280-155957-10	DUP2	Total/NA	Water	SM 2320B	
MB 280-559365/31	Method Blank	Total/NA	Water	SM 2320B	
MB 280-559365/57	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-559365/56	Lab Control Sample	Total/NA	Water	SM 2320B	
280-155806-A-6 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 559366

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155957-2	MW-14A	Total/NA	Water	SM 2320B	
280-155957-3	MW-14B	Total/NA	Water	SM 2320B	
280-155957-4	DUP3	Total/NA	Water	SM 2320B	
280-155957-9	MW-16B	Total/NA	Water	SM 2320B	
280-155957-11	MW-21A	Total/NA	Water	SM 2320B	
MB 280-559366/31	Method Blank	Total/NA	Water	SM 2320B	
MB 280-559366/5	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-559366/30	Lab Control Sample	Total/NA	Water	SM 2320B	
LCS 280-559366/4	Lab Control Sample	Total/NA	Water	SM 2320B	
280-155957-4 DU	DUP3	Total/NA	Water	SM 2320B	

Analysis Batch: 559468

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155957-12	FB3	Total/NA	Water	SM 2320B	
MB 280-559468/31	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-559468/30	Lab Control Sample	Total/NA	Water	SM 2320B	
280-155961-A-7 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 559533

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155957-7	FB2	Total/NA	Water	350.1	
280-155957-9	MW-16B	Total/NA	Water	350.1	
MB 280-559533/20	Method Blank	Total/NA	Water	350.1	
LCS 280-559533/18	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-559533/19	Lab Control Sample Dup	Total/NA	Water	350.1	
280-155801-B-7 MS	Matrix Spike	Total/NA	Water	350.1	
280-155801-B-7 MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	

Analysis Batch: 559569

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155957-6	MW-15B	Total/NA	Water	350.1	
280-155957-8	MW-16A	Total/NA	Water	350.1	
280-155957-10	DUP2	Total/NA	Water	350.1	

General Chemistry (Continued)

Analysis Batch: 559569 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155957-11	MW-21A	Total/NA	Water	350.1	
280-155957-12	FB3	Total/NA	Water	350.1	
280-155957-13	MW-21B	Total/NA	Water	350.1	
MB 280-559569/20	Method Blank	Total/NA	Water	350.1	
LCS 280-559569/18	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-559569/19	Lab Control Sample Dup	Total/NA	Water	350.1	
280-155883-B-1 MS	Matrix Spike	Total/NA	Water	350.1	
280-155883-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	

Analysis Batch: 559615

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155957-2	MW-14A	Total/NA	Water	350.1	
280-155957-3	MW-14B	Total/NA	Water	350.1	
280-155957-4	DUP3	Total/NA	Water	350.1	
280-155957-5	MW-15A	Total/NA	Water	350.1	
MB 280-559615/20	Method Blank	Total/NA	Water	350.1	
LCS 280-559615/18	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-559615/19	Lab Control Sample Dup	Total/NA	Water	350.1	
280-155957-2 MS	MW-14A	Total/NA	Water	350.1	
280-155957-2 MSD	MW-14A	Total/NA	Water	350.1	

Analysis Batch: 559905

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155957-3	MW-14B	Total/NA	Water	353.2	
280-155957-4	DUP3	Total/NA	Water	353.2	
280-155957-5	MW-15A	Total/NA	Water	353.2	
280-155957-6	MW-15B	Total/NA	Water	353.2	
280-155957-7	FB2	Total/NA	Water	353.2	
280-155957-8	MW-16A	Total/NA	Water	353.2	
280-155957-9	MW-16B	Total/NA	Water	353.2	
280-155957-10	DUP2	Total/NA	Water	353.2	
280-155957-11	MW-21A	Total/NA	Water	353.2	
280-155957-12	FB3	Total/NA	Water	353.2	
280-155957-13	MW-21B	Total/NA	Water	353.2	
MB 280-559905/22	Method Blank	Total/NA	Water	353.2	
MB 280-559905/60	Method Blank	Total/NA	Water	353.2	
LCS 280-559905/21	Lab Control Sample	Total/NA	Water	353.2	
LCS 280-559905/59	Lab Control Sample	Total/NA	Water	353.2	
280-155957-2 MS	MW-14A	Total/NA	Water	353.2	
280-155957-2 MSD	MW-14A	Total/NA	Water	353.2	
280-155957-13 MS	MW-21B	Total/NA	Water	353.2	
280-155957-13 MSD	MW-21B	Total/NA	Water	353.2	

Analysis Batch: 559987

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155957-3	MW-14B	Total/NA	Water	9060	
280-155957-4	DUP3	Total/NA	Water	9060	
280-155957-5	MW-15A	Total/NA	Water	9060	
280-155957-6	MW-15B	Total/NA	Water	9060	
280-155957-7	FB2	Total/NA	Water	9060	
MB 280-559987/37	Method Blank	Total/NA	Water	9060	

General Chemistry (Continued)

Analysis Batch: 559987 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-559987/4	Method Blank	Total/NA	Water	9060	
LCS 280-559987/36	Lab Control Sample	Total/NA	Water	9060	
280-155957-6 MS	MW-15B	Total/NA	Water	9060	
280-155957-6 MSD	MW-15B	Total/NA	Water	9060	

Analysis Batch: 560062

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155957-2	MW-14A	Total/NA	Water	353.2	
MB 280-560062/22	Method Blank	Total/NA	Water	353.2	
LCS 280-560062/21	Lab Control Sample	Total/NA	Water	353.2	
280-156232-B-2 MS	Matrix Spike	Total/NA	Water	353.2	
280-156232-B-2 MSD	Matrix Spike Duplicate	Total/NA	Water	353.2	

Analysis Batch: 560085

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155957-9	MW-16B	Total/NA	Water	9060	
280-155957-10	DUP2	Total/NA	Water	9060	
280-155957-12	FB3	Total/NA	Water	9060	
280-155957-13	MW-21B	Total/NA	Water	9060	
MB 280-560085/4	Method Blank	Total/NA	Water	9060	
LCS 280-560085/3	Lab Control Sample	Total/NA	Water	9060	
280-155750-A-3 MS	Matrix Spike	Total/NA	Water	9060	
280-155750-A-3 MSD	Matrix Spike Duplicate	Total/NA	Water	9060	

Analysis Batch: 560125

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155957-2	MW-14A	Total/NA	Water	9060	
280-155957-8	MW-16A	Total/NA	Water	9060	
MB 280-560125/4	Method Blank	Total/NA	Water	9060	
LCS 280-560125/3	Lab Control Sample	Total/NA	Water	9060	
280-156049-A-2 MS	Matrix Spike	Total/NA	Water	9060	
280-156049-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	9060	

Analysis Batch: 560188

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155957-2	MW-14A	Total/NA	Water	SM 1030E	
280-155957-2	MW-14A	Total/NA	Water	SM 1030E (meq)	
280-155957-3	MW-14B	Total/NA	Water	SM 1030E	
280-155957-3	MW-14B	Total/NA	Water	SM 1030E (meq)	
280-155957-4	DUP3	Total/NA	Water	SM 1030E	
280-155957-4	DUP3	Total/NA	Water	SM 1030E (meq)	
280-155957-5	MW-15A	Total/NA	Water	SM 1030E	
280-155957-5	MW-15A	Total/NA	Water	SM 1030E (meq)	
280-155957-6	MW-15B	Total/NA	Water	SM 1030E	
280-155957-6	MW-15B	Total/NA	Water	SM 1030E (meq)	
280-155957-7	FB2	Total/NA	Water	SM 1030E	
280-155957-7	FB2	Total/NA	Water	SM 1030E (meq)	
280-155957-8	MW-16A	Total/NA	Water	SM 1030E	
280-155957-8	MW-16A	Total/NA	Water	SM 1030E (meq)	
280-155957-9	MW-16B	Total/NA	Water	SM 1030E	
280-155957-9	MW-16B	Total/NA	Water	SM 1030E (meq)	

General Chemistry (Continued)

Analysis Batch: 560188 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155957-10	DUP2	Total/NA	Water	SM 1030E	
280-155957-10	DUP2	Total/NA	Water	SM 1030E (meq)	
280-155957-11	MW-21A	Total/NA	Water	SM 1030E	
280-155957-11	MW-21A	Total/NA	Water	SM 1030E (meq)	
280-155957-12	FB3	Total/NA	Water	SM 1030E	
280-155957-12	FB3	Total/NA	Water	SM 1030E (meq)	
280-155957-13	MW-21B	Total/NA	Water	SM 1030E	
280-155957-13	MW-21B	Total/NA	Water	SM 1030E (meq)	
MB 280-560188/1	Method Blank	Total/NA	Water	SM 1030E (meq)	

Analysis Batch: 560298

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155957-11	MW-21A	Total/NA	Water	9060	
MB 280-560298/4	Method Blank	Total/NA	Water	9060	
LCS 280-560298/3	Lab Control Sample	Total/NA	Water	9060	
280-156013-D-2 MS	Matrix Spike	Total/NA	Water	9060	
280-156013-D-2 MSD	Matrix Spike Duplicate	Total/NA	Water	9060	

Analysis Batch: 606957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155957-2	MW-14A	Total/NA	Water	300.0	
280-155957-3	MW-14B	Total/NA	Water	300.0	
280-155957-4	DUP3	Total/NA	Water	300.0	
280-155957-5	MW-15A	Total/NA	Water	300.0	
280-155957-6	MW-15B	Total/NA	Water	300.0	
280-155957-7	FB2	Total/NA	Water	300.0	
280-155957-8	MW-16A	Total/NA	Water	300.0	
280-155957-9	MW-16B	Total/NA	Water	300.0	
280-155957-10	DUP2	Total/NA	Water	300.0	
280-155957-11	MW-21A	Total/NA	Water	300.0	
MB 480-606957/4	Method Blank	Total/NA	Water	300.0	
LCS 480-606957/3	Lab Control Sample	Total/NA	Water	300.0	
280-155957-2 MS	MW-14A	Total/NA	Water	300.0	
280-155957-2 MSD	MW-14A	Total/NA	Water	300.0	
280-155957-11 MS	MW-21A	Total/NA	Water	300.0	

Analysis Batch: 606967

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155957-12	FB3	Total/NA	Water	300.0	
280-155957-13	MW-21B	Total/NA	Water	300.0	
MB 480-606967/4	Method Blank	Total/NA	Water	300.0	
LCS 480-606967/3	Lab Control Sample	Total/NA	Water	300.0	
280-155958-E-2 MS	Matrix Spike	Total/NA	Water	300.0	
280-155958-E-2 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Field Service / Mobile Lab

Analysis Batch: 558413

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155957-2	MW-14A	Total/NA	Water	Field Sampling	
280-155957-3	MW-14B	Total/NA	Water	Field Sampling	

Field Service / Mobile Lab (Continued)

Analysis Batch: 558413 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155957-5	MW-15A	Total/NA	Water	Field Sampling	
280-155957-6	MW-15B	Total/NA	Water	Field Sampling	
280-155957-8	MW-16A	Total/NA	Water	Field Sampling	
280-155957-9	MW-16B	Total/NA	Water	Field Sampling	
280-155957-11	MW-21A	Total/NA	Water	Field Sampling	
280-155957-13	MW-21B	Total/NA	Water	Field Sampling	

Lab Chronicle

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Groundwater

Job ID: 280-155957-1

Client Sample ID: TB1

Date Collected: 11/16/21 07:00
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155957-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	558921	11/29/21 11:39	TAW	TAL DEN
Total/NA	Prep	8011			35 mL	35 mL	559015	11/29/21 14:19	KSA	TAL DEN
Total/NA	Analysis	8011		1			559026	11/29/21 22:38	KSA	TAL DEN

Client Sample ID: MW-14A

Date Collected: 11/17/21 15:25
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155957-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	558921	11/29/21 12:23	TAW	TAL DEN
Total/NA	Prep	8011			35.6 mL	35 mL	559015	11/29/21 14:19	KSA	TAL DEN
Total/NA	Analysis	8011		1			559026	11/29/21 23:03	KSA	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	558903	11/29/21 08:00	CJB	TAL DEN
Dissolved	Analysis	6010B		1			559066	11/30/21 02:31	LMT	TAL DEN
Total/NA	Analysis	300.0		1			606957	11/29/21 22:26	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	559615	12/04/21 11:15	LRB	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	560062	12/08/21 17:34	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	560125	12/08/21 22:04	LFL	TAL DEN
Total/NA	Analysis	SM 1030E		1			560188	12/09/21 14:58	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			560188	12/09/21 14:58	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			559366	12/01/21 17:34	SPG	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	558481	11/23/21 09:49	ABW	TAL DEN
Total/NA	Analysis	Field Sampling		1			558413	11/17/21 16:25	PP	TAL DEN

Client Sample ID: MW-14B

Date Collected: 11/18/21 08:35
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155957-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	558921	11/29/21 12:46	TAW	TAL DEN
Total/NA	Prep	8011			35.3 mL	35 mL	559015	11/29/21 14:19	KSA	TAL DEN
Total/NA	Analysis	8011		1			559026	11/29/21 23:27	KSA	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	558903	11/29/21 08:00	CJB	TAL DEN
Dissolved	Analysis	6010B		1			559066	11/30/21 02:48	LMT	TAL DEN
Total/NA	Analysis	300.0		1			606957	11/29/21 23:37	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	559615	12/04/21 11:21	LRB	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	559905	12/07/21 17:35	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	559987	12/08/21 04:10	LFL	TAL DEN
Total/NA	Analysis	SM 1030E		1			560188	12/09/21 14:58	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			560188	12/09/21 14:58	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			559366	12/01/21 17:29	SPG	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	558481	11/23/21 09:49	ABW	TAL DEN
Total/NA	Analysis	Field Sampling		1			558413	11/18/21 09:35	PP	TAL DEN

Client Sample ID: DUP3
Lab Sample ID: 280-155957-4
Date Collected: 11/18/21 08:40
Matrix: Water
Date Received: 11/19/21 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	558921	11/29/21 13:08	TAW	TAL DEN
Total/NA	Prep	8011			35 mL	35 mL	559015	11/29/21 14:19	KSA	TAL DEN
Total/NA	Analysis	8011		1			559026	11/29/21 23:52	KSA	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	558903	11/29/21 08:00	CJB	TAL DEN
Dissolved	Analysis	6010B		1			559066	11/30/21 02:52	LMT	TAL DEN
Total/NA	Analysis	300.0		1			606957	11/29/21 23:51	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	559615	12/04/21 11:23	LRB	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	559905	12/07/21 17:37	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	559987	12/08/21 04:29	LFL	TAL DEN
Total/NA	Analysis	SM 1030E		1			560188	12/09/21 14:58	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			560188	12/09/21 14:58	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			559366	12/01/21 18:01	SPG	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	558481	11/23/21 09:49	ABW	TAL DEN

Client Sample ID: MW-15A
Lab Sample ID: 280-155957-5
Date Collected: 11/17/21 11:25
Matrix: Water
Date Received: 11/19/21 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	558921	11/29/21 13:30	TAW	TAL DEN
Total/NA	Prep	8011			34.7 mL	35 mL	559015	11/29/21 14:19	KSA	TAL DEN
Total/NA	Analysis	8011		1			559026	11/30/21 00:17	KSA	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	558903	11/29/21 08:00	CJB	TAL DEN
Dissolved	Analysis	6010B		1			559066	11/30/21 02:57	LMT	TAL DEN
Total/NA	Analysis	300.0		1			606957	11/30/21 00:05	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	559615	12/04/21 11:25	LRB	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	559905	12/07/21 17:39	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	559987	12/08/21 04:45	LFL	TAL DEN
Total/NA	Analysis	SM 1030E		1			560188	12/09/21 14:58	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			560188	12/09/21 14:58	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			559365	12/01/21 20:49	SPG	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	558963	11/29/21 11:22	ABW	TAL DEN
Total/NA	Analysis	Field Sampling		1			558413	11/17/21 12:25	PP	TAL DEN

Client Sample ID: MW-15B
Lab Sample ID: 280-155957-6
Date Collected: 11/17/21 12:05
Matrix: Water
Date Received: 11/19/21 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	558921	11/29/21 13:52	TAW	TAL DEN
Total/NA	Prep	8011			35.4 mL	35 mL	559015	11/29/21 14:19	KSA	TAL DEN
Total/NA	Analysis	8011		1			559026	11/30/21 00:42	KSA	TAL DEN

Client Sample ID: MW-15B

Lab Sample ID: 280-155957-6

Date Collected: 11/17/21 12:05

Matrix: Water

Date Received: 11/19/21 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			50 mL	50 mL	558903	11/29/21 08:00	CJB	TAL DEN
Dissolved	Analysis	6010B		1			559066	11/30/21 03:17	LMT	TAL DEN
Total/NA	Analysis	300.0		1			606957	11/30/21 00:19	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	559569	12/03/21 14:33	LRB	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	559905	12/07/21 17:41	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	559987	12/08/21 05:02	LFL	TAL DEN
Total/NA	Analysis	SM 1030E		1			560188	12/09/21 14:58	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			560188	12/09/21 14:58	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			559365	12/01/21 20:43	SPG	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	558963	11/29/21 11:22	ABW	TAL DEN
Total/NA	Analysis	Field Sampling		1			558413	11/17/21 13:05	PP	TAL DEN

Client Sample ID: FB2

Lab Sample ID: 280-155957-7

Date Collected: 11/17/21 12:20

Matrix: Water

Date Received: 11/19/21 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	558921	11/29/21 12:01	TAW	TAL DEN
Total/NA	Prep	8011			35.3 mL	35 mL	559015	11/29/21 14:19	KSA	TAL DEN
Total/NA	Analysis	8011		1			559026	11/30/21 01:06	KSA	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	558903	11/29/21 08:00	CJB	TAL DEN
Dissolved	Analysis	6010B		1			559066	11/30/21 03:21	LMT	TAL DEN
Total/NA	Analysis	300.0		1			606957	11/30/21 00:33	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	559533	12/03/21 11:25	RKD	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	559905	12/07/21 17:43	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	559987	12/08/21 06:15	LFL	TAL DEN
Total/NA	Analysis	SM 1030E		1			560188	12/09/21 14:58	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			560188	12/09/21 14:58	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			559365	12/01/21 20:35	SPG	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	558321	11/22/21 09:42	ABW	TAL DEN

Client Sample ID: MW-16A

Lab Sample ID: 280-155957-8

Date Collected: 11/17/21 08:55

Matrix: Water

Date Received: 11/19/21 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	558921	11/29/21 14:14	TAW	TAL DEN
Total/NA	Prep	8011			34.9 mL	35 mL	559015	11/29/21 14:19	KSA	TAL DEN
Total/NA	Analysis	8011		1			559026	11/30/21 01:31	KSA	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	558903	11/29/21 08:00	CJB	TAL DEN
Dissolved	Analysis	6010B		1			559066	11/30/21 03:25	LMT	TAL DEN
Total/NA	Analysis	300.0		1			606957	11/30/21 00:47	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	559569	12/03/21 14:35	LRB	TAL DEN

Client Sample ID: MW-16A

Lab Sample ID: 280-155957-8

Date Collected: 11/17/21 08:55

Matrix: Water

Date Received: 11/19/21 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	353.2		1	100 mL	100 mL	559905	12/07/21 17:57	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	560125	12/08/21 22:19	LFL	TAL DEN
Total/NA	Analysis	SM 1030E		1			560188	12/09/21 14:58	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			560188	12/09/21 14:58	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			559365	12/01/21 20:30	SPG	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	558321	11/22/21 09:42	ABW	TAL DEN
Total/NA	Analysis	Field Sampling		1			558413	11/17/21 09:55	PP	TAL DEN

Client Sample ID: MW-16B

Lab Sample ID: 280-155957-9

Date Collected: 11/17/21 09:40

Matrix: Water

Date Received: 11/19/21 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	558921	11/29/21 14:37	TAW	TAL DEN
Total/NA	Prep	8011			35.2 mL	35 mL	559015	11/29/21 14:19	KSA	TAL DEN
Total/NA	Analysis	8011		1			559026	11/30/21 01:55	KSA	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	558903	11/29/21 08:00	CJB	TAL DEN
Dissolved	Analysis	6010B		1			559066	11/30/21 03:29	LMT	TAL DEN
Total/NA	Analysis	300.0		1			606957	11/30/21 01:01	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	559533	12/03/21 11:29	RKD	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	559905	12/07/21 17:59	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	560085	12/08/21 15:31	RAF	TAL DEN
Total/NA	Analysis	SM 1030E		1			560188	12/09/21 14:58	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			560188	12/09/21 14:58	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			559366	12/01/21 17:23	SPG	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	558321	11/22/21 09:42	ABW	TAL DEN
Total/NA	Analysis	Field Sampling		1			558413	11/17/21 10:40	PP	TAL DEN

Client Sample ID: DUP2

Lab Sample ID: 280-155957-10

Date Collected: 11/17/21 09:45

Matrix: Water

Date Received: 11/19/21 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	558921	11/29/21 14:59	TAW	TAL DEN
Total/NA	Prep	8011			35 mL	35 mL	559015	11/29/21 14:19	KSA	TAL DEN
Total/NA	Analysis	8011		1			559026	11/30/21 02:20	KSA	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	558903	11/29/21 08:00	CJB	TAL DEN
Dissolved	Analysis	6010B		1			559066	11/30/21 03:33	LMT	TAL DEN
Total/NA	Analysis	300.0		1			606957	11/30/21 01:16	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	559569	12/03/21 13:35	LRB	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	559905	12/07/21 18:01	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	560085	12/08/21 15:48	RAF	TAL DEN

Client Sample ID: DUP2
Lab Sample ID: 280-155957-10

Date Collected: 11/17/21 09:45
Matrix: Water
Date Received: 11/19/21 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 1030E		1			560188	12/09/21 14:58	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			560188	12/09/21 14:58	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			559365	12/01/21 20:23	SPG	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	558321	11/22/21 09:42	ABW	TAL DEN

Client Sample ID: MW-21A
Lab Sample ID: 280-155957-11

Date Collected: 11/18/21 10:15
Matrix: Water
Date Received: 11/19/21 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	558921	11/29/21 15:21	TAW	TAL DEN
Total/NA	Prep	8011			34.8 mL	35 mL	559015	11/29/21 14:19	KSA	TAL DEN
Total/NA	Analysis	8011		1			559026	11/30/21 03:09	KSA	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	558903	11/29/21 08:00	CJB	TAL DEN
Dissolved	Analysis	6010B		1			559066	11/30/21 03:38	LMT	TAL DEN
Total/NA	Analysis	300.0		1			606957	11/30/21 01:30	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	559569	12/03/21 13:37	LRB	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	559905	12/07/21 18:03	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	560298	12/09/21 22:33	RAF	TAL DEN
Total/NA	Analysis	SM 1030E		1			560188	12/09/21 14:58	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			560188	12/09/21 14:58	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			559366	12/01/21 18:12	SPG	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	558625	11/24/21 09:11	ABW	TAL DEN
Total/NA	Analysis	Field Sampling		1			558413	11/18/21 11:15	PP	TAL DEN

Client Sample ID: FB3
Lab Sample ID: 280-155957-12

Date Collected: 11/18/21 09:50
Matrix: Water
Date Received: 11/19/21 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	559320	12/02/21 01:05	AJP	TAL DEN
Total/NA	Prep	8011			34.9 mL	35 mL	559015	11/29/21 14:19	KSA	TAL DEN
Total/NA	Analysis	8011		1			559026	11/30/21 03:33	KSA	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	558903	11/29/21 08:00	CJB	TAL DEN
Dissolved	Analysis	6010B		1			559066	11/30/21 03:42	LMT	TAL DEN
Total/NA	Analysis	300.0		1			606967	11/30/21 08:24	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	559569	12/03/21 13:39	LRB	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	559905	12/07/21 18:15	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	560085	12/08/21 16:51	RAF	TAL DEN
Total/NA	Analysis	SM 1030E		1			560188	12/09/21 14:58	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			560188	12/09/21 14:58	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			559468	12/02/21 19:12	SPG	TAL DEN

Lab Chronicle

Client: Waste Management
Job ID: 280-155957-1
Project/Site: 1003|Riverbend Landfill - Groundwater

Client Sample ID: FB3
Lab Sample ID: 280-155957-12
Date Collected: 11/18/21 09:50
Matrix: Water
Date Received: 11/19/21 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	559216	12/01/21 08:31	ABW	TAL DEN

Client Sample ID: MW-21B
Lab Sample ID: 280-155957-13
Date Collected: 11/16/21 13:00
Matrix: Water
Date Received: 11/19/21 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	558921	11/29/21 15:43	TAW	TAL DEN
Total/NA	Prep	8011			35.2 mL	35 mL	559015	11/29/21 14:19	KSA	TAL DEN
Total/NA	Analysis	8011		1			559026	11/30/21 03:57	KSA	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	558903	11/29/21 08:00	CJB	TAL DEN
Dissolved	Analysis	6010B		1			559066	11/30/21 03:46	LMT	TAL DEN
Total/NA	Analysis	300.0		1			606967	11/30/21 08:43	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	559569	12/03/21 13:41	LRB	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	559905	12/07/21 18:09	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	560085	12/08/21 17:08	RAF	TAL DEN
Total/NA	Analysis	SM 1030E		1			560188	12/09/21 14:58	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			560188	12/09/21 14:58	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			559218	11/30/21 22:33	SPG	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	558321	11/22/21 09:42	ABW	TAL DEN
Total/NA	Analysis	Field Sampling		1			558413	11/16/21 14:00	PP	TAL DEN

Laboratory References:

TAL BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Eurofins TestAmerica, Denver
4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Fax (303) 431-7171

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: F. Hultquist	Lab PM: Sara, Betsy A	Carrier Tracking No(s):	COC No: 280-16511-866.1
Client Contact:	Phone: (503) 716-6320	E-Mail: Betsy.Sara@Eurofinset.com		Page: 1 of 2
Company: Waste Management				Job #:
Address: 13469 SW Highway 18	Due Date Requested:			
City: McMinnville	TAT Requested (days):			
State, Zip: OR, 97128				
Phone:	PO #:			
Email:	WO #:			
Project Name:1003|Riverbend Landfill SCS Engineers Event Desc: Semiannual Compliance Wells - Apr Oct	Project #: 28002786			
Site: Oregon	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

280-155957 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	TDS/Alk	Dissolved Metals	Ammonia/TOC/NO3+NO2	8260B	8011	Cation/Anion Balance	Chloride/Sulfate (TA Buffalo)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	S	A	R		N		
TB1	11-16-21	0700	G	W						X	X			8	
MW-14A	11-17-21	1525	G	W	X		X	X	X	X	X	X	X	11	
MW-14B	11-18-21	0835	G	W	X		X	X	X	X	X	X	X	11	
DUP3	11-18-21	0840	G	W	X		X	X	X	X	X	X	X	11	
MW-15A	11-17-21	1125	G	W	X		X	X	X	X	X	X	X	11	
MW-15B	11-17-21	1205	G	W	X		X	X	X	X	X	X	X	11	
FB2	11-17-21	1220	G	W	X		X	X	X	X	X	X	X	11	
MW-16A	11-17-21	0855	G	W	X		X	X	X	X	X	X	X	11	
MW-16B	11-17-21	0940	G	W	X		X	X	X	X	X	X	X	11	
DUP2	11-17-21	0945	G	W	X		X	X	X	X	X	X	X	11	
MW-21A	11-18-21	1015	G	W	X		X	X	X	X	X	X	X	11	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	11-18-21 1630	SCS		11/19/2021 1025	GEL DCM
Relinquished by:					
Relinquished by:					

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.0, -0.4, 0.9, 0.4 CF 1.0 IR#4

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3/15/2022

Eurofins TestAmerica, Denver
4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Fax (303) 431-7171

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: I. Hultquist	Lab PM: Sara, Betsy A	Carrier Tracking No(s):	COC No: 280-16511-866.1
Client Contact:	Phone: (503) 716 6520	E-Mail: Betsy.Sara@Eurofinset.com		Page: 2 of 2
Company: Waste Management				Job #:
Address: 13469 SW Highway 18	Due Date Requested:			
City: McMinnville	TAT Requested (days):			
State, Zip: OR, 97128				
Phone:	PO #:			
Email:	WO #:			
Project Name:1003|Riverbend Landfill SCS Engineers Event Desc: Semiannual Compliance Wells - Apr Oct	Project #: 28002786			
Site: Oregon	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	TDS/Alk	Dissolved Metals	Ammonia/TOC/NO3+NO2	8260B	8011	Cation/Anion Balance	Chloride/Sulfate (TA Buffalo)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	S	A	R		N		
FB3	11-18-21	0950	G	W	X		X	X	X	X	X	X	X	11	
MW-21B	11-16-21	1300	G	W	X		X	X	X	X	X	X	X	11	

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown* ☐ *Radiological*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☒ *Disposal By Lab* ☐ *Archive For _____ Months*

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	11-18-21 1630	SCS	[signature]	11/19/2021 1025	EPA DEM
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: △ Yes △ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

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3/15/2022

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-14A
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	(N)	NE	E	SE	S	SW	W	NW	LIGHT	(MEDIUM)	HEAVY
WEATHER:	(SUNNY)	CLOUDY	RAIN	?	**TEMPERATURE:**	(°F) 52.0 °C					

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
11/17/21	:	23.60	.	6.19	.	17.41	X 1	2.83
/ /	:	.	.	.	.		X 3	8.49

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	(2") = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount	Volume	Preservative	Ice	Filter	pH	√
VOA Glass	11/17/21	15:25	F	3	40 ml	(HCl)	(YES)	(NO)		✓
VOA Glass	11/17/21	15:25	F	3	40 ml	$Na_2S_2O_3$	(YES)	(NO)		✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/17/21	15:25	F	2	(250), 500, (1L)	(None)	(YES)	(NO)	NA	✓
Yellow Glass	11/17/21	15:25	F	2	(250), 500, 1L	(H_2SO_4)	(YES)	(NO)		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	11/17/21	15:25	F	1	250, (500), 1L	(HNO_3)	(YES)	(YES)		✓
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 11 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: 14:29 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	F (1430)	0.00	7.15	20.0	493	12.0	6.48	8.77	clear/colorless
1	F (1447)	2.85	6.25	155.9	305	11.5	6.44	6.73	clear/colorless
2	F (1504)	5.70	6.17	184.2	304	11.5	6.45	6.71	clear/colorless
3	F (1521)	8.55	6.18	197.2	301	11.6	6.47	6.69	clear/colorless
4	F (1523)	8.85	6.17	197.8	300	11.6	6.47	6.70	clear/colorless
5		.	.			.	.	.	
6		.	.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Standard purge method (11/9/20ish) ~ 600ml/min

SAMPLER: I. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-1413
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	(NW)	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY	(CLOUDY)			(RAIN)		?		**TEMPERATURE:**	(F) 44.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
11/18/21	08:08	44.60	.	8.54	.	—	X 1	—
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)² x 0.163 | 1" = 0.041 | (2") = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	√
VOA Glass	11/18/21	08:35	F	3	(40 ml)	(HCl)	YES	(NO)		✓
VOA Glass	11/18/21	08:35	F	3	(40 ml)	($Na_2S_2O_3$)	YES	(NO)		✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/18/21	08:35	F	2	250, 500, (1L)	(None)	YES	(NO)	NA	✓
Yellow Glass	11/18/21	08:35	F	2	(250), 500, 1L	(H_2SO_4)	(YES)	(NO)		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	11/18/21	08:35	F	1	250, (500), 1L	(HNO_3)	(YES)	(YES)		✓
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 | 11 | Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: 08:11 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	F(0812)	0.00	7.03	199.6	461.7	10.8	8.94	6.85	clear/colorless
1	F(0818)	0.50	7.36	-36.1	544.1	10.9	9.13	1.01	clear/light tan
2	F(0826)	1.00	7.41	-41.2	535.6	10.9	9.13	2.27	clear/light tan
3	F(0828)	1.15	7.42	-45.5	535.1	10.9	9.13	2.21	clear/light tan
4	F(0830)	1.30	7.42	-42.7	533.6	10.9	9.13	2.20	clear/light tan
5		.	.			.	.	.	
6			.			.		.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Low flow purge method (11/9/21 p.s.c) ~300 ml/min

SAMPLER: I. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** DUP3
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		**TEMPERATURE:**	°F 61.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
/ /	:	.	.	.	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	√
VOA Glass	11/18/21	08:40	F	3	40 ml	HCl	YES NO		✓
VOA Glass	11/18/21	08:40	F	3	40 ml	$Na_2S_2O_3$	YES NO		✓
Amber Glass	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/18/21	08:40	F	2	250, 500, 1L	None	YES NO	NA	✓
Yellow Glass	11/18/21	08:40	F	2	250, 500, 1L	H_2SO_4	YES NO		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	11/18/21	08:40	F	1	250, 500, 1L	HNO_3	YES	YES		✓
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl^-) (SO_4) (Silica T) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0		0.00	.			.	.	.	
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Collected @ MW-14B

SAMPLER: T. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-15A

SITE ADDRESS: McMinnville , Oregon **BLIND ID:**

DUP ID: NA

WIND FROM:	(N)	NE	E	SE	S	SW	W	NW	LIGHT	(MEDIUM)	HEAVY
WEATHER:	SUNNY	(CLOUDY)	RAIN	?	**TEMPERATURE:**	40 . 0	° C			

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		[Water Column x Gal/ft] Volume (gal)
11/17/21	10 : 40	24 .00	.	8 .42	.	15 .58	X 1	2 .53
/ /	:	.	.	.	.		X 3	7 .59

Gal/ft = (dia /2)^2 x 0.163	1" = 0.041	(2") 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	√
VOA Glass	11/17/21	11 :25	F	3	(40 ml)	HCl	YES	NO		✓
VOA Glass	11/17/21	11 :25	F	3	(40 ml)	$Na_2S_2O_3$	YES	NO		✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/17/21	11 :25	F	2	(250, 500 1L)	None	YES	NO	NA	✓
Yellow Glass	11/17/21	11 :25	F	2	(250, 500, 1L	H_2SO_4	YES	NO		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	11/17/21	11 :25	F	1	250, (500, 1L	HNO_3	YES	YES		✓
White Poly	/ /	:	F filt	1 filt	250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — 11 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: 10 : 43 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	F(1043)	0.00	7.85	109.8	240	10 . 8	9 .82	11 .30	clear/colorless
1	F(1054)	2 .60	6.34	163.6	207	15 . 1	15 .22	10 .31	cloudy/light tan
2	F(1105)	5 .20	6.17	187.9	208	14 . 9	16 .81	9 .55	cloudy/tan
3	F(1116)	7 .80	6.19	196.2	199	14 . 8	18 .13	9 .68	cloudy/tan
4	F(1118)	8 .10	6.20	202.0	199	14 . 8	18 .37	9 .66	cloudy/tan
5	F(1120)	8 .40	6.21	201.5	197	14 . 8	18 .49	9 . 63	cloudy/tan
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Standard purge (11/9/21 spl) ~ 1050 ml/min

SAMPLER: T. Holtquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-15B
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	(N)	NE	E	SE	S	SW	W	NW	LIGHT	~~MEDIUM~~	HEAVY
WEATHER:	~~SUNNY~~		CLOUDY		RAIN		?		**TEMPERATURE:**	(°F) 48.0 °C	

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
11/17/21	11:43	45.95	.	14.90	.	—	X 1	—
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	(2") = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	√
VOA Glass	11/17/21	12:05	F	3	~~40 ml~~	HCl	YES	NO	✓
VOA Glass	11/17/21	12:05	F	3	~~40 ml~~	$Na_2S_2O_3$	YES	NO	✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/17/21	12:05	F	2	~~250~~, 500, ~~1L~~	~~None~~	~~YES~~	~~NO~~	NA	✓
Yellow Glass	11/17/21	12:05	F	2	~~250~~, 500, 1L	H_2SO_4	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	11/17/21	12:05	F	1	250, ~~500~~, 1L	HNO_3	YES	~~YES~~		✓
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 | 11 | Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: 11:44 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	F(1146)	0.00	6.90	153.1	909	13.1	15.01	7.30	Clear/colorless
1	F(1152)	0.50	6.78	64.4	894	13.5	15.02	1.21	clear/light tan
2	F(1200)	1.00	6.96	17.8	870	13.5	15.02	0.63	clear/colorless
3	F(1202)	1.20	6.97	15.6	868	13.5	15.02	0.60	clear/colorless
4	F(1204)	1.40	6.98	13.7	865	13.5	15.02	0.59	clear/colorless
5		.	.			.	.	.	
6		.	.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Low flow purge Method (11/9/21, sc) ~450 ml/min

SAMPLER: J. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** FB2
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	(N)	NE	E	SE	S	SW	W	NW	LIGHT	(MEDIUM)	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(°F) 48.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
/ /	:	.	.	.	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other = Transfer

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	√
VOA Glass	11/17/21	12 :20	G	3	(40 ml)	(HCl)	(YES)	(NO)		✓
VOA Glass	11/17/21	12 :20	G	3	(40 ml)	($Na_2S_2O_3$)	(YES)	(NO)		✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/17/21	12 :20	G	2	(250, 500, 1L)	(None)	(YES)	(NO)	NA	✓
Yellow Glass	11/17/21	12 :20	G	2	(250, 500, 1L)	(H_2SO_4)	(YES)	(NO)		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	11/17/21	12 :20	G	1	250, (500), 1L	(HNO_3)	(YES)	(YES)		✓
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 11 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [ ] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica. T) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	G (1220)	0.00	—	—	—	—	—	—	—
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity Color]

Collected near MW-153

SAMPLER: I. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-16A
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	(N)	NE	E	SE	S	SW	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)	CLOUDY	RAIN	?	**TEMPERATURE:**	(F) 37.0 °C					

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
11/17/21	08:15	25.00	.	17.54	.	7.46	X 1	1.21
/ /	:	.	.	.	.		X 3	3.6

Gal/ft = (dia./2)^2 x 0.163	1" =	0.041	(2") =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) ~~Dedicated Pump~~ (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	√
VOA Glass	11/17/21	08:55	F	3	(40 ml)	(HCl)	~~YES~~	~~NO~~		√
VOA Glass	11/17/21	08:55	F	3	(40 ml)	($Na_2S_2O_3$)	~~YES~~	~~NO~~		√
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/17/21	08:55	F	2	(250) 500 (1L)	(None)	(YES)	(NO)	NA	√
Yellow Glass	11/17/21	08:55	F	2	(250) 500, 1L	(H_2SO_4)	(YES)	(NO)		√
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	11/17/21	08:55	F	1	250, (500) 1L	(HNO_3)	(YES)	(YES)		√
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 | 11 | Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica. T) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: 08:16 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	F(0817)	0.00	7.00	214.8	647	7.8	17.77	11.03	clear/colorless
1	F(0828)	1.25	6.36	195.5	297	12.5	18.91	10.69	clear/light tan
2	F(0837)	2.50	6.47	192.9	370	12.5	19.76	10.26	clear/light tan
3	F(0846)	3.75	6.47	184.6	445	12.5	BTOP	9.64	clear/light tan
4	F(0848)	4.05	6.44	182.4	446	12.5	BTOP	9.58	clear/light tan
5	F(0850)	4 IN 340	6.44	180.2	448	12.4	BTOP	9.54	clear/light tan
6			.			.		.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

(Standard purge 20/10/20psi) ~600ml/min

SAMPLER: I. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-16B
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	(N)	NE	E	SE	S	SW	W	NW	LIGHT	~~MEDIUM~~	HEAVY
WEATHER:	(SUNNY)	CLOUDY	RAIN	?					**TEMPERATURE:**	(°F) 40.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
11/17/21	09:13	46.00	.	16.22	.	—	X 1	—
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	(2") = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	√
VOA Glass	11/17/21	09:40	F	3	(40 ml)	(HCl)	(YES)	(NO)		✓
VOA Glass	11/17/21	09:40	F	3	(40 ml)	($Na_2S_2O_3$)	YES	NO		✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/17/21	09:40	F	2	(250, 500, 1L)	(None)	(YES)	(NO)	NA	✓
Yellow Glass	11/17/21	09:40	F	2	(250, 500, 1L)	(H_2SO_4)	(YES)	(NO)		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	11/17/21	0944 (IH): 0940	F	1	250, 500, 1L	(HNO_3)	(YES)	(YES)		✓
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 | 11 | Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: 09:14 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	F(0917)	0.00	7.17	167.9	1243	9.60	16.27	7.11	clear/colorless
1	F(0925)	0.50	6.96	20.1	1272	11.80	16.27	1.67	clear/colorless
2	F(0933)	1.00	7.01	1.2	1276	11.90	16.27	1.55	clear/colorless
3	F(0935)	1.20	7.01	0.3	1279	11.90	16.27	1.50	clear/colorless
4	F(0937)	1.40	7.00	-1.3	1281	11.90	16.27	1.48	clear/colorless
5		.	.			.	.	.	
6		.	.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Low flow purge method (11/9) (25psi) ~ 450ml/min

SAMPLER: I. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** DUP2

SITE ADDRESS: McMinnville , Oregon **BLIND ID:**

DUP ID: NA

WIND FROM:	(N)	NE	E	SE	S	SW	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)	CLOUDY	RAIN	?	**TEMPERATURE:**	(°F) 40.0 °C					

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
/ /	:	.	.	.	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	√
VOA Glass	11/17/21	09:45	F	3	(40 ml)	HCl	(YES)	(NO)		√
VOA Glass	11/17/21	09:45	F	3	(40 ml)	$Na_2S_2O_3$	(YES)	(NO)		√
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/17/21	09:45	F	2	(250) 500, (1L)	None	(YES)	(NO)	NA	√
Yellow Glass	11/17/21	09:45	F	2	(250) 500, 1L	H_2SO_4	(YES)	(NO)		√
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	11/17/21	09:45	F	1	250, 500, 1L	HNO_3	(YES)	(YES)		√
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 11 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	F	0.00	-	-	-	-	-	-	-
1		.	.			.	.	.	
2		.	.			.		.	
3		.	.			.		.	
4		.	.			.		.	
5		.	.			.		.	
6			.			.		.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Collected at MW-16B

SAMPLER: J. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-21A
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		**TEMPERATURE:**	(F) 18.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
11/18/21	09:20	15.42	.	3.82	.	11.60	X 1	1.89
/ /	:	.	.	.	.		X 3	5.67

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	√
VOA Glass	11/18/21	10:15	F	3	40 ml	HCl	YES	NO	✓
VOA Glass	11/18/21	10:15	F	3	40 ml	$Na_2S_2O_3$	YES	NO	✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO	
White Poly	11/18/21	10:15	F	2	250, 500, 1L	None	YES	NO	NA ✓
Yellow Glass	11/18/21	10:15	F	2	250, 500, 1L	H_2SO_4	YES	NO	✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO	
Red Diss. Poly	11/18/21	10:15	F	1	250, 500, 1L	HNO_3	YES	YES	✓
White Poly	/ /	:			250, 500, 1L	None	YES	YES	
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO	

White no acid, Yellow H2SO4, Red HNO3 — 11 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica. T) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	F(0924)	0.00	7.32	147.8	295	10.8	4.46	9.12	clear/colorless
1	F(0940)	1.90	6.22	171.8	277	13.8	4.90	8.39	clear/colorless
2	F(0956)	3.80	6.21	190.8	284	13.9	4.91	8.12	clear/colorless
3	F(1009)	5.70	6.20	199.6	281	14.0	4.91	8.07	clear/colorless
4	F(1011)	5.85	6.20	201.3	279	14.0	4.91	8.07	clear/colorless
5		.	.			.	.	.	
6		.	.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Standard purge (10|5|25psi) ~ 600 ml/min

SAMPLER: T. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** FB3
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		TEMPERATURE:	°F 48.0 °C	

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
/ /	:	.	.	.	.		X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other = Transfer

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	√
VOA Glass	11/18/21	09:50	G	3	40 ml	HCl	YES	NO	
VOA Glass	11/18/21	09:50	G	3	40 ml	$Na_2S_2O_3$	YES	NO	
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO	
White Poly	11/18/21	09:50	G	2	250, 500, 1L	None	YES	NO	NA
Yellow Glass	11/18/21	09:50	G	2	250, 500, 1L	H_2SO_4	YES	NO	
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO	
Red Diss. Poly	11/18/21	09:50	G	1	250, 500, 1L	HNO_3	YES	YES	
White Poly	/ /	:			250, 500, 1L	None	YES	YES	
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO	

White no acid, Yellow H2SO4, Red HNO3 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	G (Case)	0.00	—	—	—	—	—	—	—
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Collected near MW-21A using Lab supplied DI water

SAMPLER: I. Hulbert (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-213
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	(SW)	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)	CLOUDY	RAIN	?	**TEMPERATURE:**	(F) 50. (C) °C					

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
11/16/21	12:19	30.40	.	1.76	.	—	X 1	—
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)² x 0.163	1" = 0.041	(2") = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	√
VOA Glass	11/16/21	13:00	F	~~3~~	~~40 ml~~	(HCl)	(YES) NO		✓
VOA Glass	11/16/21	13:00	F	3	40 ml	($Na_2S_2O_3$)	(YES) NO		✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES NO		
White Poly	11/16/21	13:00	F	2	(250), 500, (1L)	(None)	(YES) NO	NA	✓
Yellow Glass	11/16/21	13:00	F	2	(250), 500, 1L	(H_2SO_4)	(YES) NO		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES NO		
Red Diss. Poly	11/16/21	13:00	F	1	250, (500), 1L	(HNO_3)	(YES) (YES)		✓
White Poly	/ /	:			250, 500, 1L	None	YES YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES NO		

White no acid, Yellow H2SO4, Red HNO3 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica T) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	F(1225)	0.00	7.63	145.2	447	15.3	2.10	0.19	Clear/colorless
1	F(1232)	0.50	6.84	82.7	506	13.6	1.96	0.79	Clear/colorless
2	F(1238)	1.00	6.83	59.4	537	13.6	1.96	0.55	Clear/colorless
3	F(1256)	1.50	6.83	44.8	538	13.7	1.96	0.53	Clear/colorless
4	F(1252)	1.65	6.82	42.4	540	13.8	1.96	0.49	Clear/colorless
5	F(1254)	1.80	6.82	40.4	541	13.8	1.96	0.49	Clear/colorless
6	F(1256)	1.95	6.82	39.4	543	13.7	1.96	0.49	Clear/colorless

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Low flow (12/8/20 psi) ~ 300ml/min

SAMPLER: A. Hattig, J. T (PRINTED NAME) (SIGNATURE)



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ORDER: 00859798

DECLARED VALUE $100

PACKAGE WEIGHT

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4955 YARROW ST
ARVADA, CO 80002
(303) 736-0100

SATURDAY DELIVERY

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ARVADA CO

Peel here and attach

280-155957 Waybill

TO SAMPLE RCVG
EUROFINS TESTAMERICA
4955 YARROW ST
ARVADA CO 80002 (US)
(303) 736-0100

REF:

DEPT:

INV:

PO:

ORIGIN ID:BNOA

SHIP DATE: 18NOV21
ACTWGT: 65.45 LB
CAD: /SSFE2220
DIMS: 25x13x14 IN

FedEx Express

J212221101802uv

FRI - 19 NOV 11:30A
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80002
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CO-US

TRK 0667 8165 7539 5229

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ORIGIN ID:BNOA

SHIP DATE: 18NOV21
ACTWGT: 65.15 LB
CAD: /SSFE2220
DIMS: 25x13x14 IN

TO SAMPLE RCVG
FINS TESTAMERICA
YARROW ST
DA CO 80002
(303) 736-0100 REF:
INV:
PO: DEPT:

(US)

FedEx Express

E

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TRK# 0667 8165 7539 5078

FRI - 19 NOV 11:30
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XA LAAA

Part # 156297-438 FRI 19 NOV 2022



ORIGIN ID:BNOA

SHIP DATE: 18NOV21
ACTWGT: 55.95 LB
CAD: /SSFE2220
DIMS: 25x13x14 IN

TO SAMPLE RCVG
EUROFINS TESTAMERICA
4955 YARROW ST

ARVADA CO 80002 (US)
(303) 736-0100 REF:
INV:
PO: DEPT:

FedEx Express

E

TRK# 0667 8165 7539 5207

FRI - 19 NOV 11:30A
PRIORITY OVERNIGHT
AHS
80002
CO-US DEN

XA LAAA

Part # 156297-438 HRD2 EXP 05/22

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ORDER: 00859798

DECLARED VALUE $100
PACKAGE WEIGHT
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2 To *Shipment will not be accepted if address below is altered.*

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ARVADA, CO 80002
(303) 736-0100

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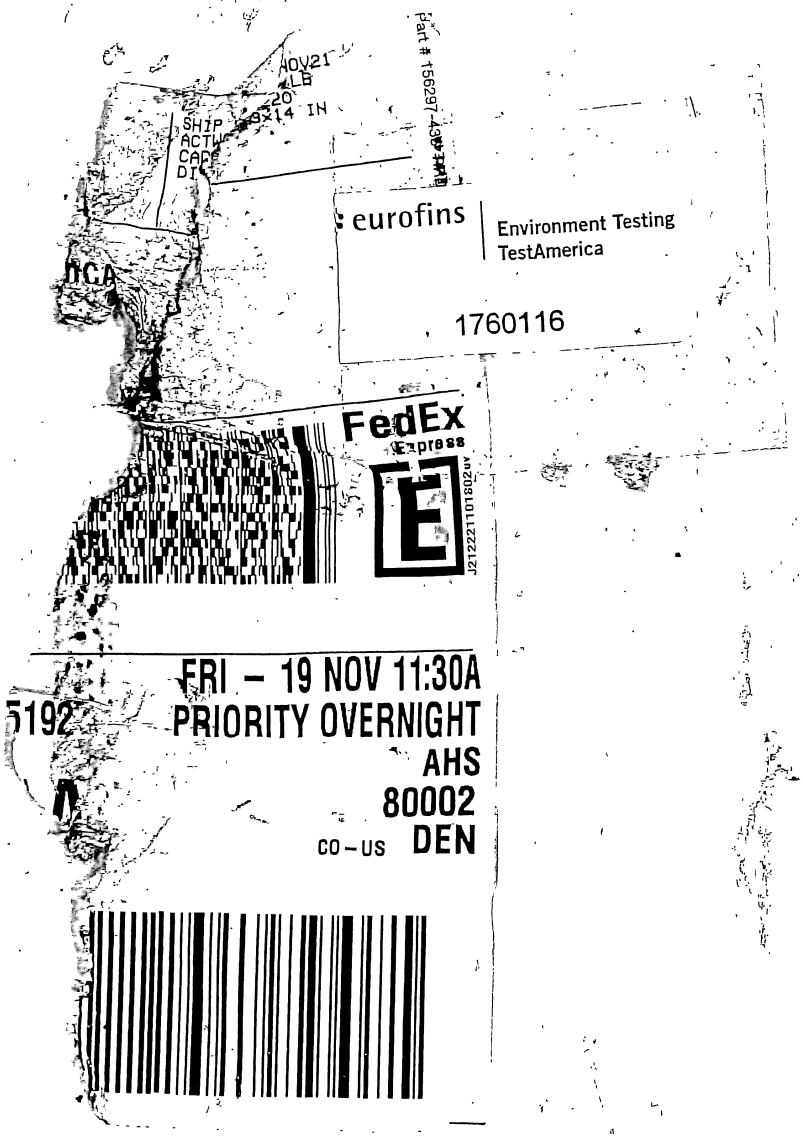
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Eurofins TestAmerica, Denver
4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0100 Fax: 303-431-7171

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Sara, Betsy A	Carrier Tracking No(s):	COC No: 280-594911.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Betsy.Sara@Eurofinset.com	State of Origin: Oregon	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Oregon		Job #: 280-155957-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 12/12/2021			
City: Amherst	TAT Requested (days):			
State, Zip: NY, 14228-2298				
Phone: 716-691-2600(Tel) 716-691-7991(Fax)	PO #:			
Email:	WO #:			
Project Name: 1003|Riverbend Landfill SCS Engineers	Project #: 28002786			
Site: 1003|Riverbend Landfill	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300.0_28D/ 300.0, Sulfate and Chloride (TA Buffalo)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-14A (280-155957-2)	11/17/21	15:25 Pacific		Water			X	1	
MW-14B (280-155957-3)	11/18/21	08:35 Pacific		Water			X	1	
DUP3 (280-155957-4)	11/18/21	08:40 Pacific		Water			X	1	
MW-15A (280-155957-5)	11/17/21	11:25 Pacific		Water			X	1	
MW-15B (280-155957-6)	11/17/21	12:05 Pacific		Water			X	1	
FB2 (280-155957-7)	11/17/21	12:20 Pacific		Water			X	1	
MW-16A (280-155957-8)	11/17/21	08:55 Pacific		Water			X	1	
MW-16B (280-155957-9)	11/17/21	09:40 Pacific		Water			X	1	
DUP2 (280-155957-10)	11/17/21	09:45 Pacific		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by:	Date/Time: 11-22-21 1627	Company ETGDEN	Received by:	Date/Time: 11/23/21 1030	Company T+A
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 2.9 # ICE

Ver: 06/08/2021

Eurofins TestAmerica, Denver
4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0100 Fax: 303-431-7171

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Sara, Betsy A	Carrier Tracking No(s):	COC No: 280-594911.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: Betsy.Sara@Eurofinset.com	State of Origin: Oregon	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Oregon		Job #: 280-155957-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 12/12/2021			
City: Amherst	TAT Requested (days):			
State, Zip: NY, 14228-2298				
Phone: 716-691-2600(Tel) 716-691-7991(Fax)	PO #:			
Email:	WO #:			
Project Name: 1003|Riverbend Landfill SCS Engineers	Project #: 28002786			
Site: 1003|Riverbend Landfill	SSOW#:			

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - 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:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300.0_28D/ 300.0, Sulfate and Chloride (TA Buffalo)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-21A (280-155957-11)	11/18/21	10:15 Pacific		Water			X	1	
FB3 (280-155957-12)	11/18/21	09:50 Pacific		Water			X	1	
MW-21B (280-155957-13)	11/16/21	13:00 Pacific		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:		Method of Shipment:	
Relinquished by:	Date/Time: 11-22-21 1627	Company ETGDEN	Received by:	Date/Time: 11/23/21 1030	Company TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.9 #1 ICE

Ver: 06/08/2021

3/15/2022

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-155957-1

Login Number: 155957
List Number: 1
Creator: Roehsner, Karen P

List Source: Eurofins Denver

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	
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: 280-155957-1

Login Number: 155957
List Number: 2
Creator: Kolb, Chris M

List Source: Eurofins Buffalo
List Creation: 11/26/21 09:43 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	2.9 ir gun #1 ice
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

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ANALYTICAL REPORT

Eurofins Denver
4955 Yarrow Street
Arvada, CO 80002
Tel: (303)736-0100

Laboratory Job ID: 280-156013-1
Client Project/Site: 1003|Riverbend Landfill - GW
Sampling Event: Semiannual Compliance Wells - Apr Oct
Revision: 1

For:
Waste Management
7227 NE 55th Avenue
Portland, Oregon 97218

Attn: Mr. William V Hickey, PMP

Authorized for release by:
4/28/2022 8:45:27 AM

Janice Collins, Project Management Assistant I
(303)736-0100
Janice.Collins@et.eurofinsus.com

LINKS

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Waste Management
Job ID: 280-156013-1
Project/Site: 1003|Riverbend Landfill - GW

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F3	Duplicate RPD exceeds the control limit

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 280-156013-1

Laboratory: Eurofins Denver

Narrative

CASE NARRATIVE

Client: Waste Management

Project: 1003|Riverbend Landfill SCS Engineers

Report Number: 280-156013-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

This report may include reporting limits (RLs) less than Eurofins TestAmerica's standard reporting limit. The reported sample results and associated reporting limits are being used specifically to meet the needs of this project. Note that data are not normally reported to these levels without qualification because they are inherently less reliable and potentially less defensible than required by the latest industry standards.

Sample Receiving

The samples were received on 11/22/2021; the samples arrived in good condition, properly preserved and on ice. The temperatures of the coolers at receipt were 1.2°C and 2.8°C.

Holding Times

All holding times were met.

Method Blanks

All Method Blanks met method criteria.

Laboratory Control Samples (LCS)

All Laboratory Control Sample recoveries were within control limits.

Matrix Spike (MS) and Matrix Spike Duplicate (MSD)

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) for Method 8260B and Method 8011, however, LCS/LCSD pairs were analyzed to demonstrate method precision and accuracy.

Sample MW-12A was selected to fulfill the laboratory batch quality control requirements for Method 353.2. Analysis of the laboratory generated MS/MSD for this sample exhibited recoveries of Nitrate/Nitrite 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 results were within established control limits.

Sample Duplicate

The RPD for Total Dissolved Solids (TDS) Method 2540C performed on sample MW-12A was outside control limits. Because all other QC and calibration criteria were met no corrective action was needed.

Job ID: 280-156013-1 (Continued)

Laboratory: Eurofins Denver (Continued)

General Comments

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.

The analysis for Chloride and Sulfate Method 300.0 was performed by TestAmerica Buffalo. Their address and phone number are:
TestAmerica Buffalo
10 Hazelwood Drive, Suite 106
Amherst, NY 14228
Phone: 716-691-2600

Detection Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - GW

Job ID: 280-156013-1

Client Sample ID: TB3 — Lab Sample ID: 280-156013-1

No Detections.

Client Sample ID: MW-12A — Lab Sample ID: 280-156013-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	23000		500		ug/L	1		6010B	Dissolved
Magnesium	9100		200		ug/L	1		6010B	Dissolved
Potassium	650		500		ug/L	1		6010B	Dissolved
Sodium	27000		1000		ug/L	1		6010B	Dissolved
Chloride	42		0.50		mg/L	1		300.0	Total/NA
Sulfate	20		1.0		mg/L	1		300.0	Total/NA
Nitrate/Nitrite	3.8	F1	0.050		mg/L	1		353.2	Total/NA
Total Organic Carbon - Average	3.1		1.0		mg/L	1		9060	Total/NA
Total Anions	3.5				meq/L	1		SM 1030E	Total/NA
Total Cations	3.1				meq/L	1		SM 1030E	Total/NA
Percent Difference	-6.1				%	1		SM 1030E	Total/NA
Calcium	23				mg/L	1		SM 1030E	Total/NA
Magnesium	9.1				mg/L	1		SM 1030E	Total/NA
Potassium	0.65				mg/L	1		SM 1030E	Total/NA
Sodium	27				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.00				mg/L	1		SM 1030E	Total/NA
Chloride	42				mg/L	1		SM 1030E	Total/NA
Sulfate	20				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	81				mg/L	1		SM 1030E	Total/NA
Alkalinity	81				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	3.8				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	-6.1				%	1		SM 1030E	Total/NA
Calculated TDS	150				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.2				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	190				mg/L	1		SM 1030E	Total/NA
Iron	0.00				mg/L	1		SM 1030E	Total/NA
Calcium	1.1				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	0.75				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.017				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	1.2				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	1.2				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.42				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	81				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	1.6				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.27				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	81		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	190		10		mg/L	1		SM 2540C	Total/NA
Field pH	6.48				SU	1		Field Sampling	Total/NA
Field Conductivity	343				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	11.00				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	10.43				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	167.9				millivolts	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - GW

Job ID: 280-156013-1

Client Sample ID: MW-12B

Lab Sample ID: 280-156013-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	56000		500		ug/L	1		6010B	Dissolved
Iron	2300		30		ug/L	1		6010B	Dissolved
Magnesium	17000		200		ug/L	1		6010B	Dissolved
Manganese	1200		3.0		ug/L	1		6010B	Dissolved
Sodium	21000		1000		ug/L	1		6010B	Dissolved
Chloride	60		0.50		mg/L	1		300.0	Total/NA
Ammonia as N	0.32		0.030		mg/L	1		350.1	Total/NA
Nitrate/Nitrite	0.13		0.050		mg/L	1		353.2	Total/NA
Total Organic Carbon - Average	1.9		1.0		mg/L	1		9060	Total/NA
Total Anions	5.9				meq/L	1		SM 1030E	Total/NA
Total Cations	5.3				meq/L	1		SM 1030E	Total/NA
Percent Difference	-5.8				%	1		SM 1030E	Total/NA
Calcium	56				mg/L	1		SM 1030E	Total/NA
Magnesium	17				mg/L	1		SM 1030E	Total/NA
Potassium	0.00				mg/L	1		SM 1030E	Total/NA
Sodium	21				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.32				mg/L	1		SM 1030E	Total/NA
Chloride	60				mg/L	1		SM 1030E	Total/NA
Sulfate	0.00				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	210				mg/L	1		SM 1030E	Total/NA
Alkalinity	210				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.13				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	-5.8				%	1		SM 1030E	Total/NA
Calculated TDS	280				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.2				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	340				mg/L	1		SM 1030E	Total/NA
Iron	2.3				mg/L	1		SM 1030E	Total/NA
Calcium	2.8				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	1.4				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	0.91				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.023				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	1.7				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	210				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	4.2				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.0093				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.12				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	210		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	340		10		mg/L	1		SM 2540C	Total/NA
Field pH	7.13				SU	1		Field Sampling	Total/NA
Field Conductivity	494				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	11.4				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	1.68				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	-31.3				millivolts	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - GW

Job ID: 280-156013-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-156013-1	TB3	Water	11/19/21 07:00	11/22/21 09:35
280-156013-2	MW-12A	Water	11/19/21 10:30	11/22/21 09:35
280-156013-3	MW-12B	Water	11/19/21 11:05	11/22/21 09:35

Method Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - GW

Job ID: 280-156013-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL DEN
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	TAL DEN
6010B	Metals (ICP)	SW846	TAL DEN
300.0	Anions, Ion Chromatography	MCAWW	TAL BUF
350.1	Nitrogen, Ammonia	MCAWW	TAL DEN
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	TAL DEN
9060	Organic Carbon, Total (TOC)	SW846	TAL DEN
SM 1030E	Cation Anion Balance	SM	TAL DEN
SM 1030E (meq)	Cation Anion Balance	SM	TAL DEN
SM 2320B	Alkalinity	SM	TAL DEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL DEN
Field Sampling	Field Sampling	EPA	TAL DEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL DEN
5030B	Purge and Trap	SW846	TAL DEN
8011	Microextraction	SW846	TAL DEN

Protocol 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.

Laboratory References:

TAL BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - GW

Job ID: 280-156013-1

Client Sample ID: TB3

Date Collected: 11/19/21 07:00
Date Received: 11/22/21 09:35

Lab Sample ID: 280-156013-1

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			12/02/21 00:23	1
1,1,1-Trichloroethane	ND		1.0		ug/L			12/02/21 00:23	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			12/02/21 00:23	1
1,1,2-Trichloroethane	ND		1.0		ug/L			12/02/21 00:23	1
1,1-Dichloroethane	ND		1.0		ug/L			12/02/21 00:23	1
1,1-Dichloroethene	ND		1.0		ug/L			12/02/21 00:23	1
1,1-Dichloropropene	ND		1.0		ug/L			12/02/21 00:23	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			12/02/21 00:23	1
1,2,3-Trichloropropane	ND		1.0		ug/L			12/02/21 00:23	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			12/02/21 00:23	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			12/02/21 00:23	1
1,2-Dichlorobenzene	ND		1.0		ug/L			12/02/21 00:23	1
1,2-Dichloroethane	ND		1.0		ug/L			12/02/21 00:23	1
1,2-Dichloropropane	ND		1.0		ug/L			12/02/21 00:23	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			12/02/21 00:23	1
1,3-Dichlorobenzene	ND		1.0		ug/L			12/02/21 00:23	1
1,3-Dichloropropane	ND		1.0		ug/L			12/02/21 00:23	1
1,4-Dichlorobenzene	ND		1.0		ug/L			12/02/21 00:23	1
2,2-Dichloropropane	ND		5.0		ug/L			12/02/21 00:23	1
2-Butanone (MEK)	ND		6.0		ug/L			12/02/21 00:23	1
2-Chlorotoluene	ND		1.0		ug/L			12/02/21 00:23	1
2-Hexanone	ND		5.0		ug/L			12/02/21 00:23	1
4-Chlorotoluene	ND		1.0		ug/L			12/02/21 00:23	1
4-Isopropyltoluene	ND		1.0		ug/L			12/02/21 00:23	1
4-Methyl-2-pentanone	ND		5.0		ug/L			12/02/21 00:23	1
Acetone	ND		10		ug/L			12/02/21 00:23	1
Benzene	ND		1.0		ug/L			12/02/21 00:23	1
Bromobenzene	ND		1.0		ug/L			12/02/21 00:23	1
Bromochloromethane	ND		1.0		ug/L			12/02/21 00:23	1
Bromodichloromethane	ND		1.0		ug/L			12/02/21 00:23	1
Bromoform	ND		1.0		ug/L			12/02/21 00:23	1
Bromomethane	ND		2.0		ug/L			12/02/21 00:23	1
Carbon disulfide	ND		2.0		ug/L			12/02/21 00:23	1
Carbon tetrachloride	ND		1.0		ug/L			12/02/21 00:23	1
Chlorobenzene	ND		1.0		ug/L			12/02/21 00:23	1
Chloroethane	ND		2.0		ug/L			12/02/21 00:23	1
Chloroform	ND		1.0		ug/L			12/02/21 00:23	1
Chloromethane	ND		2.0		ug/L			12/02/21 00:23	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			12/02/21 00:23	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			12/02/21 00:23	1
Dibromochloromethane	ND		1.0		ug/L			12/02/21 00:23	1
Dibromomethane	ND		1.0		ug/L			12/02/21 00:23	1
Dichlorodifluoromethane	ND		2.0		ug/L			12/02/21 00:23	1
Ethylbenzene	ND		1.0		ug/L			12/02/21 00:23	1
Hexachlorobutadiene	ND		1.0		ug/L			12/02/21 00:23	1
Isopropylbenzene	ND		1.0		ug/L			12/02/21 00:23	1
Methylene Chloride	ND		5.0		ug/L			12/02/21 00:23	1
Naphthalene	ND		1.0		ug/L			12/02/21 00:23	1
n-Butylbenzene	ND		1.0		ug/L			12/02/21 00:23	1

Client Sample ID: TB3

Lab Sample ID: 280-156013-1
Date Collected: 11/19/21 07:00
Matrix: Water
Date Received: 11/22/21 09:35

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		1.0		ug/L			12/02/21 00:23	1
sec-Butylbenzene	ND		1.0		ug/L			12/02/21 00:23	1
Styrene	ND		1.0		ug/L			12/02/21 00:23	1
tert-Butylbenzene	ND		1.0		ug/L			12/02/21 00:23	1
Tetrachloroethene	ND		1.0		ug/L			12/02/21 00:23	1
Toluene	ND		1.0		ug/L			12/02/21 00:23	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			12/02/21 00:23	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			12/02/21 00:23	1
Trichloroethene	ND		1.0		ug/L			12/02/21 00:23	1
Trichlorofluoromethane	ND		2.0		ug/L			12/02/21 00:23	1
Vinyl chloride	ND		1.0		ug/L			12/02/21 00:23	1
Xylenes (total)	ND		2.0		ug/L			12/02/21 00:23	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*12/02/21 00:23*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 127*		*12/02/21 00:23*	*1*
4-Bromofluorobenzene (Surr)	*107*		*78 - 120*		*12/02/21 00:23*	*1*
Dibromofluoromethane (Surr)	*97*		*77 - 120*		*12/02/21 00:23*	*1*
Toluene-d8 (Surr)	*98*		*80 - 125*		*12/02/21 00:23*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		11/30/21 14:02	12/02/21 03:25	1
1,2-Dibromoethane	ND		0.050		ug/L		11/30/21 14:02	12/02/21 03:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*110*		*70 - 130*	*11/30/21 14:02*	*12/02/21 03:25*	*1*

Client Sample ID: MW-12A

Lab Sample ID: 280-156013-2
Date Collected: 11/19/21 10:30
Matrix: Water
Date Received: 11/22/21 09:35

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			12/02/21 04:49	1
1,1,1-Trichloroethane	ND		1.0		ug/L			12/02/21 04:49	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			12/02/21 04:49	1
1,1,2-Trichloroethane	ND		1.0		ug/L			12/02/21 04:49	1
1,1-Dichloroethane	ND		1.0		ug/L			12/02/21 04:49	1
1,1-Dichloroethene	ND		1.0		ug/L			12/02/21 04:49	1
1,1-Dichloropropene	ND		1.0		ug/L			12/02/21 04:49	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			12/02/21 04:49	1
1,2,3-Trichloropropane	ND		1.0		ug/L			12/02/21 04:49	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			12/02/21 04:49	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			12/02/21 04:49	1
1,2-Dichlorobenzene	ND		1.0		ug/L			12/02/21 04:49	1
1,2-Dichloroethane	ND		1.0		ug/L			12/02/21 04:49	1
1,2-Dichloropropane	ND		1.0		ug/L			12/02/21 04:49	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			12/02/21 04:49	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - GW

Job ID: 280-156013-1

Client Sample ID: MW-12A
Date Collected: 11/19/21 10:30
Date Received: 11/22/21 09:35

Lab Sample ID: 280-156013-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0		ug/L			12/02/21 04:49	1
1,3-Dichloropropane	ND		1.0		ug/L			12/02/21 04:49	1
1,4-Dichlorobenzene	ND		1.0		ug/L			12/02/21 04:49	1
2,2-Dichloropropane	ND		5.0		ug/L			12/02/21 04:49	1
2-Butanone (MEK)	ND		6.0		ug/L			12/02/21 04:49	1
2-Chlorotoluene	ND		1.0		ug/L			12/02/21 04:49	1
2-Hexanone	ND		5.0		ug/L			12/02/21 04:49	1
4-Chlorotoluene	ND		1.0		ug/L			12/02/21 04:49	1
4-Isopropyltoluene	ND		1.0		ug/L			12/02/21 04:49	1
4-Methyl-2-pentanone	ND		5.0		ug/L			12/02/21 04:49	1
Acetone	ND		10		ug/L			12/02/21 04:49	1
Benzene	ND		1.0		ug/L			12/02/21 04:49	1
Bromobenzene	ND		1.0		ug/L			12/02/21 04:49	1
Bromochloromethane	ND		1.0		ug/L			12/02/21 04:49	1
Bromodichloromethane	ND		1.0		ug/L			12/02/21 04:49	1
Bromoform	ND		1.0		ug/L			12/02/21 04:49	1
Bromomethane	ND		2.0		ug/L			12/02/21 04:49	1
Carbon disulfide	ND		2.0		ug/L			12/02/21 04:49	1
Carbon tetrachloride	ND		1.0		ug/L			12/02/21 04:49	1
Chlorobenzene	ND		1.0		ug/L			12/02/21 04:49	1
Chloroethane	ND		2.0		ug/L			12/02/21 04:49	1
Chloroform	ND		1.0		ug/L			12/02/21 04:49	1
Chloromethane	ND		2.0		ug/L			12/02/21 04:49	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			12/02/21 04:49	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			12/02/21 04:49	1
Dibromochloromethane	ND		1.0		ug/L			12/02/21 04:49	1
Dibromomethane	ND		1.0		ug/L			12/02/21 04:49	1
Dichlorodifluoromethane	ND		2.0		ug/L			12/02/21 04:49	1
Ethylbenzene	ND		1.0		ug/L			12/02/21 04:49	1
Hexachlorobutadiene	ND		1.0		ug/L			12/02/21 04:49	1
Isopropylbenzene	ND		1.0		ug/L			12/02/21 04:49	1
Methylene Chloride	ND		5.0		ug/L			12/02/21 04:49	1
Naphthalene	ND		1.0		ug/L			12/02/21 04:49	1
n-Butylbenzene	ND		1.0		ug/L			12/02/21 04:49	1
N-Propylbenzene	ND		1.0		ug/L			12/02/21 04:49	1
sec-Butylbenzene	ND		1.0		ug/L			12/02/21 04:49	1
Styrene	ND		1.0		ug/L			12/02/21 04:49	1
tert-Butylbenzene	ND		1.0		ug/L			12/02/21 04:49	1
Tetrachloroethene	ND		1.0		ug/L			12/02/21 04:49	1
Toluene	ND		1.0		ug/L			12/02/21 04:49	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			12/02/21 04:49	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			12/02/21 04:49	1
Trichloroethene	ND		1.0		ug/L			12/02/21 04:49	1
Trichlorofluoromethane	ND		2.0		ug/L			12/02/21 04:49	1
Vinyl chloride	ND		1.0		ug/L			12/02/21 04:49	1
Xylenes (total)	ND		2.0		ug/L			12/02/21 04:49	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*12/02/21 04:49*	*1*

Client Sample ID: MW-12A

Date Collected: 11/19/21 10:30
Date Received: 11/22/21 09:35

Lab Sample ID: 280-156013-2

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 127*		*12/02/21 04:49*	*1*
4-Bromofluorobenzene (Surr)	*103*		*78 - 120*		*12/02/21 04:49*	*1*
Dibromofluoromethane (Surr)	*99*		*77 - 120*		*12/02/21 04:49*	*1*
Toluene-d8 (Surr)	*99*		*80 - 125*		*12/02/21 04:49*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		11/30/21 14:02	12/02/21 03:49	1
1,2-Dibromoethane	ND		0.050		ug/L		11/30/21 14:02	12/02/21 03:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*113*		*70 - 130*	*11/30/21 14:02*	*12/02/21 03:49*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**23000**		500		ug/L		11/23/21 15:30	11/24/21 06:50	1
Iron	ND		30		ug/L		11/23/21 15:30	11/24/21 06:50	1
Magnesium	**9100**		200		ug/L		11/23/21 15:30	11/24/21 06:50	1
Manganese	ND		3.0		ug/L		11/23/21 15:30	11/24/21 06:50	1
Potassium	**650**		500		ug/L		11/23/21 15:30	11/24/21 06:50	1
Sodium	**27000**		1000		ug/L		11/23/21 15:30	11/24/21 06:50	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	**3.5**				meq/L			12/15/21 11:29	1
Total Cations	**3.1**				meq/L			12/15/21 11:29	1
Percent Difference	**-6.1**				%			12/15/21 11:29	1
Calcium	**23**				mg/L			12/15/21 11:29	1
Magnesium	**9.1**				mg/L			12/15/21 11:29	1
Potassium	**0.65**				mg/L			12/15/21 11:29	1
Sodium	**27**				mg/L			12/15/21 11:29	1
Ammonia as N	**0.00**				mg/L			12/15/21 11:29	1
Chloride	**42**				mg/L			12/15/21 11:29	1
Sulfate	**20**				mg/L			12/15/21 11:29	1
Bicarbonate Alkalinity	**81**				mg/L			12/15/21 11:29	1
Alkalinity	**81**				mg/L			12/15/21 11:29	1
Nitrate/Nitrite	**3.8**				mg/L			12/15/21 11:29	1
Anion/Cation Balance	**-6.1**				%			12/15/21 11:29	1
Calculated TDS	**150**				mg/L			12/15/21 11:29	1
TDS Ratio	**1.2**				NONE			12/15/21 11:29	1
Total Dissolved Solids	**190**				mg/L			12/15/21 11:29	1
Iron	**0.00**				mg/L			12/15/21 11:29	1
Calcium	**1.1**				meq/L			12/15/21 11:29	1
Magnesium	**0.75**				meq/L			12/15/21 11:29	1
Potassium	**0.017**				meq/L			12/15/21 11:29	1
Sodium	**1.2**				meq/L			12/15/21 11:29	1
Ammonia as N	**0.00**				meq/L			12/15/21 11:29	1
Chloride	**1.2**				meq/L			12/15/21 11:29	1
Sulfate	**0.42**				meq/L			12/15/21 11:29	1
Alkalinity	**81**				mg/L			12/15/21 11:29	1
Bicarbonate Alkalinity	**1.6**				meq/L			12/15/21 11:29	1

Client Sample ID: MW-12A

Lab Sample ID: 280-156013-2

Date Collected: 11/19/21 10:30

Matrix: Water

Date Received: 11/22/21 09:35

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate/Nitrite	0.27				meq/L			12/15/21 11:29	1
Iron	0.00				meq/L			12/15/21 11:29	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	42		0.50		mg/L			11/30/21 13:03	1
Sulfate	20		1.0		mg/L			11/30/21 13:03	1
Ammonia as N	ND		0.030		mg/L			12/09/21 10:47	1
Nitrate/Nitrite	3.8	F1	0.050		mg/L			12/02/21 17:24	1
Total Organic Carbon - Average	3.1		1.0		mg/L			12/11/21 06:33	1
Bicarbonate Alkalinity	81		10		mg/L			12/02/21 15:07	1
Total Dissolved Solids	190		10		mg/L			11/24/21 09:13	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.48				SU			11/19/21 11:30	1
Field Conductivity	343				umhos/cm			11/19/21 11:30	1
Field Temperature	11.00				Degrees C			11/19/21 11:30	1
Field Dissolved Oxygen	10.43				mg/L			11/19/21 11:30	1
Field EH/ORP	167.9				millivolts			11/19/21 11:30	1

Client Sample ID: MW-12B

Lab Sample ID: 280-156013-3

Date Collected: 11/19/21 11:05

Matrix: Water

Date Received: 11/22/21 09:35

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			12/02/21 05:11	1
1,1,1-Trichloroethane	ND		1.0		ug/L			12/02/21 05:11	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			12/02/21 05:11	1
1,1,2-Trichloroethane	ND		1.0		ug/L			12/02/21 05:11	1
1,1-Dichloroethane	ND		1.0		ug/L			12/02/21 05:11	1
1,1-Dichloroethene	ND		1.0		ug/L			12/02/21 05:11	1
1,1-Dichloropropene	ND		1.0		ug/L			12/02/21 05:11	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			12/02/21 05:11	1
1,2,3-Trichloropropane	ND		1.0		ug/L			12/02/21 05:11	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			12/02/21 05:11	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			12/02/21 05:11	1
1,2-Dichlorobenzene	ND		1.0		ug/L			12/02/21 05:11	1
1,2-Dichloroethane	ND		1.0		ug/L			12/02/21 05:11	1
1,2-Dichloropropane	ND		1.0		ug/L			12/02/21 05:11	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			12/02/21 05:11	1
1,3-Dichlorobenzene	ND		1.0		ug/L			12/02/21 05:11	1
1,3-Dichloropropane	ND		1.0		ug/L			12/02/21 05:11	1
1,4-Dichlorobenzene	ND		1.0		ug/L			12/02/21 05:11	1
2,2-Dichloropropane	ND		5.0		ug/L			12/02/21 05:11	1
2-Butanone (MEK)	ND		6.0		ug/L			12/02/21 05:11	1
2-Chlorotoluene	ND		1.0		ug/L			12/02/21 05:11	1
2-Hexanone	ND		5.0		ug/L			12/02/21 05:11	1
4-Chlorotoluene	ND		1.0		ug/L			12/02/21 05:11	1
4-Isopropyltoluene	ND		1.0		ug/L			12/02/21 05:11	1
4-Methyl-2-pentanone	ND		5.0		ug/L			12/02/21 05:11	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - GW

Job ID: 280-156013-1

Client Sample ID: MW-12B
Date Collected: 11/19/21 11:05
Date Received: 11/22/21 09:35

Lab Sample ID: 280-156013-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10		ug/L			12/02/21 05:11	1
Benzene	ND		1.0		ug/L			12/02/21 05:11	1
Bromobenzene	ND		1.0		ug/L			12/02/21 05:11	1
Bromochloromethane	ND		1.0		ug/L			12/02/21 05:11	1
Bromodichloromethane	ND		1.0		ug/L			12/02/21 05:11	1
Bromoform	ND		1.0		ug/L			12/02/21 05:11	1
Bromomethane	ND		2.0		ug/L			12/02/21 05:11	1
Carbon disulfide	ND		2.0		ug/L			12/02/21 05:11	1
Carbon tetrachloride	ND		1.0		ug/L			12/02/21 05:11	1
Chlorobenzene	ND		1.0		ug/L			12/02/21 05:11	1
Chloroethane	ND		2.0		ug/L			12/02/21 05:11	1
Chloroform	ND		1.0		ug/L			12/02/21 05:11	1
Chloromethane	ND		2.0		ug/L			12/02/21 05:11	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			12/02/21 05:11	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			12/02/21 05:11	1
Dibromochloromethane	ND		1.0		ug/L			12/02/21 05:11	1
Dibromomethane	ND		1.0		ug/L			12/02/21 05:11	1
Dichlorodifluoromethane	ND		2.0		ug/L			12/02/21 05:11	1
Ethylbenzene	ND		1.0		ug/L			12/02/21 05:11	1
Hexachlorobutadiene	ND		1.0		ug/L			12/02/21 05:11	1
Isopropylbenzene	ND		1.0		ug/L			12/02/21 05:11	1
Methylene Chloride	ND		5.0		ug/L			12/02/21 05:11	1
Naphthalene	ND		1.0		ug/L			12/02/21 05:11	1
n-Butylbenzene	ND		1.0		ug/L			12/02/21 05:11	1
N-Propylbenzene	ND		1.0		ug/L			12/02/21 05:11	1
sec-Butylbenzene	ND		1.0		ug/L			12/02/21 05:11	1
Styrene	ND		1.0		ug/L			12/02/21 05:11	1
tert-Butylbenzene	ND		1.0		ug/L			12/02/21 05:11	1
Tetrachloroethene	ND		1.0		ug/L			12/02/21 05:11	1
Toluene	ND		1.0		ug/L			12/02/21 05:11	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			12/02/21 05:11	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			12/02/21 05:11	1
Trichloroethene	ND		1.0		ug/L			12/02/21 05:11	1
Trichlorofluoromethane	ND		2.0		ug/L			12/02/21 05:11	1
Vinyl chloride	ND		1.0		ug/L			12/02/21 05:11	1
Xylenes (total)	ND		2.0		ug/L			12/02/21 05:11	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*12/02/21 05:11*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 127*		*12/02/21 05:11*	*1*
4-Bromofluorobenzene (Surr)	*107*		*78 - 120*		*12/02/21 05:11*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 120*		*12/02/21 05:11*	*1*
Toluene-d8 (Surr)	*99*		*80 - 125*		*12/02/21 05:11*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		11/30/21 14:02	12/02/21 04:13	1
1,2-Dibromoethane	ND		0.050		ug/L		11/30/21 14:02	12/02/21 04:13	1

Client Sample ID: MW-12B

Date Collected: 11/19/21 11:05
Date Received: 11/22/21 09:35

Lab Sample ID: 280-156013-3

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*110*		*70 - 130*	*11/30/21 14:02*	*12/02/21 04:13*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**56000**		500		ug/L		11/23/21 15:30	11/24/21 06:55	1
Iron	**2300**		30		ug/L		11/23/21 15:30	11/24/21 06:55	1
Magnesium	**17000**		200		ug/L		11/23/21 15:30	11/24/21 06:55	1
Manganese	**1200**		3.0		ug/L		11/23/21 15:30	11/24/21 06:55	1
Potassium	ND		500		ug/L		11/23/21 15:30	11/24/21 06:55	1
Sodium	**21000**		1000		ug/L		11/23/21 15:30	11/24/21 06:55	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	**5.9**				meq/L			12/15/21 11:29	1
Total Cations	**5.3**				meq/L			12/15/21 11:29	1
Percent Difference	**-5.8**				%			12/15/21 11:29	1
Calcium	**56**				mg/L			12/15/21 11:29	1
Magnesium	**17**				mg/L			12/15/21 11:29	1
Potassium	**0.00**				mg/L			12/15/21 11:29	1
Sodium	**21**				mg/L			12/15/21 11:29	1
Ammonia as N	**0.32**				mg/L			12/15/21 11:29	1
Chloride	**60**				mg/L			12/15/21 11:29	1
Sulfate	**0.00**				mg/L			12/15/21 11:29	1
Bicarbonate Alkalinity	**210**				mg/L			12/15/21 11:29	1
Alkalinity	**210**				mg/L			12/15/21 11:29	1
Nitrate/Nitrite	**0.13**				mg/L			12/15/21 11:29	1
Anion/Cation Balance	**-5.8**				%			12/15/21 11:29	1
Calculated TDS	**280**				mg/L			12/15/21 11:29	1
TDS Ratio	**1.2**				NONE			12/15/21 11:29	1
Total Dissolved Solids	**340**				mg/L			12/15/21 11:29	1
Iron	**2.3**				mg/L			12/15/21 11:29	1
Calcium	**2.8**				meq/L			12/15/21 11:29	1
Magnesium	**1.4**				meq/L			12/15/21 11:29	1
Potassium	**0.00**				meq/L			12/15/21 11:29	1
Sodium	**0.91**				meq/L			12/15/21 11:29	1
Ammonia as N	**0.023**				meq/L			12/15/21 11:29	1
Chloride	**1.7**				meq/L			12/15/21 11:29	1
Sulfate	**0.00**				meq/L			12/15/21 11:29	1
Alkalinity	**210**				mg/L			12/15/21 11:29	1
Bicarbonate Alkalinity	**4.2**				meq/L			12/15/21 11:29	1
Nitrate/Nitrite	**0.0093**				meq/L			12/15/21 11:29	1
Iron	**0.12**				meq/L			12/15/21 11:29	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**60**		0.50		mg/L			11/30/21 13:22	1
Sulfate	ND		1.0		mg/L			11/30/21 13:22	1
Ammonia as N	**0.32**		0.030		mg/L			12/09/21 11:07	1
Nitrate/Nitrite	**0.13**		0.050		mg/L			12/07/21 17:01	1
Total Organic Carbon - Average	**1.9**		1.0		mg/L			12/09/21 07:32	1
Bicarbonate Alkalinity	**210**		10		mg/L			12/02/21 15:02	1
Total Dissolved Solids	**340**		10		mg/L			11/24/21 09:13	1

Client Sample Results

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - GW

Job ID: 280-156013-1

Client Sample ID: MW-12B

Date Collected: 11/19/21 11:05
Date Received: 11/22/21 09:35

Lab Sample ID: 280-156013-3

Matrix: Water

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.13				SU			11/19/21 12:05	1
Field Conductivity	494				umhos/cm			11/19/21 12:05	1
Field Temperature	11.4				Degrees C			11/19/21 12:05	1
Field Dissolved Oxygen	1.68				mg/L			11/19/21 12:05	1
Field EH/ORP	-31.3				millivolts			11/19/21 12:05	1

Surrogate Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - GW

Job ID: 280-156013-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-127)	(78-120)	(77-120)	(80-125)
280-156013-1	TB3	99	107	97	98
280-156013-2	MW-12A	102	103	99	99
280-156013-3	MW-12B	104	107	100	99
LCS 280-559317/4	Lab Control Sample	97	106	100	102
LCSD 280-559317/5	Lab Control Sample Dup	95	105	99	100
MB 280-559317/9	Method Blank	99	105	99	100

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		12DBP1
Lab Sample ID	Client Sample ID	(70-130)
280-156013-1	TB3	110
280-156013-2	MW-12A	113
280-156013-3	MW-12B	110
LCS 280-559134/2-A	Lab Control Sample	113
LCSD 280-559134/3-A	Lab Control Sample Dup	113
MB 280-559134/1-A	Method Blank	109

Surrogate Legend

12DBP = 1,2-Dibromopropane

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 280-559317/9
Matrix: Water
Analysis Batch: 559317

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			12/01/21 22:55	1
1,1,1-Trichloroethane	ND		1.0		ug/L			12/01/21 22:55	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			12/01/21 22:55	1
1,1,2-Trichloroethane	ND		1.0		ug/L			12/01/21 22:55	1
1,1-Dichloroethane	ND		1.0		ug/L			12/01/21 22:55	1
1,1-Dichloroethene	ND		1.0		ug/L			12/01/21 22:55	1
1,1-Dichloropropene	ND		1.0		ug/L			12/01/21 22:55	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			12/01/21 22:55	1
1,2,3-Trichloropropane	ND		1.0		ug/L			12/01/21 22:55	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			12/01/21 22:55	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			12/01/21 22:55	1
1,2-Dichlorobenzene	ND		1.0		ug/L			12/01/21 22:55	1
1,2-Dichloroethane	ND		1.0		ug/L			12/01/21 22:55	1
1,2-Dichloropropane	ND		1.0		ug/L			12/01/21 22:55	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			12/01/21 22:55	1
1,3-Dichlorobenzene	ND		1.0		ug/L			12/01/21 22:55	1
1,3-Dichloropropane	ND		1.0		ug/L			12/01/21 22:55	1
1,4-Dichlorobenzene	ND		1.0		ug/L			12/01/21 22:55	1
2,2-Dichloropropane	ND		5.0		ug/L			12/01/21 22:55	1
2-Butanone (MEK)	ND		6.0		ug/L			12/01/21 22:55	1
2-Chlorotoluene	ND		1.0		ug/L			12/01/21 22:55	1
2-Hexanone	ND		5.0		ug/L			12/01/21 22:55	1
4-Chlorotoluene	ND		1.0		ug/L			12/01/21 22:55	1
4-Isopropyltoluene	ND		1.0		ug/L			12/01/21 22:55	1
4-Methyl-2-pentanone	ND		5.0		ug/L			12/01/21 22:55	1
Acetone	ND		10		ug/L			12/01/21 22:55	1
Benzene	ND		1.0		ug/L			12/01/21 22:55	1
Bromobenzene	ND		1.0		ug/L			12/01/21 22:55	1
Bromochloromethane	ND		1.0		ug/L			12/01/21 22:55	1
Bromodichloromethane	ND		1.0		ug/L			12/01/21 22:55	1
Bromoform	ND		1.0		ug/L			12/01/21 22:55	1
Bromomethane	ND		2.0		ug/L			12/01/21 22:55	1
Carbon disulfide	ND		2.0		ug/L			12/01/21 22:55	1
Carbon tetrachloride	ND		1.0		ug/L			12/01/21 22:55	1
Chlorobenzene	ND		1.0		ug/L			12/01/21 22:55	1
Chloroethane	ND		2.0		ug/L			12/01/21 22:55	1
Chloroform	ND		1.0		ug/L			12/01/21 22:55	1
Chloromethane	ND		2.0		ug/L			12/01/21 22:55	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			12/01/21 22:55	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			12/01/21 22:55	1
Dibromochloromethane	ND		1.0		ug/L			12/01/21 22:55	1
Dibromomethane	ND		1.0		ug/L			12/01/21 22:55	1
Dichlorodifluoromethane	ND		2.0		ug/L			12/01/21 22:55	1
Ethylbenzene	ND		1.0		ug/L			12/01/21 22:55	1
Hexachlorobutadiene	ND		1.0		ug/L			12/01/21 22:55	1
Isopropylbenzene	ND		1.0		ug/L			12/01/21 22:55	1
Methylene Chloride	ND		5.0		ug/L			12/01/21 22:55	1
Naphthalene	ND		1.0		ug/L			12/01/21 22:55	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 280-559317/9
Matrix: Water
Analysis Batch: 559317

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		1.0		ug/L			12/01/21 22:55	1
N-Propylbenzene	ND		1.0		ug/L			12/01/21 22:55	1
sec-Butylbenzene	ND		1.0		ug/L			12/01/21 22:55	1
Styrene	ND		1.0		ug/L			12/01/21 22:55	1
tert-Butylbenzene	ND		1.0		ug/L			12/01/21 22:55	1
Tetrachloroethene	ND		1.0		ug/L			12/01/21 22:55	1
Toluene	ND		1.0		ug/L			12/01/21 22:55	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			12/01/21 22:55	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			12/01/21 22:55	1
Trichloroethene	ND		1.0		ug/L			12/01/21 22:55	1
Trichlorofluoromethane	ND		2.0		ug/L			12/01/21 22:55	1
Vinyl chloride	ND		1.0		ug/L			12/01/21 22:55	1
Xylenes (total)	ND		2.0		ug/L			12/01/21 22:55	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*12/01/21 22:55*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 127*		*12/01/21 22:55*	*1*
4-Bromofluorobenzene (Surr)	*105*		*78 - 120*		*12/01/21 22:55*	*1*
Dibromofluoromethane (Surr)	*99*		*77 - 120*		*12/01/21 22:55*	*1*
Toluene-d8 (Surr)	*100*		*80 - 125*		*12/01/21 22:55*	*1*

Lab Sample ID: LCS 280-559317/4
Matrix: Water
Analysis Batch: 559317

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	25.0	23.2		ug/L		93	65 - 135
1,1,1-Trichloroethane	25.0	25.4		ug/L		102	65 - 135
1,1,2,2-Tetrachloroethane	25.0	22.3		ug/L		89	58 - 135
1,1,2-Trichloroethane	25.0	23.8		ug/L		95	64 - 135
1,1-Dichloroethane	25.0	25.9		ug/L		103	65 - 135
1,1-Dichloroethene	25.0	26.9		ug/L		108	65 - 136
1,1-Dichloropropene	25.0	26.8		ug/L		107	65 - 135
1,2,3-Trichlorobenzene	25.0	17.2		ug/L		69	60 - 135
1,2,3-Trichloropropane	25.0	22.5		ug/L		90	65 - 135
1,2,4-Trichlorobenzene	25.0	20.2		ug/L		81	58 - 135
1,2,4-Trimethylbenzene	25.0	25.3		ug/L		101	65 - 135
1,2-Dichlorobenzene	25.0	23.0		ug/L		92	65 - 135
1,2-Dichloroethane	25.0	22.8		ug/L		91	65 - 135
1,2-Dichloropropane	25.0	25.4		ug/L		102	64 - 135
1,3,5-Trimethylbenzene	25.0	24.6		ug/L		98	65 - 135
1,3-Dichlorobenzene	25.0	23.3		ug/L		93	65 - 135
1,3-Dichloropropane	25.0	22.0		ug/L		88	64 - 135
1,4-Dichlorobenzene	25.0	23.5		ug/L		94	65 - 135
2,2-Dichloropropane	25.0	26.1		ug/L		104	65 - 135
2-Butanone (MEK)	100	93.7		ug/L		94	44 - 177

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-559317/4
Matrix: Water
Analysis Batch: 559317

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-Chlorotoluene	25.0	25.8		ug/L		103	65 - 135
2-Hexanone	100	84.1		ug/L		84	57 - 139
4-Chlorotoluene	25.0	25.1		ug/L		100	65 - 135
4-Isopropyltoluene	25.0	25.2		ug/L		101	65 - 135
4-Methyl-2-pentanone	100	91.3		ug/L		91	60 - 150
Acetone	100	92.8		ug/L		93	39 - 156
Benzene	25.0	24.9		ug/L		99	65 - 135
Bromobenzene	25.0	24.6		ug/L		98	65 - 135
Bromochloromethane	25.0	24.7		ug/L		99	65 - 135
Bromodichloromethane	25.0	24.8		ug/L		99	65 - 135
Bromoform	25.0	16.7		ug/L		67	62 - 135
Bromomethane	25.0	26.1		ug/L		104	45 - 135
Carbon disulfide	25.0	23.7		ug/L		95	55 - 143
Carbon tetrachloride	25.0	22.3		ug/L		89	65 - 135
Chlorobenzene	25.0	23.0		ug/L		92	65 - 135
Chloroethane	25.0	29.5		ug/L		118	46 - 136
Chloroform	25.0	24.6		ug/L		99	65 - 135
Chloromethane	25.0	27.3		ug/L		109	34 - 145
cis-1,2-Dichloroethene	25.0	24.2		ug/L		97	65 - 135
cis-1,3-Dichloropropene	25.0	23.4		ug/L		94	65 - 135
Dibromochloromethane	25.0	19.3		ug/L		77	65 - 135
Dibromomethane	25.0	23.3		ug/L		93	65 - 135
Dichlorodifluoromethane	25.0	26.0		ug/L		104	43 - 142
Ethylbenzene	25.0	24.5		ug/L		98	65 - 135
Hexachlorobutadiene	25.0	20.9		ug/L		84	65 - 135
Isopropylbenzene	25.0	27.2		ug/L		109	65 - 135
Methylene Chloride	25.0	24.2		ug/L		97	54 - 141
Naphthalene	25.0	16.9		ug/L		68	42 - 135
n-Butylbenzene	25.0	24.8		ug/L		99	64 - 135
N-Propylbenzene	25.0	26.8		ug/L		107	65 - 135
sec-Butylbenzene	25.0	25.8		ug/L		103	64 - 135
Styrene	25.0	23.7		ug/L		95	65 - 135
tert-Butylbenzene	25.0	25.9		ug/L		104	65 - 135
Tetrachloroethene	25.0	24.6		ug/L		98	65 - 135
Toluene	25.0	25.2		ug/L		101	65 - 135
trans-1,2-Dichloroethene	25.0	25.4		ug/L		102	65 - 135
trans-1,3-Dichloropropene	25.0	22.3		ug/L		89	65 - 135
Trichloroethene	25.0	25.1		ug/L		100	65 - 135
Trichlorofluoromethane	25.0	28.3		ug/L		113	53 - 137
Vinyl chloride	25.0	28.2		ug/L		113	40 - 137

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 127*
4-Bromofluorobenzene (Surr)	*106*		*78 - 120*
Dibromofluoromethane (Surr)	*100*		*77 - 120*
Toluene-d8 (Surr)	*102*		*80 - 125*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 280-559317/5
Matrix: Water
Analysis Batch: 559317

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane			25.0	23.5		ug/L		94	65 - 135	1	20
1,1,1-Trichloroethane			25.0	25.7		ug/L		103	65 - 135	1	20
1,1,2,2-Tetrachloroethane			25.0	22.0		ug/L		88	58 - 135	1	20
1,1,2-Trichloroethane			25.0	22.6		ug/L		90	64 - 135	5	27
1,1-Dichloroethane			25.0	25.3		ug/L		101	65 - 135	2	21
1,1-Dichloroethene			25.0	26.8		ug/L		107	65 - 136	0	20
1,1-Dichloropropene			25.0	26.7		ug/L		107	65 - 135	1	21
1,2,3-Trichlorobenzene			25.0	17.6		ug/L		70	60 - 135	2	36
1,2,3-Trichloropropane			25.0	21.6		ug/L		87	65 - 135	4	23
1,2,4-Trichlorobenzene			25.0	20.1		ug/L		80	58 - 135	0	25
1,2,4-Trimethylbenzene			25.0	25.1		ug/L		100	65 - 135	1	20
1,2-Dichlorobenzene			25.0	22.8		ug/L		91	65 - 135	1	20
1,2-Dichloroethane			25.0	22.3		ug/L		89	65 - 135	2	20
1,2-Dichloropropane			25.0	24.4		ug/L		98	64 - 135	4	20
1,3,5-Trimethylbenzene			25.0	24.3		ug/L		97	65 - 135	1	20
1,3-Dichlorobenzene			25.0	23.1		ug/L		93	65 - 135	1	20
1,3-Dichloropropane			25.0	22.4		ug/L		90	64 - 135	2	20
1,4-Dichlorobenzene			25.0	23.1		ug/L		92	65 - 135	2	23
2,2-Dichloropropane			25.0	27.1		ug/L		108	65 - 135	4	20
2-Butanone (MEK)			100	91.2		ug/L		91	44 - 177	3	32
2-Chlorotoluene			25.0	24.9		ug/L		100	65 - 135	3	20
2-Hexanone			100	84.5		ug/L		85	57 - 139	0	25
4-Chlorotoluene			25.0	25.0		ug/L		100	65 - 135	1	20
4-Isopropyltoluene			25.0	25.3		ug/L		101	65 - 135	0	20
4-Methyl-2-pentanone			100	87.5		ug/L		88	60 - 150	4	22
Acetone			100	90.0		ug/L		90	39 - 156	3	23
Benzene			25.0	24.7		ug/L		99	65 - 135	1	20
Bromobenzene			25.0	24.0		ug/L		96	65 - 135	2	26
Bromochloromethane			25.0	24.2		ug/L		97	65 - 135	2	29
Bromodichloromethane			25.0	23.9		ug/L		96	65 - 135	4	20
Bromoform			25.0	17.2		ug/L		69	62 - 135	3	27
Bromomethane			25.0	24.7		ug/L		99	45 - 135	6	33
Carbon disulfide			25.0	23.6		ug/L		94	55 - 143	1	20
Carbon tetrachloride			25.0	22.3		ug/L		89	65 - 135	0	21
Chlorobenzene			25.0	23.2		ug/L		93	65 - 135	1	20
Chloroethane			25.0	28.0		ug/L		112	46 - 136	5	25
Chloroform			25.0	24.4		ug/L		98	65 - 135	1	20
Chloromethane			25.0	27.7		ug/L		111	34 - 145	2	24
cis-1,2-Dichloroethene			25.0	23.9		ug/L		96	65 - 135	1	20
cis-1,3-Dichloropropene			25.0	24.5		ug/L		98	65 - 135	4	26
Dibromochloromethane			25.0	19.8		ug/L		79	65 - 135	2	20
Dibromomethane			25.0	22.5		ug/L		90	65 - 135	3	26
Dichlorodifluoromethane			25.0	25.5		ug/L		102	43 - 142	2	30
Ethylbenzene			25.0	24.6		ug/L		98	65 - 135	1	20
Hexachlorobutadiene			25.0	22.0		ug/L		88	65 - 135	5	25
Isopropylbenzene			25.0	27.0		ug/L		108	65 - 135	1	20
Methylene Chloride			25.0	24.5		ug/L		98	54 - 141	1	26
Naphthalene			25.0	17.9		ug/L		72	42 - 135	6	23

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 280-559317/5
Matrix: Water
Analysis Batch: 559317

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
n-Butylbenzene			25.0	24.8		ug/L		99	64 - 135	0	21
N-Propylbenzene			25.0	25.6		ug/L		102	65 - 135	5	20
sec-Butylbenzene			25.0	26.2		ug/L		105	64 - 135	2	21
Styrene			25.0	23.9		ug/L		95	65 - 135	1	26
tert-Butylbenzene			25.0	25.9		ug/L		103	65 - 135	0	21
Tetrachloroethene			25.0	25.1		ug/L		100	65 - 135	2	20
Toluene			25.0	24.3		ug/L		97	65 - 135	4	20
trans-1,2-Dichloroethene			25.0	25.0		ug/L		100	65 - 135	2	24
trans-1,3-Dichloropropene			25.0	22.2		ug/L		89	65 - 135	1	26
Trichloroethene			25.0	25.1		ug/L		100	65 - 135	0	20
Trichlorofluoromethane			25.0	28.2		ug/L		113	53 - 137	0	27
Vinyl chloride			25.0	27.8		ug/L		111	40 - 137	1	24

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 127*
4-Bromofluorobenzene (Surr)	*105*		*78 - 120*
Dibromofluoromethane (Surr)	*99*		*77 - 120*
Toluene-d8 (Surr)	*100*		*80 - 125*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Lab Sample ID: MB 280-559134/1-A
Matrix: Water
Analysis Batch: 559266

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 559134

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		11/30/21 14:02	12/01/21 18:58	1
1,2-Dibromoethane	ND		0.050		ug/L		11/30/21 14:02	12/01/21 18:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*109*		*70 - 130*	*11/30/21 14:02*	*12/01/21 18:58*	*1*

Lab Sample ID: LCS 280-559134/2-A
Matrix: Water
Analysis Batch: 559266

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 559134

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromo-3-Chloropropane			0.250	0.245		ug/L		98	60 - 140
1,2-Dibromoethane			0.250	0.256		ug/L		102	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dibromopropane	*113*		*70 - 130*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC) (Continued)

Lab Sample ID: LCSD 280-559134/3-A
Matrix: Water
Analysis Batch: 559266

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 559134

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.250	0.249		ug/L		100	60 - 140	2	10
1,2-Dibromoethane			0.250	0.240		ug/L		96	60 - 140	7	10

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dibromopropane	*113*		*70 - 130*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 280-558430/1-A
Matrix: Water
Analysis Batch: 558612

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 558430

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		500		ug/L		11/23/21 15:30	11/24/21 04:43	1
Iron	ND		30		ug/L		11/23/21 15:30	11/24/21 04:43	1
Magnesium	ND		200		ug/L		11/23/21 15:30	11/24/21 04:43	1
Manganese	ND		3.0		ug/L		11/23/21 15:30	11/24/21 04:43	1
Potassium	ND		500		ug/L		11/23/21 15:30	11/24/21 04:43	1
Sodium	ND		1000		ug/L		11/23/21 15:30	11/24/21 04:43	1

Lab Sample ID: LCS 280-558430/2-A
Matrix: Water
Analysis Batch: 558612

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 558430

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Calcium			50000	48600		ug/L		97	90 - 111		
Iron			10000	9840		ug/L		98	89 - 115		
Magnesium			50000	49900		ug/L		100	90 - 113		
Manganese			1000	1000		ug/L		100	90 - 110		
Potassium			50000	50000		ug/L		100	89 - 114		
Sodium			50000	48500		ug/L		97	90 - 115		

Lab Sample ID: 280-155959-B-2-B MS
Matrix: Water
Analysis Batch: 558612

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 558430

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Calcium	130000		50000	172000		ug/L		94	48 - 153		
Iron	350000		10000	359000	4	ug/L		60	52 - 155		
Magnesium	81000		50000	131000		ug/L		100	62 - 146		
Manganese	5600		1000	6480	4	ug/L		91	79 - 121		
Potassium	14000		50000	65500		ug/L		104	76 - 132		
Sodium	52000		50000	106000		ug/L		107	70 - 203		

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 280-155959-B-2-C MSD
Matrix: Water
Analysis Batch: 558612

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 558430

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	130000		50000	174000		ug/L		97	48 - 153	1	20
Iron	350000		10000	362000	4	ug/L		89	52 - 155	1	20
Magnesium	81000		50000	132000		ug/L		102	62 - 146	1	20
Manganese	5600		1000	6530	4	ug/L		97	79 - 121	1	20
Potassium	14000		50000	66300		ug/L		105	76 - 132	1	20
Sodium	52000		50000	107000		ug/L		109	70 - 203	1	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 480-606967/4
Matrix: Water
Analysis Batch: 606967

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			11/30/21 07:10	1
Sulfate	ND		1.0		mg/L			11/30/21 07:10	1

Lab Sample ID: LCS 480-606967/3
Matrix: Water
Analysis Batch: 606967

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	49.3		mg/L		99	90 - 110
Sulfate	50.0	49.1		mg/L		98	90 - 110

Lab Sample ID: 280-155958-E-2 MS
Matrix: Water
Analysis Batch: 606967

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	ND		50.0	48.8		mg/L		98	81 - 120
Sulfate	ND		50.0	48.4		mg/L		97	80 - 120

Lab Sample ID: 280-155958-E-2 MSD
Matrix: Water
Analysis Batch: 606967

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	ND		50.0	49.1		mg/L		98	81 - 120	1	15
Sulfate	ND		50.0	48.9		mg/L		98	80 - 120	1	15

Lab Sample ID: 410-63989-A-1 MS
Matrix: Water
Analysis Batch: 606967

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	13		50.0	61.3		mg/L		96	81 - 120
Sulfate	8.5		50.0	56.6		mg/L		96	80 - 120

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-560210/20
Matrix: Water
Analysis Batch: 560210

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.030		mg/L			12/09/21 10:29	1

Lab Sample ID: LCS 280-560210/18
Matrix: Water
Analysis Batch: 560210

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Ammonia as N			2.50	2.48		mg/L		99	90 - 110		

Lab Sample ID: LCSD 280-560210/19
Matrix: Water
Analysis Batch: 560210

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ammonia as N			2.50	2.49		mg/L		100	90 - 110	0	10

Lab Sample ID: 280-156013-3 MS
Matrix: Water
Analysis Batch: 560210

Client Sample ID: MW-12B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Ammonia as N	0.32		1.00	1.30		mg/L		98	90 - 110		

Lab Sample ID: 280-156013-3 MSD
Matrix: Water
Analysis Batch: 560210

Client Sample ID: MW-12B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ammonia as N	0.32		1.00	1.31		mg/L		100	90 - 110	1	10

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-559452/22
Matrix: Water
Analysis Batch: 559452

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate/Nitrite	ND		0.050		mg/L			12/02/21 17:22	1

Lab Sample ID: LCS 280-559452/21
Matrix: Water
Analysis Batch: 559452

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Nitrate/Nitrite			5.00	4.97		mg/L		99	90 - 110		

Method: 353.2 - Nitrogen, Nitrate-Nitrite (Continued)

Lab Sample ID: 280-156013-2 MS
Matrix: Water
Analysis Batch: 559452

Client Sample ID: MW-12A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Nitrate/Nitrite	3.8	F1	4.00	7.15	F1	mg/L		84	90 - 110		

Lab Sample ID: 280-156013-2 MSD
Matrix: Water
Analysis Batch: 559452

Client Sample ID: MW-12A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate/Nitrite	3.8	F1	4.00	7.17	F1	mg/L		85	90 - 110	0	10

Lab Sample ID: MB 280-559905/22
Matrix: Water
Analysis Batch: 559905

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate/Nitrite	ND		0.050		mg/L			12/07/21 16:51	1

Lab Sample ID: LCS 280-559905/21
Matrix: Water
Analysis Batch: 559905

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Nitrate/Nitrite			5.00	4.87		mg/L		97	90 - 110		

Lab Sample ID: 280-155824-A-1 MS
Matrix: Water
Analysis Batch: 559905

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Nitrate/Nitrite	21		40.0	59.6		mg/L		97	90 - 110		

Lab Sample ID: 280-155824-A-1 MSD
Matrix: Water
Analysis Batch: 559905

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate/Nitrite	21		40.0	59.6		mg/L		97	90 - 110	0	10

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 280-560125/35
Matrix: Water
Analysis Batch: 560125

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Average	ND		1.0		mg/L			12/09/21 02:08	1

Method: 9060 - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: MB 280-560125/4
Matrix: Water
Analysis Batch: 560125

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Average	ND		1.0		mg/L			12/08/21 17:31	1

Lab Sample ID: LCS 280-560125/34
Matrix: Water
Analysis Batch: 560125

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon - Average	25.0	24.8		mg/L		99	88 - 112

Lab Sample ID: 280-156013-3 MS
Matrix: Water
Analysis Batch: 560125

Client Sample ID: MW-12B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon - Average	1.9		25.0	26.8		mg/L		99	88 - 112

Lab Sample ID: 280-156013-3 MSD
Matrix: Water
Analysis Batch: 560125

Client Sample ID: MW-12B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Organic Carbon - Average	1.9		25.0	27.4		mg/L		102	88 - 112	2	15

Lab Sample ID: MB 280-560419/35
Matrix: Water
Analysis Batch: 560419

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Average	ND		1.0		mg/L			12/11/21 03:23	1

Lab Sample ID: MB 280-560419/4
Matrix: Water
Analysis Batch: 560419

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Average	ND		1.0		mg/L			12/10/21 18:53	1

Lab Sample ID: LCS 280-560419/34
Matrix: Water
Analysis Batch: 560419

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon - Average	25.0	25.3		mg/L		101	88 - 112

Lab Sample ID: 280-156193-C-1 MS
Matrix: Water
Analysis Batch: 560419

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon - Average	ND		25.0	26.0		mg/L		101	88 - 112

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: 280-156193-C-1 MSD
Matrix: Water
Analysis Batch: 560419

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Organic Carbon - Average	ND		25.0	25.9		mg/L		101	88 - 112	0	15

Method: SM 1030E (meq) - Cation Anion Balance

Lab Sample ID: MB 280-560755/1
Matrix: Water
Analysis Batch: 560755

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	0.000				meq/L			12/15/21 11:01	1
Magnesium	0.000				meq/L			12/15/21 11:01	1
Potassium	0.000				meq/L			12/15/21 11:01	1
Sodium	0.000				meq/L			12/15/21 11:01	1
Ammonia as N	0.000				meq/L			12/15/21 11:01	1
Chloride	0.000				meq/L			12/15/21 11:01	1
Sulfate	0.000				meq/L			12/15/21 11:01	1
Alkalinity	0.000				mg/L			12/15/21 11:01	1
Bicarbonate Alkalinity	0.000				meq/L			12/15/21 11:01	1
Nitrate/Nitrite	0.000				meq/L			12/15/21 11:01	1
Iron	0.000				meq/L			12/15/21 11:01	1

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-559468/5
Matrix: Water
Analysis Batch: 559468

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity	ND		10		mg/L			12/02/21 14:32	1

Lab Sample ID: 280-156011-A-4 DU
Matrix: Water
Analysis Batch: 559468

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Bicarbonate Alkalinity	130		132		mg/L		3	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 280-558626/1
Matrix: Water
Analysis Batch: 558626

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10		mg/L			11/24/21 08:13	1

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 280-558626/2
Matrix: Water
Analysis Batch: 558626

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			503	509		mg/L		101	88 - 114		

Lab Sample ID: 280-156013-2 DU
Matrix: Water
Analysis Batch: 558626

Client Sample ID: MW-12A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	190			222	F3	mg/L				18	10

QC Association Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - GW

Job ID: 280-156013-1

GC/MS VOA

Analysis Batch: 559317

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-156013-1	TB3	Total/NA	Water	8260B	
280-156013-2	MW-12A	Total/NA	Water	8260B	
280-156013-3	MW-12B	Total/NA	Water	8260B	
MB 280-559317/9	Method Blank	Total/NA	Water	8260B	
LCS 280-559317/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-559317/5	Lab Control Sample Dup	Total/NA	Water	8260B	

GC Semi VOA

Prep Batch: 559134

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-156013-1	TB3	Total/NA	Water	8011	
280-156013-2	MW-12A	Total/NA	Water	8011	
280-156013-3	MW-12B	Total/NA	Water	8011	
MB 280-559134/1-A	Method Blank	Total/NA	Water	8011	
LCS 280-559134/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 280-559134/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 559266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-156013-1	TB3	Total/NA	Water	8011	559134
280-156013-2	MW-12A	Total/NA	Water	8011	559134
280-156013-3	MW-12B	Total/NA	Water	8011	559134
MB 280-559134/1-A	Method Blank	Total/NA	Water	8011	559134
LCS 280-559134/2-A	Lab Control Sample	Total/NA	Water	8011	559134
LCSD 280-559134/3-A	Lab Control Sample Dup	Total/NA	Water	8011	559134

Metals

Prep Batch: 558430

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-156013-2	MW-12A	Dissolved	Water	3005A	
280-156013-3	MW-12B	Dissolved	Water	3005A	
MB 280-558430/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-558430/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-155959-B-2-B MS	Matrix Spike	Dissolved	Water	3005A	
280-155959-B-2-C MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	

Analysis Batch: 558612

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-156013-2	MW-12A	Dissolved	Water	6010B	558430
280-156013-3	MW-12B	Dissolved	Water	6010B	558430
MB 280-558430/1-A	Method Blank	Total Recoverable	Water	6010B	558430
LCS 280-558430/2-A	Lab Control Sample	Total Recoverable	Water	6010B	558430
280-155959-B-2-B MS	Matrix Spike	Dissolved	Water	6010B	558430
280-155959-B-2-C MSD	Matrix Spike Duplicate	Dissolved	Water	6010B	558430

General Chemistry

Analysis Batch: 558626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-156013-2	MW-12A	Total/NA	Water	SM 2540C	

General Chemistry (Continued)

Analysis Batch: 558626 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-156013-3	MW-12B	Total/NA	Water	SM 2540C	
MB 280-558626/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-558626/2	Lab Control Sample	Total/NA	Water	SM 2540C	
280-156013-2 DU	MW-12A	Total/NA	Water	SM 2540C	

Analysis Batch: 559452

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-156013-2	MW-12A	Total/NA	Water	353.2	
MB 280-559452/22	Method Blank	Total/NA	Water	353.2	
LCS 280-559452/21	Lab Control Sample	Total/NA	Water	353.2	
280-156013-2 MS	MW-12A	Total/NA	Water	353.2	
280-156013-2 MSD	MW-12A	Total/NA	Water	353.2	

Analysis Batch: 559468

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-156013-2	MW-12A	Total/NA	Water	SM 2320B	
280-156013-3	MW-12B	Total/NA	Water	SM 2320B	
MB 280-559468/5	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-559468/4	Lab Control Sample	Total/NA	Water	SM 2320B	
280-156011-A-4 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 559905

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-156013-3	MW-12B	Total/NA	Water	353.2	
MB 280-559905/22	Method Blank	Total/NA	Water	353.2	
LCS 280-559905/21	Lab Control Sample	Total/NA	Water	353.2	
280-155824-A-1 MS	Matrix Spike	Total/NA	Water	353.2	
280-155824-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	353.2	

Analysis Batch: 560125

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-156013-3	MW-12B	Total/NA	Water	9060	
MB 280-560125/35	Method Blank	Total/NA	Water	9060	
MB 280-560125/4	Method Blank	Total/NA	Water	9060	
LCS 280-560125/34	Lab Control Sample	Total/NA	Water	9060	
280-156013-3 MS	MW-12B	Total/NA	Water	9060	
280-156013-3 MSD	MW-12B	Total/NA	Water	9060	

Analysis Batch: 560210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-156013-2	MW-12A	Total/NA	Water	350.1	
280-156013-3	MW-12B	Total/NA	Water	350.1	
MB 280-560210/20	Method Blank	Total/NA	Water	350.1	
LCS 280-560210/18	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-560210/19	Lab Control Sample Dup	Total/NA	Water	350.1	
280-156013-3 MS	MW-12B	Total/NA	Water	350.1	
280-156013-3 MSD	MW-12B	Total/NA	Water	350.1	

Analysis Batch: 560419

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-156013-2	MW-12A	Total/NA	Water	9060	

General Chemistry (Continued)

Analysis Batch: 560419 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-560419/35	Method Blank	Total/NA	Water	9060	
MB 280-560419/4	Method Blank	Total/NA	Water	9060	
LCS 280-560419/34	Lab Control Sample	Total/NA	Water	9060	
280-156193-C-1 MS	Matrix Spike	Total/NA	Water	9060	
280-156193-C-1 MSD	Matrix Spike Duplicate	Total/NA	Water	9060	

Analysis Batch: 560755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-156013-2	MW-12A	Total/NA	Water	SM 1030E	
280-156013-2	MW-12A	Total/NA	Water	SM 1030E (meq)	
280-156013-3	MW-12B	Total/NA	Water	SM 1030E	
280-156013-3	MW-12B	Total/NA	Water	SM 1030E (meq)	
MB 280-560755/1	Method Blank	Total/NA	Water	SM 1030E (meq)	

Analysis Batch: 606967

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-156013-2	MW-12A	Total/NA	Water	300.0	
280-156013-3	MW-12B	Total/NA	Water	300.0	
MB 480-606967/4	Method Blank	Total/NA	Water	300.0	
LCS 480-606967/3	Lab Control Sample	Total/NA	Water	300.0	
280-155958-E-2 MS	Matrix Spike	Total/NA	Water	300.0	
280-155958-E-2 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
410-63989-A-1 MS	Matrix Spike	Total/NA	Water	300.0	

Field Service / Mobile Lab

Analysis Batch: 558592

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-156013-2	MW-12A	Total/NA	Water	Field Sampling	
280-156013-3	MW-12B	Total/NA	Water	Field Sampling	

Lab Chronicle

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - GW

Job ID: 280-156013-1

Client Sample ID: TB3

Date Collected: 11/19/21 07:00
Date Received: 11/22/21 09:35

Lab Sample ID: 280-156013-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	559317	12/02/21 00:23	AJP	TAL DEN
Total/NA	Prep	8011			34.9 mL	35 mL	559134	11/30/21 14:02	KSA	TAL DEN
Total/NA	Analysis	8011		1			559266	12/02/21 03:25	KSA	TAL DEN

Client Sample ID: MW-12A

Date Collected: 11/19/21 10:30
Date Received: 11/22/21 09:35

Lab Sample ID: 280-156013-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	559317	12/02/21 04:49	AJP	TAL DEN
Total/NA	Prep	8011			35.4 mL	35 mL	559134	11/30/21 14:02	KSA	TAL DEN
Total/NA	Analysis	8011		1			559266	12/02/21 03:49	KSA	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	558430	11/23/21 15:30	CEH	TAL DEN
Dissolved	Analysis	6010B		1			558612	11/24/21 06:50	MAB	TAL DEN
Total/NA	Analysis	300.0		1			606967	11/30/21 13:03	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	560210	12/09/21 10:47	RKD	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	559452	12/02/21 17:24	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	560419	12/11/21 06:33	RAF	TAL DEN
Total/NA	Analysis	SM 1030E		1			560755	12/15/21 11:29	SAH	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			560755	12/15/21 11:29	SAH	TAL DEN
Total/NA	Analysis	SM 2320B		1			559468	12/02/21 15:07	SPG	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	558626	11/24/21 09:13	ABW	TAL DEN
Total/NA	Analysis	Field Sampling		1			558592	11/19/21 11:30	PP	TAL DEN

Client Sample ID: MW-12B

Date Collected: 11/19/21 11:05
Date Received: 11/22/21 09:35

Lab Sample ID: 280-156013-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	559317	12/02/21 05:11	AJP	TAL DEN
Total/NA	Prep	8011			35.2 mL	35 mL	559134	11/30/21 14:02	KSA	TAL DEN
Total/NA	Analysis	8011		1			559266	12/02/21 04:13	KSA	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	558430	11/23/21 15:30	CEH	TAL DEN
Dissolved	Analysis	6010B		1			558612	11/24/21 06:55	MAB	TAL DEN
Total/NA	Analysis	300.0		1			606967	11/30/21 13:22	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	560210	12/09/21 11:07	RKD	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	559905	12/07/21 17:01	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	560125	12/09/21 07:32	LFL	TAL DEN
Total/NA	Analysis	SM 1030E		1			560755	12/15/21 11:29	SAH	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			560755	12/15/21 11:29	SAH	TAL DEN
Total/NA	Analysis	SM 2320B		1			559468	12/02/21 15:02	SPG	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	558626	11/24/21 09:13	ABW	TAL DEN
Total/NA	Analysis	Field Sampling		1			558592	11/19/21 12:05	PP	TAL DEN

Lab Chronicle

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - GW

Job ID: 280-156013-1

Laboratory References:

TAL BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Eurofins TestAmerica, Denver
4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Fax (303) 431-7171

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: I. Holtquist	Lab PM: Sara, Betsy A	Carrier Tracking No(s):	COC No: 280-16511-866.1
Client Contact:	Phone: 503 7166320	E-Mail: Betsy.Sara@Eurofinset.com		Page:
Company: Waste Management				Job #:
Address: 13469 SW Highway 18	Due Date Requested:			
City: McMinnville	TAT Requested (days):			
State, Zip: OR, 97128				
Phone:	PO #:			
Email:	WO #:			
Project Name:1003|Riverbend Landfill SCS Engineers Event Desc: Semiannual Compliance Wells - Apr Oct	Project #: 28002786			
Site: Oregon	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	TDS/Alk	Dissolved Metals	Ammonia/TOC/NO3+NO2	8260B	8011	Cation/Anion Balance	Chloride/Sulfate (TA Buffalo)	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	N	D	S	A	R		N	X	
TB3	11-19-21	0700	G	W						X	X			6	
MW-12A	11-19-21	1030	G	W	X		X	X	X	X	X	X	X	10	
MW-12B	11-19-21	1105	G	W	X		X	X	X	X	X	X	X	10	

280-156013 Chain of Custody

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown* ☐ *Radiological*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: [signature]	Date/Time: 11-19-21 @ 1630	Company: SCS	Received by: [signature]	Date/Time: 11/22/2021 0935	Company: ETADEN
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:

Custody Seals Intact: Δ Yes Δ No

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 0.2, 1.8 IR11 CF+1.0

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-12A
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN			?	**TEMPERATURE:**	° F	° C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
11/19/21	09:11	27.60	.	6.16	.	21.44	X 1	3.49
/ /	:	.	.	.	.		X 3	10.47

Gal/ft = (dia./2)² x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	[√ if used] √
VOA Glass	11/19/21	10:30	F	3 (40 ml)	HCl	YES	NO		✓
VOA Glass	11/19/21	10:30	F	3 (40 ml)	$Na_2S_2O_3$	YES	NO		✓
Amber Glass	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/19/21	10:30	F	2 (250) 500 1L	None	YES	NO	NA	✓
Yellow Glass	11/19/21	10:30	F	2 (250) 500, 1L	H_2SO_4	YES	NO		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	11/19/21	10:30	F	1	250, (500), 1L	HNO_3	YES	YES		
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — 11 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH3) (NO_2/NO_3) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O_2 (mg/l)	Water Quality
0	F(0914)	0.00	6.12	134.0	347	14.8	6.24	9.69	clear/colorless
1	F(0934)	3.50	6.52	138.1	341	11.00	7.56	9.55	clear/colorless
2	F(1003)	7.00	6.49	157.6	349	11.00	7.56	9.86	clear/colorless
3	F(1023)	10.50	6.47	166.9	343	11.00	7.58	10.37	clear/colorless
4	F(1025)	10.90	6.47	168.6	343	11.00	7.58	10.40	clear/colorless
5	F(1027)	11.30	6.48	167.9	343	11.00	7.58	10.43	clear/colorless
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Standard purge (10/4/25 psi) ~ 800 ml/min

SAMPLER: J. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-12B
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		TEMPERATURE:	°F 45.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
11/19/21	10:41	46.20	.	12.25	.	—	X 1	—
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	√
VOA Glass	11/19/21	11:05	F	3	40 ml	HCl	YES	NO		✓
VOA Glass	11/19/21	11:05	F	3	40 ml	$Na_2S_2O_3$	YES	NO		✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/19/21	11:05	F	2	250, 500, 1L	None	YES	NO	NA	✓
Yellow Glass	11/19/21	11:05	F	2	250, 500, 1L	H_2SO_4	YES	NO		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	11/19/21	11:05	F	1	250, 500, 1L	HNO_3	YES	YES		✓
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — 11 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO_3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: 10:44 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	F(1045)	0.00	6.84	142.0	691	11.6	12.41	9.26	clear/colorless
1	F(1050)	0.50	7.01	-3.2	467	11.3	12.52	2.15	cloudy/light tan
2	F(1055)	1.0	7.09	-26.7	489	11.4	12.54	1.73	Cloudy/light tan
3	F(1057)	1.20	7.11	-28.9	491	11.4	12.54	1.67	cloudy/light tan
4	F(1059)	1.40	7.12	-30.4	493	11.4	12.54	1.67	cloudy/light tan
5	F(1101)	1.60	7.13	-31.3	494	11.4	12.54	1.68	cloudy/light tan
6			.			.	.	.	

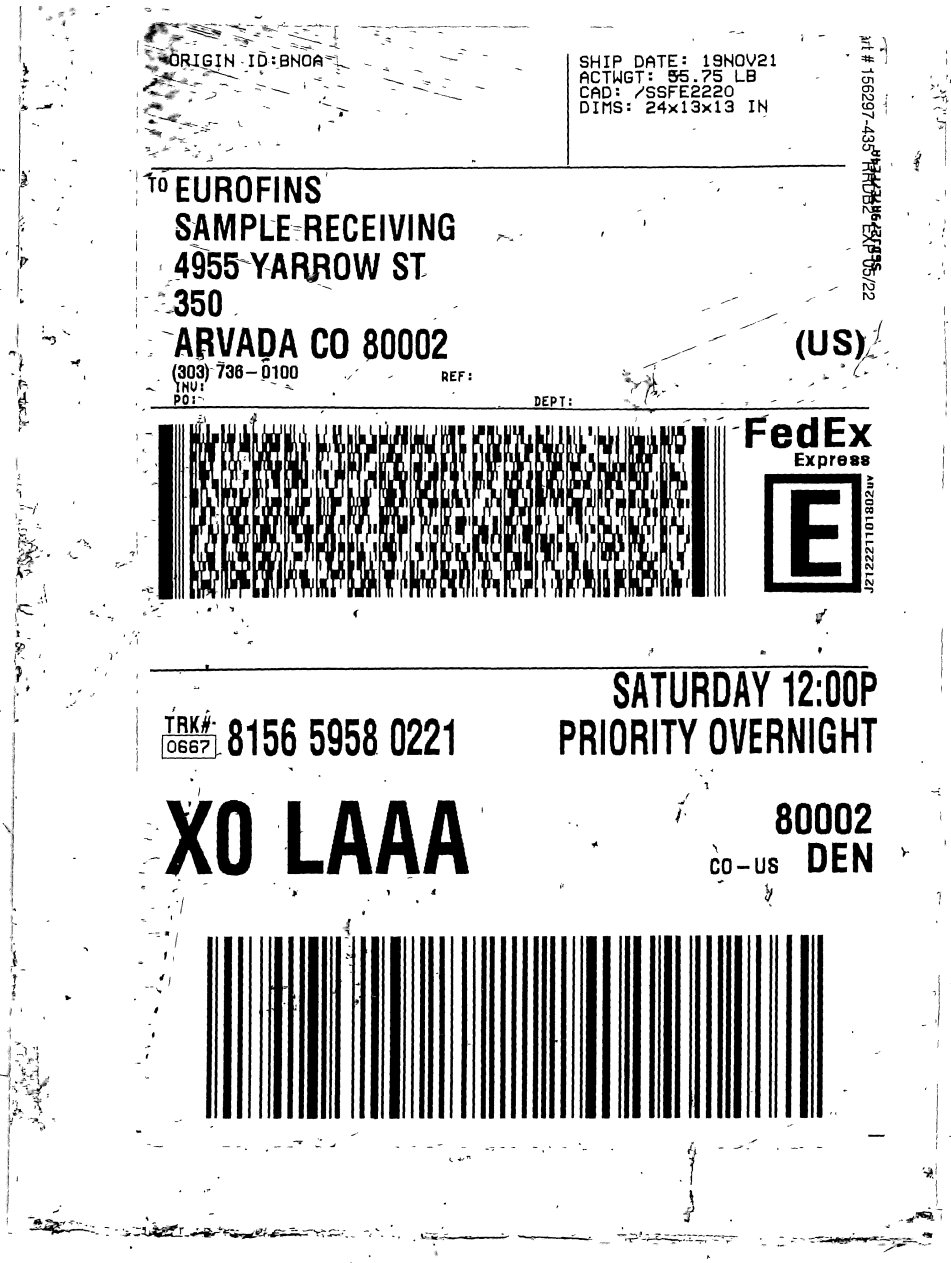
[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Low flow purge Method (11/9/25 psi) ~ 375ml/min.

SAMPLER: J. Hultquist (PRINTED NAME) (SIGNATURE)



280-156013 Waybill


ORIGIN ID:BNOA

SHIP DATE: 19NOV21
ACTWGT: 55.75 LB
CAD: /SSFE2220
DIMS: 24x13x13 IN

Jrt # 156297-435 HRUB2 EXP 05/22

TO EUROFINS
SAMPLE RECEIVING
4955 YARROW ST
350
ARVADA CO 80002 (US)
(303) 736-0100
INV:
PO:
REF:
DEPT:

FedEx Express

TRK# 0667 8156 5958 0221

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO LAAA

80002
CO-US DEN

Eurofins TestAmerica, Denver
4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0100 Fax: 303-431-7171

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Sara, Betsy A	Carrier Tracking No(s):	COC No: 280-595106.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Betsy.Sara@Eurofinset.com	State of Origin: Oregon	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Oregon		Job #: 280-156013-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 12/13/2021			
City: Amherst	TAT Requested (days):			
State, Zip: NY, 14228-2298				
Phone: 716-691-2600(Tel) 716-691-7991(Fax)	PO #:			
Email:	WO #:			
Project Name: 1003|Riverbend Landfill SCS Engineers	Project #: 28002786			
Site: 1003|Riverbend Landfill	SSOW#:			

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - 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:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300.0_28D/ 300.0, Sulfate and Chloride (TA Buffalo)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-12A (280-156013-2)	11/19/21	10:30 Pacific		Water			X	1	
MW-12B (280-156013-3)	11/19/21	11:05 Pacific		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:			
Relinquished by:	Date/Time: 11/23/21 1335	Company	Received by:	Date/Time: 11-24-21 1000	Company TAB	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 2.6 ICE			

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-156013-1

Login Number: 156013
List Number: 1
Creator: Rystrom, Joshua R

List Source: Eurofins Denver

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	
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: 280-156013-1

Login Number: 156013
List Number: 2
Creator: Yeager, Brian A

List Source: Eurofins Buffalo
List Creation: 11/29/21 10:08 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	2.6 ice ir gun #1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

Fall 2021

Detection Groundwater

Laboratory Analytical Reports

eurofins | Environment Testing America



ANALYTICAL REPORT

Eurofins Denver
4955 Yarrow Street
Arvada, CO 80002
Tel: (303)736-0100

Laboratory Job ID: 280-155958-1
Client Project/Site: 1003|Riverbend Landfill SCS Engineers - GW
Sampling Event: Annual MW-22A - Apr

For:
Waste Management
7227 NE 55th Avenue
Portland, Oregon 97218

Attn: Mr. William V Hickey, PMP

Authorized for release by:
3/15/2022 3:01:46 PM
Janice Collins, Project Management Assistant I
(303)736-0100
Janice.Collins@Eurofinset.com

Designee for

Betsy Sara, Project Manager II
(303)736-0189
Betsy.Sara@Eurofinset.com

LINKS

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Qualifiers

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
T	Result is a tentatively identified compound (TIC) and an estimated value.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 280-155958-1

Laboratory: Eurofins Denver

Narrative

CASE NARRATIVE

Client: Waste Management

Project: 1003|Riverbend Landfill SCS Engineers - GW

Report Number: 280-155958-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

This report may include reporting limits (RLs) less than Eurofins TestAmerica's standard reporting limit. The reported sample results and associated reporting limits are being used specifically to meet the needs of this project. Note that data are not normally reported to these levels without qualification because they are inherently less reliable and potentially less defensible than required by the latest industry standards.

Sample Receiving

The samples were received on 11/19/2021; the samples arrived in good condition, properly preserved and on ice. The temperatures of the coolers at receipt were 0.6°C, 1.0°C, 1.4°C and 1.9°C.

Holding Times

All holding times were met.

Method Blanks

All Method Blanks met method criteria.

Laboratory Control Samples (LCS)

All Laboratory Control Sample recoveries were within control limits.

Matrix Spike (MS) and Matrix Spike Duplicate (MSD)

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) for Method 8260B and Method 8011, however, LCS/LCSD pairs were analyzed to demonstrate method precision and accuracy.

The Matrix Spike and Matrix Spike Duplicate performed on a sample from another client exhibited recoveries outside control limits for Nitrate/Nitrite Method 353.2. 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.

Sample MW-12A (156013) was selected to fulfill the laboratory batch quality control requirements for Method 353.2. Analysis of the laboratory generated MS/MSD for this sample exhibited recoveries of Nitrate/Nitrite 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 results were within established control limits.

Job ID: 280-155958-1 (Continued)

Laboratory: Eurofins Denver (Continued)

General Comments

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.

The analysis for Chloride and Sulfate Method 300.0 was performed by TestAmerica Buffalo. Their address and phone number are:
TestAmerica Buffalo
10 Hazelwood Drive, Suite 106
Amherst, NY 14228
Phone: 716-691-2600

Detection Summary

Client: Waste Management
Job ID: 280-155958-1
Project/Site: 1003|Riverbend Landfill SCS Engineers - GW

Client Sample ID: TB1 — Lab Sample ID: 280-155958-1

No Detections.

Client Sample ID: FB1 — Lab Sample ID: 280-155958-2

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Total Anions	0.00				meq/L	1		SM 1030E	Total/NA
Total Cations	0.00				meq/L	1		SM 1030E	Total/NA
Percent Difference	NC				%	1		SM 1030E	Total/NA
Calcium	0.00				mg/L	1		SM 1030E	Total/NA
Magnesium	0.00				mg/L	1		SM 1030E	Total/NA
Potassium	0.00				mg/L	1		SM 1030E	Total/NA
Sodium	0.00				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.00				mg/L	1		SM 1030E	Total/NA
Chloride	0.00				mg/L	1		SM 1030E	Total/NA
Sulfate	0.00				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	0.00				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.00				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	NC				%	1		SM 1030E	Total/NA
Calculated TDS	0.00				mg/L	1		SM 1030E	Total/NA
TDS Ratio	NC				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	0.00				mg/L	1		SM 1030E	Total/NA
Iron	0.00				mg/L	1		SM 1030E	Total/NA
Calcium	0.00				mg/L	1		SM 1030E (meq)	Total/NA
Magnesium	0.00				mg/L	1		SM 1030E (meq)	Total/NA
Potassium	0.00				mg/L	1		SM 1030E (meq)	Total/NA
Sodium	0.00				mg/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.00				mg/L	1		SM 1030E (meq)	Total/NA
Chloride	0.00				mg/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.00				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	0.00				mg/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.00				mg/L	1		SM 1030E (meq)	Total/NA
Iron	0.00				mg/L	1		SM 1030E (meq)	Total/NA

Client Sample ID: MW-22A — Lab Sample ID: 280-155958-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	19000		500		ug/L	1		6010B	Dissolved
Magnesium	8300		200		ug/L	1		6010B	Dissolved
Sodium	23000		1000		ug/L	1		6010B	Dissolved
Chloride	4.5		0.50		mg/L	1		300.0	Total/NA
Sulfate	25		1.0		mg/L	1		300.0	Total/NA
Nitrate/Nitrite	0.60		0.050		mg/L	1		353.2	Total/NA
Total Organic Carbon - Average	1.6		1.0		mg/L	1		9060	Total/NA
Total Anions	2.9				meq/L	1		SM 1030E	Total/NA
Total Cations	2.6				meq/L	1		SM 1030E	Total/NA
Percent Difference	-4.7				%	1		SM 1030E	Total/NA
Calcium	19				mg/L	1		SM 1030E	Total/NA
Magnesium	8.3				mg/L	1		SM 1030E	Total/NA
Potassium	0.00				mg/L	1		SM 1030E	Total/NA
Sodium	23				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.00				mg/L	1		SM 1030E	Total/NA
Chloride	4.5				mg/L	1		SM 1030E	Total/NA
Sulfate	25				mg/L	1		SM 1030E	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Denver

Client Sample ID: MW-22A (Continued) — Lab Sample ID: 280-155958-3

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Bicarbonate Alkalinity	110				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.60				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	-4.7				%	1		SM 1030E	Total/NA
Calculated TDS	120				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.7				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	210				mg/L	1		SM 1030E	Total/NA
Iron	0.00				mg/L	1		SM 1030E	Total/NA
Calcium	19				mg/L	1		SM 1030E (meq)	Total/NA
Magnesium	8.3				mg/L	1		SM 1030E (meq)	Total/NA
Potassium	0.00				mg/L	1		SM 1030E (meq)	Total/NA
Sodium	23				mg/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.00				mg/L	1		SM 1030E (meq)	Total/NA
Chloride	4.5				mg/L	1		SM 1030E (meq)	Total/NA
Sulfate	25				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	110				mg/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.60				mg/L	1		SM 1030E (meq)	Total/NA
Iron	0.00				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	110		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	210		10		mg/L	1		SM 2540C	Total/NA
Field pH	6.34				SU	1		Field Sampling	Total/NA
Field Conductivity	462.0				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	11.8				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	8.43				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	187.5				millivolts	1		Field Sampling	Total/NA

Client Sample ID: DUP1 — Lab Sample ID: 280-155958-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	19000		500		ug/L	1		6010B	Dissolved
Magnesium	8400		200		ug/L	1		6010B	Dissolved
Sodium	23000		1000		ug/L	1		6010B	Dissolved
Chloride	4.5		0.50		mg/L	1		300.0	Total/NA
Sulfate	25		1.0		mg/L	1		300.0	Total/NA
Ammonia as N	0.036		0.030		mg/L	1		350.1	Total/NA
Nitrate/Nitrite	0.61		0.050		mg/L	1		353.2	Total/NA
Total Organic Carbon - Average	1.6		1.0		mg/L	1		9060	Total/NA
Total Anions	3.1				meq/L	1		SM 1030E	Total/NA
Total Cations	2.6				meq/L	1		SM 1030E	Total/NA
Percent Difference	-7.8				%	1		SM 1030E	Total/NA
Calcium	19				mg/L	1		SM 1030E	Total/NA
Magnesium	8.4				mg/L	1		SM 1030E	Total/NA
Potassium	0.00				mg/L	1		SM 1030E	Total/NA
Sodium	23				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.036				mg/L	1		SM 1030E	Total/NA
Chloride	4.5				mg/L	1		SM 1030E	Total/NA
Sulfate	25				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	120				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.61				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	-7.8				%	1		SM 1030E	Total/NA
Calculated TDS	130				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.6				NONE	1		SM 1030E	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DUP1 (Continued)
Lab Sample ID: 280-155958-4

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	210				mg/L	1		SM 1030E	Total/NA
Iron	0.00				mg/L	1		SM 1030E	Total/NA
Calcium	19				mg/L	1		SM 1030E (meq)	Total/NA
Magnesium	8.4				mg/L	1		SM 1030E (meq)	Total/NA
Potassium	0.00				mg/L	1		SM 1030E (meq)	Total/NA
Sodium	23				mg/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.036				mg/L	1		SM 1030E (meq)	Total/NA
Chloride	4.5				mg/L	1		SM 1030E (meq)	Total/NA
Sulfate	25				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	120				mg/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.61				mg/L	1		SM 1030E (meq)	Total/NA
Iron	0.00				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	120		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	210		10		mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Waste Management
Job ID: 280-155958-1
Project/Site: 1003|Riverbend Landfill SCS Engineers - GW

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-155958-1	TB1	Water	11/16/21 07:00	11/19/21 10:25
280-155958-2	FB1	Water	11/16/21 09:30	11/19/21 10:25
280-155958-3	MW-22A	Water	11/16/21 10:05	11/19/21 10:25
280-155958-4	DUP1	Water	11/16/21 10:10	11/19/21 10:25

Method Summary

Client: Waste Management
Job ID: 280-155958-1
Project/Site: 1003|Riverbend Landfill SCS Engineers - GW

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL DEN
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	TAL DEN
6010B	Metals (ICP)	SW846	TAL DEN
300.0	Anions, Ion Chromatography	MCAWW	TAL BUF
350.1	Nitrogen, Ammonia	MCAWW	TAL DEN
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	TAL DEN
9060	Organic Carbon, Total (TOC)	SW846	TAL DEN
SM 1030E	Cation Anion Balance	SM	TAL DEN
SM 1030E (meq)	Cation Anion Balance	SM	TAL DEN
SM 2320B	Alkalinity	SM	TAL DEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL DEN
Field Sampling	Field Sampling	EPA	TAL DEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL DEN
5030B	Purge and Trap	SW846	TAL DEN
8011	Microextraction	SW846	TAL DEN

Protocol 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.

Laboratory References:

TAL BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Client Sample ID: TB1
Date Collected: 11/16/21 07:00
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155958-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			11/24/21 22:20	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/24/21 22:20	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/24/21 22:20	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/24/21 22:20	1
1,1-Dichloroethane	ND		1.0		ug/L			11/24/21 22:20	1
1,1-Dichloroethene	ND		1.0		ug/L			11/24/21 22:20	1
1,1-Dichloropropene	ND		1.0		ug/L			11/24/21 22:20	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/24/21 22:20	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/24/21 22:20	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/24/21 22:20	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/24/21 22:20	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/24/21 22:20	1
1,2-Dichloroethane	ND		1.0		ug/L			11/24/21 22:20	1
1,2-Dichloropropane	ND		1.0		ug/L			11/24/21 22:20	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/24/21 22:20	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/24/21 22:20	1
1,3-Dichloropropane	ND		1.0		ug/L			11/24/21 22:20	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/24/21 22:20	1
2,2-Dichloropropane	ND		5.0		ug/L			11/24/21 22:20	1
2-Butanone (MEK)	ND		6.0		ug/L			11/24/21 22:20	1
2-Chlorotoluene	ND		1.0		ug/L			11/24/21 22:20	1
2-Hexanone	ND		5.0		ug/L			11/24/21 22:20	1
4-Chlorotoluene	ND		1.0		ug/L			11/24/21 22:20	1
4-Isopropyltoluene	ND		1.0		ug/L			11/24/21 22:20	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/24/21 22:20	1
Acetone	ND		10		ug/L			11/24/21 22:20	1
Benzene	ND		1.0		ug/L			11/24/21 22:20	1
Bromobenzene	ND		1.0		ug/L			11/24/21 22:20	1
Bromochloromethane	ND		1.0		ug/L			11/24/21 22:20	1
Bromodichloromethane	ND		1.0		ug/L			11/24/21 22:20	1
Bromoform	ND		1.0		ug/L			11/24/21 22:20	1
Bromomethane	ND		2.0		ug/L			11/24/21 22:20	1
Carbon disulfide	ND		2.0		ug/L			11/24/21 22:20	1
Carbon tetrachloride	ND		1.0		ug/L			11/24/21 22:20	1
Chlorobenzene	ND		1.0		ug/L			11/24/21 22:20	1
Chloroethane	ND		2.0		ug/L			11/24/21 22:20	1
Chloroform	ND		1.0		ug/L			11/24/21 22:20	1
Chloromethane	ND		2.0		ug/L			11/24/21 22:20	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/24/21 22:20	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/24/21 22:20	1
Dibromochloromethane	ND		1.0		ug/L			11/24/21 22:20	1
Dibromomethane	ND		1.0		ug/L			11/24/21 22:20	1
Dichlorodifluoromethane	ND		2.0		ug/L			11/24/21 22:20	1
Ethylbenzene	ND		1.0		ug/L			11/24/21 22:20	1
Hexachlorobutadiene	ND		1.0		ug/L			11/24/21 22:20	1
Isopropylbenzene	ND		1.0		ug/L			11/24/21 22:20	1
Methylene Chloride	ND		5.0		ug/L			11/24/21 22:20	1
Naphthalene	ND		1.0		ug/L			11/24/21 22:20	1
n-Butylbenzene	ND		1.0		ug/L			11/24/21 22:20	1

Client Sample ID: TB1

Date Collected: 11/16/21 07:00
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155958-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		1.0		ug/L			11/24/21 22:20	1
sec-Butylbenzene	ND		1.0		ug/L			11/24/21 22:20	1
Styrene	ND		1.0		ug/L			11/24/21 22:20	1
tert-Butylbenzene	ND		1.0		ug/L			11/24/21 22:20	1
Tetrachloroethene	ND		1.0		ug/L			11/24/21 22:20	1
Toluene	ND		1.0		ug/L			11/24/21 22:20	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/24/21 22:20	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/24/21 22:20	1
Trichloroethene	ND		1.0		ug/L			11/24/21 22:20	1
Trichlorofluoromethane	ND		2.0		ug/L			11/24/21 22:20	1
Vinyl chloride	ND		1.0		ug/L			11/24/21 22:20	1
Xylenes (total)	ND		2.0		ug/L			11/24/21 22:20	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*8.8*	*T J*	*ug/L*		*1.47*			*11/24/21 22:20*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 127*		*11/24/21 22:20*	*1*
4-Bromofluorobenzene (Surr)	*94*		*78 - 120*		*11/24/21 22:20*	*1*
Dibromofluoromethane (Surr)	*104*		*77 - 120*		*11/24/21 22:20*	*1*
Toluene-d8 (Surr)	*101*		*80 - 125*		*11/24/21 22:20*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		11/29/21 14:19	11/30/21 04:21	1
1,2-Dibromoethane	ND		0.050		ug/L		11/29/21 14:19	11/30/21 04:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*107*		*70 - 130*	*11/29/21 14:19*	*11/30/21 04:21*	*1*

Client Sample ID: FB1

Date Collected: 11/16/21 09:30
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155958-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			11/24/21 22:41	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/24/21 22:41	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/24/21 22:41	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/24/21 22:41	1
1,1-Dichloroethane	ND		1.0		ug/L			11/24/21 22:41	1
1,1-Dichloroethene	ND		1.0		ug/L			11/24/21 22:41	1
1,1-Dichloropropene	ND		1.0		ug/L			11/24/21 22:41	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/24/21 22:41	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/24/21 22:41	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/24/21 22:41	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/24/21 22:41	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/24/21 22:41	1
1,2-Dichloroethane	ND		1.0		ug/L			11/24/21 22:41	1
1,2-Dichloropropane	ND		1.0		ug/L			11/24/21 22:41	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/24/21 22:41	1

Client Sample ID: FB1
Date Collected: 11/16/21 09:30
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155958-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0		ug/L			11/24/21 22:41	1
1,3-Dichloropropane	ND		1.0		ug/L			11/24/21 22:41	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/24/21 22:41	1
2,2-Dichloropropane	ND		5.0		ug/L			11/24/21 22:41	1
2-Butanone (MEK)	ND		6.0		ug/L			11/24/21 22:41	1
2-Chlorotoluene	ND		1.0		ug/L			11/24/21 22:41	1
2-Hexanone	ND		5.0		ug/L			11/24/21 22:41	1
4-Chlorotoluene	ND		1.0		ug/L			11/24/21 22:41	1
4-Isopropyltoluene	ND		1.0		ug/L			11/24/21 22:41	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/24/21 22:41	1
Acetone	ND		10		ug/L			11/24/21 22:41	1
Benzene	ND		1.0		ug/L			11/24/21 22:41	1
Bromobenzene	ND		1.0		ug/L			11/24/21 22:41	1
Bromochloromethane	ND		1.0		ug/L			11/24/21 22:41	1
Bromodichloromethane	ND		1.0		ug/L			11/24/21 22:41	1
Bromoform	ND		1.0		ug/L			11/24/21 22:41	1
Bromomethane	ND		2.0		ug/L			11/24/21 22:41	1
Carbon disulfide	ND		2.0		ug/L			11/24/21 22:41	1
Carbon tetrachloride	ND		1.0		ug/L			11/24/21 22:41	1
Chlorobenzene	ND		1.0		ug/L			11/24/21 22:41	1
Chloroethane	ND		2.0		ug/L			11/24/21 22:41	1
Chloroform	ND		1.0		ug/L			11/24/21 22:41	1
Chloromethane	ND		2.0		ug/L			11/24/21 22:41	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/24/21 22:41	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/24/21 22:41	1
Dibromochloromethane	ND		1.0		ug/L			11/24/21 22:41	1
Dibromomethane	ND		1.0		ug/L			11/24/21 22:41	1
Dichlorodifluoromethane	ND		2.0		ug/L			11/24/21 22:41	1
Ethylbenzene	ND		1.0		ug/L			11/24/21 22:41	1
Hexachlorobutadiene	ND		1.0		ug/L			11/24/21 22:41	1
Isopropylbenzene	ND		1.0		ug/L			11/24/21 22:41	1
Methylene Chloride	ND		5.0		ug/L			11/24/21 22:41	1
Naphthalene	ND		1.0		ug/L			11/24/21 22:41	1
n-Butylbenzene	ND		1.0		ug/L			11/24/21 22:41	1
N-Propylbenzene	ND		1.0		ug/L			11/24/21 22:41	1
sec-Butylbenzene	ND		1.0		ug/L			11/24/21 22:41	1
Styrene	ND		1.0		ug/L			11/24/21 22:41	1
tert-Butylbenzene	ND		1.0		ug/L			11/24/21 22:41	1
Tetrachloroethene	ND		1.0		ug/L			11/24/21 22:41	1
Toluene	ND		1.0		ug/L			11/24/21 22:41	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/24/21 22:41	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/24/21 22:41	1
Trichloroethene	ND		1.0		ug/L			11/24/21 22:41	1
Trichlorofluoromethane	ND		2.0		ug/L			11/24/21 22:41	1
Vinyl chloride	ND		1.0		ug/L			11/24/21 22:41	1
Xylenes (total)	ND		2.0		ug/L			11/24/21 22:41	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*9.2*	*T J*	*ug/L*		*1.47*			*11/24/21 22:41*	*1*

Client Sample ID: FB1

Date Collected: 11/16/21 09:30
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155958-2

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 127*		*11/24/21 22:41*	*1*
4-Bromofluorobenzene (Surr)	*94*		*78 - 120*		*11/24/21 22:41*	*1*
Dibromofluoromethane (Surr)	*103*		*77 - 120*		*11/24/21 22:41*	*1*
Toluene-d8 (Surr)	*99*		*80 - 125*		*11/24/21 22:41*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		11/29/21 14:19	11/30/21 04:45	1
1,2-Dibromoethane	ND		0.050		ug/L		11/29/21 14:19	11/30/21 04:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*105*		*70 - 130*	*11/29/21 14:19*	*11/30/21 04:45*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		500		ug/L		11/23/21 15:30	11/24/21 06:25	1
Iron	ND		30		ug/L		11/23/21 15:30	11/24/21 06:25	1
Magnesium	ND		200		ug/L		11/23/21 15:30	11/24/21 06:25	1
Manganese	ND		3.0		ug/L		11/23/21 15:30	11/24/21 06:25	1
Potassium	ND		500		ug/L		11/23/21 15:30	11/24/21 06:25	1
Sodium	ND		1000		ug/L		11/23/21 15:30	11/24/21 06:25	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	**0.00**				meq/L			12/09/21 14:58	1
Total Cations	**0.00**				meq/L			12/09/21 14:58	1
Percent Difference	**NC**				%			12/09/21 14:58	1
Calcium	**0.00**				mg/L			12/09/21 14:58	1
Magnesium	**0.00**				mg/L			12/09/21 14:58	1
Potassium	**0.00**				mg/L			12/09/21 14:58	1
Sodium	**0.00**				mg/L			12/09/21 14:58	1
Ammonia as N	**0.00**				mg/L			12/09/21 14:58	1
Chloride	**0.00**				mg/L			12/09/21 14:58	1
Sulfate	**0.00**				mg/L			12/09/21 14:58	1
Bicarbonate Alkalinity	**0.00**				mg/L			12/09/21 14:58	1
Nitrate/Nitrite	**0.00**				mg/L			12/09/21 14:58	1
Anion/Cation Balance	**NC**				%			12/09/21 14:58	1
Calculated TDS	**0.00**				mg/L			12/09/21 14:58	1
TDS Ratio	**NC**				NONE			12/09/21 14:58	1
Total Dissolved Solids	**0.00**				mg/L			12/09/21 14:58	1
Iron	**0.00**				mg/L			12/09/21 14:58	1
Calcium	**0.00**				mg/L			12/09/21 14:58	1
Magnesium	**0.00**				mg/L			12/09/21 14:58	1
Potassium	**0.00**				mg/L			12/09/21 14:58	1
Sodium	**0.00**				mg/L			12/09/21 14:58	1
Ammonia as N	**0.00**				mg/L			12/09/21 14:58	1
Chloride	**0.00**				mg/L			12/09/21 14:58	1
Sulfate	**0.00**				mg/L			12/09/21 14:58	1
Bicarbonate Alkalinity	**0.00**				mg/L			12/09/21 14:58	1
Nitrate/Nitrite	**0.00**				mg/L			12/09/21 14:58	1
Iron	**0.00**				mg/L			12/09/21 14:58	1

Client Sample ID: FB1
Lab Sample ID: 280-155958-2
Date Collected: 11/16/21 09:30
Matrix: Water
Date Received: 11/19/21 10:25

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			11/30/21 09:01	1
Sulfate	ND		1.0		mg/L			11/30/21 09:01	1
Ammonia as N	ND		0.030		mg/L			12/03/21 15:35	1
Nitrate/Nitrite	ND		0.050		mg/L			11/30/21 18:12	1
Total Organic Carbon - Average	ND		1.0		mg/L			12/08/21 17:23	1
Bicarbonate Alkalinity	ND		10		mg/L			11/30/21 22:17	1
Total Dissolved Solids	ND		10		mg/L			11/22/21 09:42	1

Client Sample ID: MW-22A
Lab Sample ID: 280-155958-3
Date Collected: 11/16/21 10:05
Matrix: Water
Date Received: 11/19/21 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			11/24/21 23:03	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/24/21 23:03	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/24/21 23:03	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/24/21 23:03	1
1,1-Dichloroethane	ND		1.0		ug/L			11/24/21 23:03	1
1,1-Dichloroethene	ND		1.0		ug/L			11/24/21 23:03	1
1,1-Dichloropropene	ND		1.0		ug/L			11/24/21 23:03	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/24/21 23:03	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/24/21 23:03	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/24/21 23:03	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/24/21 23:03	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/24/21 23:03	1
1,2-Dichloroethane	ND		1.0		ug/L			11/24/21 23:03	1
1,2-Dichloropropane	ND		1.0		ug/L			11/24/21 23:03	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/24/21 23:03	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/24/21 23:03	1
1,3-Dichloropropane	ND		1.0		ug/L			11/24/21 23:03	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/24/21 23:03	1
2,2-Dichloropropane	ND		5.0		ug/L			11/24/21 23:03	1
2-Butanone (MEK)	ND		6.0		ug/L			11/24/21 23:03	1
2-Chlorotoluene	ND		1.0		ug/L			11/24/21 23:03	1
2-Hexanone	ND		5.0		ug/L			11/24/21 23:03	1
4-Chlorotoluene	ND		1.0		ug/L			11/24/21 23:03	1
4-Isopropyltoluene	ND		1.0		ug/L			11/24/21 23:03	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/24/21 23:03	1
Acetone	ND		10		ug/L			11/24/21 23:03	1
Benzene	ND		1.0		ug/L			11/24/21 23:03	1
Bromobenzene	ND		1.0		ug/L			11/24/21 23:03	1
Bromochloromethane	ND		1.0		ug/L			11/24/21 23:03	1
Bromodichloromethane	ND		1.0		ug/L			11/24/21 23:03	1
Bromoform	ND		1.0		ug/L			11/24/21 23:03	1
Bromomethane	ND		2.0		ug/L			11/24/21 23:03	1
Carbon disulfide	ND		2.0		ug/L			11/24/21 23:03	1
Carbon tetrachloride	ND		1.0		ug/L			11/24/21 23:03	1
Chlorobenzene	ND		1.0		ug/L			11/24/21 23:03	1
Chloroethane	ND		2.0		ug/L			11/24/21 23:03	1
Chloroform	ND		1.0		ug/L			11/24/21 23:03	1

Client Sample ID: MW-22A

Date Collected: 11/16/21 10:05
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155958-3

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		2.0		ug/L			11/24/21 23:03	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/24/21 23:03	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/24/21 23:03	1
Dibromochloromethane	ND		1.0		ug/L			11/24/21 23:03	1
Dibromomethane	ND		1.0		ug/L			11/24/21 23:03	1
Dichlorodifluoromethane	ND		2.0		ug/L			11/24/21 23:03	1
Ethylbenzene	ND		1.0		ug/L			11/24/21 23:03	1
Hexachlorobutadiene	ND		1.0		ug/L			11/24/21 23:03	1
Isopropylbenzene	ND		1.0		ug/L			11/24/21 23:03	1
Methylene Chloride	ND		5.0		ug/L			11/24/21 23:03	1
Naphthalene	ND		1.0		ug/L			11/24/21 23:03	1
n-Butylbenzene	ND		1.0		ug/L			11/24/21 23:03	1
N-Propylbenzene	ND		1.0		ug/L			11/24/21 23:03	1
sec-Butylbenzene	ND		1.0		ug/L			11/24/21 23:03	1
Styrene	ND		1.0		ug/L			11/24/21 23:03	1
tert-Butylbenzene	ND		1.0		ug/L			11/24/21 23:03	1
Tetrachloroethene	ND		1.0		ug/L			11/24/21 23:03	1
Toluene	ND		1.0		ug/L			11/24/21 23:03	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/24/21 23:03	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/24/21 23:03	1
Trichloroethene	ND		1.0		ug/L			11/24/21 23:03	1
Trichlorofluoromethane	ND		2.0		ug/L			11/24/21 23:03	1
Vinyl chloride	ND		1.0		ug/L			11/24/21 23:03	1
Xylenes (total)	ND		2.0		ug/L			11/24/21 23:03	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*20*	*T J*	*ug/L*		*1.51*			*11/24/21 23:03*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 127*		*11/24/21 23:03*	*1*
4-Bromofluorobenzene (Surr)	*92*		*78 - 120*		*11/24/21 23:03*	*1*
Dibromofluoromethane (Surr)	*103*		*77 - 120*		*11/24/21 23:03*	*1*
Toluene-d8 (Surr)	*99*		*80 - 125*		*11/24/21 23:03*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		11/29/21 14:19	11/30/21 05:10	1
1,2-Dibromoethane	ND		0.050		ug/L		11/29/21 14:19	11/30/21 05:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*103*		*70 - 130*	*11/29/21 14:19*	*11/30/21 05:10*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**19000**		500		ug/L		11/23/21 15:30	11/24/21 06:29	1
Iron	ND		30		ug/L		11/23/21 15:30	11/24/21 06:29	1
Magnesium	**8300**		200		ug/L		11/23/21 15:30	11/24/21 06:29	1
Manganese	ND		3.0		ug/L		11/23/21 15:30	11/24/21 06:29	1
Potassium	ND		500		ug/L		11/23/21 15:30	11/24/21 06:29	1
Sodium	**23000**		1000		ug/L		11/23/21 15:30	11/24/21 06:29	1

Client Sample ID: MW-22A

Date Collected: 11/16/21 10:05
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155958-3

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	2.9				meq/L			12/09/21 14:58	1
Total Cations	2.6				meq/L			12/09/21 14:58	1
Percent Difference	-4.7				%			12/09/21 14:58	1
Calcium	19				mg/L			12/09/21 14:58	1
Magnesium	8.3				mg/L			12/09/21 14:58	1
Potassium	0.00				mg/L			12/09/21 14:58	1
Sodium	23				mg/L			12/09/21 14:58	1
Ammonia as N	0.00				mg/L			12/09/21 14:58	1
Chloride	4.5				mg/L			12/09/21 14:58	1
Sulfate	25				mg/L			12/09/21 14:58	1
Bicarbonate Alkalinity	110				mg/L			12/09/21 14:58	1
Nitrate/Nitrite	0.60				mg/L			12/09/21 14:58	1
Anion/Cation Balance	-4.7				%			12/09/21 14:58	1
Calculated TDS	120				mg/L			12/09/21 14:58	1
TDS Ratio	1.7				NONE			12/09/21 14:58	1
Total Dissolved Solids	210				mg/L			12/09/21 14:58	1
Iron	0.00				mg/L			12/09/21 14:58	1
Calcium	19				mg/L			12/09/21 14:58	1
Magnesium	8.3				mg/L			12/09/21 14:58	1
Potassium	0.00				mg/L			12/09/21 14:58	1
Sodium	23				mg/L			12/09/21 14:58	1
Ammonia as N	0.00				mg/L			12/09/21 14:58	1
Chloride	4.5				mg/L			12/09/21 14:58	1
Sulfate	25				mg/L			12/09/21 14:58	1
Bicarbonate Alkalinity	110				mg/L			12/09/21 14:58	1
Nitrate/Nitrite	0.60				mg/L			12/09/21 14:58	1
Iron	0.00				mg/L			12/09/21 14:58	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.5		0.50		mg/L			11/30/21 11:12	1
Sulfate	25		1.0		mg/L			12/01/21 17:58	1
Ammonia as N	ND		0.030		mg/L			12/03/21 15:37	1
Nitrate/Nitrite	0.60		0.050		mg/L			12/02/21 17:32	1
Total Organic Carbon - Average	1.6		1.0		mg/L			12/08/21 18:10	1
Bicarbonate Alkalinity	110		10		mg/L			11/30/21 22:22	1
Total Dissolved Solids	210		10		mg/L			11/22/21 09:42	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.34				SU			11/16/21 11:05	1
Field Conductivity	462.0				umhos/cm			11/16/21 11:05	1
Field Temperature	11.8				Degrees C			11/16/21 11:05	1
Field Dissolved Oxygen	8.43				mg/L			11/16/21 11:05	1
Field EH/ORP	187.5				millivolts			11/16/21 11:05	1

Client Sample ID: DUP1

Date Collected: 11/16/21 10:10
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155958-4

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			11/24/21 23:25	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/24/21 23:25	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/24/21 23:25	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/24/21 23:25	1
1,1-Dichloroethane	ND		1.0		ug/L			11/24/21 23:25	1
1,1-Dichloroethene	ND		1.0		ug/L			11/24/21 23:25	1
1,1-Dichloropropene	ND		1.0		ug/L			11/24/21 23:25	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/24/21 23:25	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/24/21 23:25	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/24/21 23:25	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/24/21 23:25	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/24/21 23:25	1
1,2-Dichloroethane	ND		1.0		ug/L			11/24/21 23:25	1
1,2-Dichloropropane	ND		1.0		ug/L			11/24/21 23:25	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/24/21 23:25	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/24/21 23:25	1
1,3-Dichloropropane	ND		1.0		ug/L			11/24/21 23:25	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/24/21 23:25	1
2,2-Dichloropropane	ND		5.0		ug/L			11/24/21 23:25	1
2-Butanone (MEK)	ND		6.0		ug/L			11/24/21 23:25	1
2-Chlorotoluene	ND		1.0		ug/L			11/24/21 23:25	1
2-Hexanone	ND		5.0		ug/L			11/24/21 23:25	1
4-Chlorotoluene	ND		1.0		ug/L			11/24/21 23:25	1
4-Isopropyltoluene	ND		1.0		ug/L			11/24/21 23:25	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/24/21 23:25	1
Acetone	ND		10		ug/L			11/24/21 23:25	1
Benzene	ND		1.0		ug/L			11/24/21 23:25	1
Bromobenzene	ND		1.0		ug/L			11/24/21 23:25	1
Bromochloromethane	ND		1.0		ug/L			11/24/21 23:25	1
Bromodichloromethane	ND		1.0		ug/L			11/24/21 23:25	1
Bromoform	ND		1.0		ug/L			11/24/21 23:25	1
Bromomethane	ND		2.0		ug/L			11/24/21 23:25	1
Carbon disulfide	ND		2.0		ug/L			11/24/21 23:25	1
Carbon tetrachloride	ND		1.0		ug/L			11/24/21 23:25	1
Chlorobenzene	ND		1.0		ug/L			11/24/21 23:25	1
Chloroethane	ND		2.0		ug/L			11/24/21 23:25	1
Chloroform	ND		1.0		ug/L			11/24/21 23:25	1
Chloromethane	ND		2.0		ug/L			11/24/21 23:25	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/24/21 23:25	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/24/21 23:25	1
Dibromochloromethane	ND		1.0		ug/L			11/24/21 23:25	1
Dibromomethane	ND		1.0		ug/L			11/24/21 23:25	1
Dichlorodifluoromethane	ND		2.0		ug/L			11/24/21 23:25	1
Ethylbenzene	ND		1.0		ug/L			11/24/21 23:25	1
Hexachlorobutadiene	ND		1.0		ug/L			11/24/21 23:25	1
Isopropylbenzene	ND		1.0		ug/L			11/24/21 23:25	1
Methylene Chloride	ND		5.0		ug/L			11/24/21 23:25	1
Naphthalene	ND		1.0		ug/L			11/24/21 23:25	1
n-Butylbenzene	ND		1.0		ug/L			11/24/21 23:25	1

Client Sample ID: DUP1
Date Collected: 11/16/21 10:10
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155958-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		1.0		ug/L			11/24/21 23:25	1
sec-Butylbenzene	ND		1.0		ug/L			11/24/21 23:25	1
Styrene	ND		1.0		ug/L			11/24/21 23:25	1
tert-Butylbenzene	ND		1.0		ug/L			11/24/21 23:25	1
Tetrachloroethene	ND		1.0		ug/L			11/24/21 23:25	1
Toluene	ND		1.0		ug/L			11/24/21 23:25	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/24/21 23:25	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/24/21 23:25	1
Trichloroethene	ND		1.0		ug/L			11/24/21 23:25	1
Trichlorofluoromethane	ND		2.0		ug/L			11/24/21 23:25	1
Vinyl chloride	ND		1.0		ug/L			11/24/21 23:25	1
Xylenes (total)	ND		2.0		ug/L			11/24/21 23:25	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*21*	*T J*	*ug/L*		*1.51*			*11/24/21 23:25*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 127*		*11/24/21 23:25*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*11/24/21 23:25*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 120*		*11/24/21 23:25*	*1*
Toluene-d8 (Surr)	*98*		*80 - 125*		*11/24/21 23:25*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		11/29/21 14:19	11/30/21 05:34	1
1,2-Dibromoethane	ND		0.050		ug/L		11/29/21 14:19	11/30/21 05:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*102*		*70 - 130*	*11/29/21 14:19*	*11/30/21 05:34*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**19000**		500		ug/L		11/23/21 15:30	11/24/21 06:33	1
Iron	ND		30		ug/L		11/23/21 15:30	11/24/21 06:33	1
Magnesium	**8400**		200		ug/L		11/23/21 15:30	11/24/21 06:33	1
Manganese	ND		3.0		ug/L		11/23/21 15:30	11/24/21 06:33	1
Potassium	ND		500		ug/L		11/23/21 15:30	11/24/21 06:33	1
Sodium	**23000**		1000		ug/L		11/23/21 15:30	11/24/21 06:33	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	**3.1**				meq/L			12/09/21 14:58	1
Total Cations	**2.6**				meq/L			12/09/21 14:58	1
Percent Difference	**-7.8**				%			12/09/21 14:58	1
Calcium	**19**				mg/L			12/09/21 14:58	1
Magnesium	**8.4**				mg/L			12/09/21 14:58	1
Potassium	**0.00**				mg/L			12/09/21 14:58	1
Sodium	**23**				mg/L			12/09/21 14:58	1
Ammonia as N	**0.036**				mg/L			12/09/21 14:58	1
Chloride	**4.5**				mg/L			12/09/21 14:58	1
Sulfate	**25**				mg/L			12/09/21 14:58	1

Client Sample ID: DUP1
Lab Sample ID: 280-155958-4

Date Collected: 11/16/21 10:10
Matrix: Water
Date Received: 11/19/21 10:25

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity	120				mg/L			12/09/21 14:58	1
Nitrate/Nitrite	0.61				mg/L			12/09/21 14:58	1
Anion/Cation Balance	-7.8				%			12/09/21 14:58	1
Calculated TDS	130				mg/L			12/09/21 14:58	1
TDS Ratio	1.6				NONE			12/09/21 14:58	1
Total Dissolved Solids	210				mg/L			12/09/21 14:58	1
Iron	0.00				mg/L			12/09/21 14:58	1
Calcium	19				mg/L			12/09/21 14:58	1
Magnesium	8.4				mg/L			12/09/21 14:58	1
Potassium	0.00				mg/L			12/09/21 14:58	1
Sodium	23				mg/L			12/09/21 14:58	1
Ammonia as N	0.036				mg/L			12/09/21 14:58	1
Chloride	4.5				mg/L			12/09/21 14:58	1
Sulfate	25				mg/L			12/09/21 14:58	1
Bicarbonate Alkalinity	120				mg/L			12/09/21 14:58	1
Nitrate/Nitrite	0.61				mg/L			12/09/21 14:58	1
Iron	0.00				mg/L			12/09/21 14:58	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.5		0.50		mg/L			11/30/21 11:31	1
Sulfate	25		1.0		mg/L			11/30/21 11:31	1
Ammonia as N	0.036		0.030		mg/L			12/03/21 15:39	1
Nitrate/Nitrite	0.61		0.050		mg/L			11/30/21 18:28	1
Total Organic Carbon - Average	1.6		1.0		mg/L			12/08/21 18:25	1
Bicarbonate Alkalinity	120		10		mg/L			11/30/21 22:27	1
Total Dissolved Solids	210		10		mg/L			11/22/21 09:42	1

Surrogate Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers - GW

Job ID: 280-155958-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-127)	(78-120)	(77-120)	(80-125)
280-155958-1	TB1	97	94	104	101
280-155958-2	FB1	91	94	103	99
280-155958-3	MW-22A	94	92	103	99
280-155958-4	DUP1	93	96	100	98
LCS 280-558720/4	Lab Control Sample	95	96	101	101
LCSD 280-558720/5	Lab Control Sample Dup	96	93	101	98
MB 280-558720/9	Method Blank	95	93	100	99

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		12DBP1
Lab Sample ID	Client Sample ID	(70-130)
280-155958-1	TB1	107
280-155958-2	FB1	105
280-155958-3	MW-22A	103
280-155958-4	DUP1	102
LCS 280-559015/2-A	Lab Control Sample	108
LCSD 280-559015/3-A	Lab Control Sample Dup	107
MB 280-559015/1-A	Method Blank	109

Surrogate Legend

12DBP = 1,2-Dibromopropane

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 280-558720/9
Matrix: Water
Analysis Batch: 558720

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			11/24/21 21:58	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/24/21 21:58	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/24/21 21:58	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/24/21 21:58	1
1,1-Dichloroethane	ND		1.0		ug/L			11/24/21 21:58	1
1,1-Dichloroethene	ND		1.0		ug/L			11/24/21 21:58	1
1,1-Dichloropropene	ND		1.0		ug/L			11/24/21 21:58	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/24/21 21:58	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/24/21 21:58	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/24/21 21:58	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/24/21 21:58	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/24/21 21:58	1
1,2-Dichloroethane	ND		1.0		ug/L			11/24/21 21:58	1
1,2-Dichloropropane	ND		1.0		ug/L			11/24/21 21:58	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/24/21 21:58	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/24/21 21:58	1
1,3-Dichloropropane	ND		1.0		ug/L			11/24/21 21:58	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/24/21 21:58	1
2,2-Dichloropropane	ND		5.0		ug/L			11/24/21 21:58	1
2-Butanone (MEK)	ND		6.0		ug/L			11/24/21 21:58	1
2-Chlorotoluene	ND		1.0		ug/L			11/24/21 21:58	1
2-Hexanone	ND		5.0		ug/L			11/24/21 21:58	1
4-Chlorotoluene	ND		1.0		ug/L			11/24/21 21:58	1
4-Isopropyltoluene	ND		1.0		ug/L			11/24/21 21:58	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/24/21 21:58	1
Acetone	ND		10		ug/L			11/24/21 21:58	1
Benzene	ND		1.0		ug/L			11/24/21 21:58	1
Bromobenzene	ND		1.0		ug/L			11/24/21 21:58	1
Bromochloromethane	ND		1.0		ug/L			11/24/21 21:58	1
Bromodichloromethane	ND		1.0		ug/L			11/24/21 21:58	1
Bromoform	ND		1.0		ug/L			11/24/21 21:58	1
Bromomethane	ND		2.0		ug/L			11/24/21 21:58	1
Carbon disulfide	ND		2.0		ug/L			11/24/21 21:58	1
Carbon tetrachloride	ND		1.0		ug/L			11/24/21 21:58	1
Chlorobenzene	ND		1.0		ug/L			11/24/21 21:58	1
Chloroethane	ND		2.0		ug/L			11/24/21 21:58	1
Chloroform	ND		1.0		ug/L			11/24/21 21:58	1
Chloromethane	ND		2.0		ug/L			11/24/21 21:58	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/24/21 21:58	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/24/21 21:58	1
Dibromochloromethane	ND		1.0		ug/L			11/24/21 21:58	1
Dibromomethane	ND		1.0		ug/L			11/24/21 21:58	1
Dichlorodifluoromethane	ND		2.0		ug/L			11/24/21 21:58	1
Ethylbenzene	ND		1.0		ug/L			11/24/21 21:58	1
Hexachlorobutadiene	ND		1.0		ug/L			11/24/21 21:58	1
Isopropylbenzene	ND		1.0		ug/L			11/24/21 21:58	1
Methylene Chloride	ND		5.0		ug/L			11/24/21 21:58	1
Naphthalene	ND		1.0		ug/L			11/24/21 21:58	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 280-558720/9
Matrix: Water
Analysis Batch: 558720

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		1.0		ug/L			11/24/21 21:58	1
N-Propylbenzene	ND		1.0		ug/L			11/24/21 21:58	1
sec-Butylbenzene	ND		1.0		ug/L			11/24/21 21:58	1
Styrene	ND		1.0		ug/L			11/24/21 21:58	1
tert-Butylbenzene	ND		1.0		ug/L			11/24/21 21:58	1
Tetrachloroethene	ND		1.0		ug/L			11/24/21 21:58	1
Toluene	ND		1.0		ug/L			11/24/21 21:58	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/24/21 21:58	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/24/21 21:58	1
Trichloroethene	ND		1.0		ug/L			11/24/21 21:58	1
Trichlorofluoromethane	ND		2.0		ug/L			11/24/21 21:58	1
Vinyl chloride	ND		1.0		ug/L			11/24/21 21:58	1
Xylenes (total)	ND		2.0		ug/L			11/24/21 21:58	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*11/24/21 21:58*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 127*		*11/24/21 21:58*	*1*
4-Bromofluorobenzene (Surr)	*93*		*78 - 120*		*11/24/21 21:58*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 120*		*11/24/21 21:58*	*1*
Toluene-d8 (Surr)	*99*		*80 - 125*		*11/24/21 21:58*	*1*

Lab Sample ID: LCS 280-558720/4
Matrix: Water
Analysis Batch: 558720

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	26.2		ug/L		105	65 - 135
1,1,1-Trichloroethane	25.0	27.0		ug/L		108	65 - 135
1,1,2,2-Tetrachloroethane	25.0	26.3		ug/L		105	58 - 135
1,1,2-Trichloroethane	25.0	26.4		ug/L		105	64 - 135
1,1-Dichloroethane	25.0	27.8		ug/L		111	65 - 135
1,1-Dichloroethene	25.0	25.9		ug/L		104	65 - 136
1,1-Dichloropropene	25.0	28.9		ug/L		116	65 - 135
1,2,3-Trichlorobenzene	25.0	24.4		ug/L		98	60 - 135
1,2,3-Trichloropropane	25.0	24.6		ug/L		99	65 - 135
1,2,4-Trichlorobenzene	25.0	26.2		ug/L		105	58 - 135
1,2,4-Trimethylbenzene	25.0	27.4		ug/L		110	65 - 135
1,2-Dichlorobenzene	25.0	26.3		ug/L		105	65 - 135
1,2-Dichloroethane	25.0	25.2		ug/L		101	65 - 135
1,2-Dichloropropane	25.0	29.7		ug/L		119	64 - 135
1,3,5-Trimethylbenzene	25.0	27.3		ug/L		109	65 - 135
1,3-Dichlorobenzene	25.0	26.5		ug/L		106	65 - 135
1,3-Dichloropropane	25.0	27.1		ug/L		108	64 - 135
1,4-Dichlorobenzene	25.0	27.0		ug/L		108	65 - 135
2,2-Dichloropropane	25.0	27.6		ug/L		110	65 - 135
2-Butanone (MEK)	100	99.2		ug/L		99	44 - 177

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-558720/4
Matrix: Water
Analysis Batch: 558720

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chlorotoluene	25.0	27.1		ug/L		108	65 - 135
2-Hexanone	100	108		ug/L		108	57 - 139
4-Chlorotoluene	25.0	26.5		ug/L		106	65 - 135
4-Isopropyltoluene	25.0	28.0		ug/L		112	65 - 135
4-Methyl-2-pentanone	100	99.0		ug/L		99	60 - 150
Acetone	100	96.2		ug/L		96	39 - 156
Benzene	25.0	26.9		ug/L		108	65 - 135
Bromobenzene	25.0	26.5		ug/L		106	65 - 135
Bromochloromethane	25.0	25.3		ug/L		101	65 - 135
Bromodichloromethane	25.0	25.8		ug/L		103	65 - 135
Bromoform	25.0	24.1		ug/L		96	62 - 135
Bromomethane	25.0	28.6		ug/L		114	45 - 135
Carbon disulfide	25.0	28.7		ug/L		115	55 - 143
Carbon tetrachloride	25.0	27.6		ug/L		110	65 - 135
Chlorobenzene	25.0	28.4		ug/L		114	65 - 135
Chloroethane	25.0	28.4		ug/L		114	46 - 136
Chloroform	25.0	27.6		ug/L		110	65 - 135
Chloromethane	25.0	29.0		ug/L		116	34 - 145
cis-1,2-Dichloroethene	25.0	29.4		ug/L		118	65 - 135
cis-1,3-Dichloropropene	25.0	28.1		ug/L		112	65 - 135
Dibromochloromethane	25.0	25.9		ug/L		104	65 - 135
Dibromomethane	25.0	27.2		ug/L		109	65 - 135
Dichlorodifluoromethane	25.0	30.9		ug/L		124	43 - 142
Ethylbenzene	25.0	27.7		ug/L		111	65 - 135
Hexachlorobutadiene	25.0	25.8		ug/L		103	65 - 135
Isopropylbenzene	25.0	26.4		ug/L		106	65 - 135
Methylene Chloride	25.0	27.2		ug/L		109	54 - 141
Naphthalene	25.0	25.2		ug/L		101	42 - 135
n-Butylbenzene	25.0	27.4		ug/L		110	64 - 135
N-Propylbenzene	25.0	27.5		ug/L		110	65 - 135
sec-Butylbenzene	25.0	26.3		ug/L		105	64 - 135
Styrene	25.0	29.4		ug/L		118	65 - 135
tert-Butylbenzene	25.0	27.0		ug/L		108	65 - 135
Tetrachloroethene	25.0	29.0		ug/L		116	65 - 135
Toluene	25.0	26.0		ug/L		104	65 - 135
trans-1,2-Dichloroethene	25.0	29.3		ug/L		117	65 - 135
trans-1,3-Dichloropropene	25.0	25.0		ug/L		100	65 - 135
Trichloroethene	25.0	29.6		ug/L		118	65 - 135
Trichlorofluoromethane	25.0	24.6		ug/L		98	53 - 137
Vinyl chloride	25.0	30.6		ug/L		122	40 - 137

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 127*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*
Dibromofluoromethane (Surr)	*101*		*77 - 120*
Toluene-d8 (Surr)	*101*		*80 - 125*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 280-558720/5
Matrix: Water
Analysis Batch: 558720

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane			25.0	23.4		ug/L		93	65 - 135	11	20
1,1,1-Trichloroethane			25.0	25.4		ug/L		102	65 - 135	6	20
1,1,2,2-Tetrachloroethane			25.0	26.2		ug/L		105	58 - 135	0	20
1,1,2-Trichloroethane			25.0	25.5		ug/L		102	64 - 135	3	27
1,1-Dichloroethane			25.0	25.4		ug/L		102	65 - 135	9	21
1,1-Dichloroethene			25.0	25.5		ug/L		102	65 - 136	2	20
1,1-Dichloropropene			25.0	27.8		ug/L		111	65 - 135	4	21
1,2,3-Trichlorobenzene			25.0	24.3		ug/L		97	60 - 135	0	36
1,2,3-Trichloropropane			25.0	24.0		ug/L		96	65 - 135	2	23
1,2,4-Trichlorobenzene			25.0	26.1		ug/L		104	58 - 135	0	25
1,2,4-Trimethylbenzene			25.0	24.9		ug/L		100	65 - 135	9	20
1,2-Dichlorobenzene			25.0	25.3		ug/L		101	65 - 135	4	20
1,2-Dichloroethane			25.0	24.8		ug/L		99	65 - 135	2	20
1,2-Dichloropropane			25.0	29.7		ug/L		119	64 - 135	0	20
1,3,5-Trimethylbenzene			25.0	24.8		ug/L		99	65 - 135	10	20
1,3-Dichlorobenzene			25.0	24.7		ug/L		99	65 - 135	7	20
1,3-Dichloropropane			25.0	26.1		ug/L		105	64 - 135	4	20
1,4-Dichlorobenzene			25.0	26.0		ug/L		104	65 - 135	4	23
2,2-Dichloropropane			25.0	25.4		ug/L		102	65 - 135	8	20
2-Butanone (MEK)			100	99.6		ug/L		100	44 - 177	0	32
2-Chlorotoluene			25.0	26.7		ug/L		107	65 - 135	1	20
2-Hexanone			100	103		ug/L		103	57 - 139	5	25
4-Chlorotoluene			25.0	26.4		ug/L		106	65 - 135	0	20
4-Isopropyltoluene			25.0	26.0		ug/L		104	65 - 135	7	20
4-Methyl-2-pentanone			100	99.8		ug/L		100	60 - 150	1	22
Acetone			100	91.3		ug/L		91	39 - 156	5	23
Benzene			25.0	26.3		ug/L		105	65 - 135	3	20
Bromobenzene			25.0	26.2		ug/L		105	65 - 135	1	26
Bromochloromethane			25.0	24.5		ug/L		98	65 - 135	3	29
Bromodichloromethane			25.0	25.1		ug/L		100	65 - 135	3	20
Bromoform			25.0	23.2		ug/L		93	62 - 135	4	27
Bromomethane			25.0	27.1		ug/L		108	45 - 135	5	33
Carbon disulfide			25.0	27.2		ug/L		109	55 - 143	5	20
Carbon tetrachloride			25.0	26.3		ug/L		105	65 - 135	5	21
Chlorobenzene			25.0	26.8		ug/L		107	65 - 135	6	20
Chloroethane			25.0	27.2		ug/L		109	46 - 136	4	25
Chloroform			25.0	27.0		ug/L		108	65 - 135	2	20
Chloromethane			25.0	27.3		ug/L		109	34 - 145	6	24
cis-1,2-Dichloroethene			25.0	28.1		ug/L		112	65 - 135	5	20
cis-1,3-Dichloropropene			25.0	26.2		ug/L		105	65 - 135	7	26
Dibromochloromethane			25.0	25.0		ug/L		100	65 - 135	3	20
Dibromomethane			25.0	26.3		ug/L		105	65 - 135	3	26
Dichlorodifluoromethane			25.0	28.1		ug/L		112	43 - 142	10	30
Ethylbenzene			25.0	25.6		ug/L		102	65 - 135	8	20
Hexachlorobutadiene			25.0	24.4		ug/L		98	65 - 135	6	25
Isopropylbenzene			25.0	25.4		ug/L		102	65 - 135	4	20
Methylene Chloride			25.0	26.1		ug/L		105	54 - 141	4	26
Naphthalene			25.0	25.3		ug/L		101	42 - 135	0	23

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 280-558720/5
Matrix: Water
Analysis Batch: 558720

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
n-Butylbenzene			25.0	26.2		ug/L		105	64 - 135	5	21
N-Propylbenzene			25.0	25.9		ug/L		104	65 - 135	6	20
sec-Butylbenzene			25.0	25.2		ug/L		101	64 - 135	4	21
Styrene			25.0	26.8		ug/L		107	65 - 135	10	26
tert-Butylbenzene			25.0	25.4		ug/L		101	65 - 135	6	21
Tetrachloroethene			25.0	26.2		ug/L		105	65 - 135	10	20
Toluene			25.0	25.1		ug/L		100	65 - 135	3	20
trans-1,2-Dichloroethene			25.0	26.8		ug/L		107	65 - 135	9	24
trans-1,3-Dichloropropene			25.0	24.6		ug/L		98	65 - 135	2	26
Trichloroethene			25.0	25.5		ug/L		102	65 - 135	15	20
Trichlorofluoromethane			25.0	22.7		ug/L		91	53 - 137	8	27
Vinyl chloride			25.0	27.2		ug/L		109	40 - 137	12	24

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 127*
4-Bromofluorobenzene (Surr)	*93*		*78 - 120*
Dibromofluoromethane (Surr)	*101*		*77 - 120*
Toluene-d8 (Surr)	*98*		*80 - 125*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Lab Sample ID: MB 280-559015/1-A
Matrix: Water
Analysis Batch: 559026

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 559015

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		11/29/21 14:19	11/29/21 21:25	1
1,2-Dibromoethane	ND		0.050		ug/L		11/29/21 14:19	11/29/21 21:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*109*		*70 - 130*	*11/29/21 14:19*	*11/29/21 21:25*	*1*

Lab Sample ID: LCS 280-559015/2-A
Matrix: Water
Analysis Batch: 559026

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 559015

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane			0.250	0.228		ug/L		91	60 - 140
1,2-Dibromoethane			0.250	0.224		ug/L		90	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dibromopropane	*108*		*70 - 130*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC) (Continued)

Lab Sample ID: LCSD 280-559015/3-A
Matrix: Water
Analysis Batch: 559026

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 559015

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.250	0.236		ug/L		94	60 - 140	3	10
1,2-Dibromoethane			0.250	0.233		ug/L		93	60 - 140	4	10

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dibromopropane	*107*		*70 - 130*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 280-558430/1-A
Matrix: Water
Analysis Batch: 558612

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 558430

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		500		ug/L		11/23/21 15:30	11/24/21 04:43	1
Iron	ND		30		ug/L		11/23/21 15:30	11/24/21 04:43	1
Magnesium	ND		200		ug/L		11/23/21 15:30	11/24/21 04:43	1
Manganese	ND		3.0		ug/L		11/23/21 15:30	11/24/21 04:43	1
Potassium	ND		500		ug/L		11/23/21 15:30	11/24/21 04:43	1
Sodium	ND		1000		ug/L		11/23/21 15:30	11/24/21 04:43	1

Lab Sample ID: LCS 280-558430/2-A
Matrix: Water
Analysis Batch: 558612

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 558430

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Calcium			50000	48600		ug/L		97	90 - 111		
Iron			10000	9840		ug/L		98	89 - 115		
Magnesium			50000	49900		ug/L		100	90 - 113		
Manganese			1000	1000		ug/L		100	90 - 110		
Potassium			50000	50000		ug/L		100	89 - 114		
Sodium			50000	48500		ug/L		97	90 - 115		

Lab Sample ID: 280-155959-B-2-B MS
Matrix: Water
Analysis Batch: 558612

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 558430

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Calcium	130000		50000	172000		ug/L		94	48 - 153		
Iron	350000		10000	359000	4	ug/L		60	52 - 155		
Magnesium	81000		50000	131000		ug/L		100	62 - 146		
Manganese	5600		1000	6480	4	ug/L		91	79 - 121		
Potassium	14000		50000	65500		ug/L		104	76 - 132		
Sodium	52000		50000	106000		ug/L		107	70 - 203		

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 280-155959-B-2-C MSD
Matrix: Water
Analysis Batch: 558612

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 558430

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium	130000		50000	174000		ug/L		97	48 - 153	1	20
Iron	350000		10000	362000	4	ug/L		89	52 - 155	1	20
Magnesium	81000		50000	132000		ug/L		102	62 - 146	1	20
Manganese	5600		1000	6530	4	ug/L		97	79 - 121	1	20
Potassium	14000		50000	66300		ug/L		105	76 - 132	1	20
Sodium	52000		50000	107000		ug/L		109	70 - 203	1	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 480-606967/4
Matrix: Water
Analysis Batch: 606967

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			11/30/21 07:10	1
Sulfate	ND		1.0		mg/L			11/30/21 07:10	1

Lab Sample ID: LCS 480-606967/3
Matrix: Water
Analysis Batch: 606967

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	49.3		mg/L		99	90 - 110
Sulfate	50.0	49.1		mg/L		98	90 - 110

Lab Sample ID: 280-155958-2 MS
Matrix: Water
Analysis Batch: 606967

Client Sample ID: FB1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	ND		50.0	48.8		mg/L		98	81 - 120
Sulfate	ND		50.0	48.4		mg/L		97	80 - 120

Lab Sample ID: 280-155958-2 MSD
Matrix: Water
Analysis Batch: 606967

Client Sample ID: FB1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	ND		50.0	49.1		mg/L		98	81 - 120	1	15
Sulfate	ND		50.0	48.9		mg/L		98	80 - 120	1	15

Lab Sample ID: 410-63989-A-1 MS
Matrix: Water
Analysis Batch: 606967

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	13		50.0	61.3		mg/L		96	81 - 120
Sulfate	8.5		50.0	56.6		mg/L		96	80 - 120

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 480-607230/4
Matrix: Water
Analysis Batch: 607230

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			12/01/21 13:25	1
Sulfate	ND		1.0		mg/L			12/01/21 13:25	1

Lab Sample ID: LCS 480-607230/3
Matrix: Water
Analysis Batch: 607230

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	49.2		mg/L		98	90 - 110
Sulfate	50.0	49.5		mg/L		99	90 - 110

Lab Sample ID: 240-160667-A-1 MS
Matrix: Water
Analysis Batch: 607230

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	25		250	261		mg/L		94	81 - 120
Sulfate	38		250	273		mg/L		94	80 - 120

Lab Sample ID: 240-160667-A-1 MSD
Matrix: Water
Analysis Batch: 607230

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	25		250	260		mg/L		94	81 - 120	0	15
Sulfate	38		250	274		mg/L		94	80 - 120	0	15

Lab Sample ID: 480-192862-K-1 MS
Matrix: Water
Analysis Batch: 607230

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.5		50.0	50.2		mg/L		95	81 - 120
Sulfate	17		50.0	63.9		mg/L		94	80 - 120

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-559569/20
Matrix: Water
Analysis Batch: 559569

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.030		mg/L			12/03/21 13:21	1

Lab Sample ID: MB 280-559569/66
Matrix: Water
Analysis Batch: 559569

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.030		mg/L			12/03/21 15:15	1

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: LCS 280-559569/64
Matrix: Water
Analysis Batch: 559569

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia as N			2.50	2.46		mg/L		98	90 - 110		

Lab Sample ID: LCSD 280-559569/65
Matrix: Water
Analysis Batch: 559569

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N			2.50	2.46		mg/L		98	90 - 110	0	10

Lab Sample ID: 280-155883-B-11 MS
Matrix: Water
Analysis Batch: 559569

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia as N	0.044		1.00	1.04		mg/L		100	90 - 110		

Lab Sample ID: 280-155883-B-11 MSD
Matrix: Water
Analysis Batch: 559569

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N	0.044		1.00	1.02		mg/L		98	90 - 110	2	10

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-559192/22
Matrix: Water
Analysis Batch: 559192

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate/Nitrite	ND		0.050		mg/L			11/30/21 17:20	1

Lab Sample ID: LCS 280-559192/21
Matrix: Water
Analysis Batch: 559192

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate/Nitrite			5.00	5.02		mg/L		100	90 - 110		

Lab Sample ID: 280-155618-A-7 MS
Matrix: Water
Analysis Batch: 559192

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate/Nitrite	15	F1	20.0	33.1	F1	mg/L		89	90 - 110		

Method: 353.2 - Nitrogen, Nitrate-Nitrite (Continued)

Lab Sample ID: 280-155618-A-7 MSD
Matrix: Water
Analysis Batch: 559192

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate/Nitrite	15	F1	20.0	31.8	F1	mg/L		82	90 - 110	4	10

Lab Sample ID: MB 280-559452/22
Matrix: Water
Analysis Batch: 559452

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate/Nitrite	ND		0.050		mg/L			12/02/21 17:22	1

Lab Sample ID: LCS 280-559452/21
Matrix: Water
Analysis Batch: 559452

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate/Nitrite	5.00	4.97		mg/L		99	90 - 110

Lab Sample ID: 280-156013-D-2 MS
Matrix: Water
Analysis Batch: 559452

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate/Nitrite	3.8	F1	4.00	7.15	F1	mg/L		84	90 - 110

Lab Sample ID: 280-156013-D-2 MSD
Matrix: Water
Analysis Batch: 559452

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate/Nitrite	3.8	F1	4.00	7.17	F1	mg/L		85	90 - 110	0	10

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 280-560085/4
Matrix: Water
Analysis Batch: 560085

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Average	ND		1.0		mg/L			12/08/21 13:15	1

Lab Sample ID: LCS 280-560085/3
Matrix: Water
Analysis Batch: 560085

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Average	25.0	24.8		mg/L		99	88 - 112

Method: 9060 - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: 280-155958-2 MS
Matrix: Water
Analysis Batch: 560085

Client Sample ID: FB1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon - Average	ND		25.0	25.2		mg/L		101	88 - 112		

Lab Sample ID: 280-155958-2 MSD
Matrix: Water
Analysis Batch: 560085

Client Sample ID: FB1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Average	ND		25.0	25.2		mg/L		101	88 - 112	0	15

Method: SM 1030E (meq) - Cation Anion Balance

Lab Sample ID: MB 280-560188/1
Matrix: Water
Analysis Batch: 560188

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	0.000				mg/L			12/09/21 14:58	1
Magnesium	0.000				mg/L			12/09/21 14:58	1
Potassium	0.000				mg/L			12/09/21 14:58	1
Sodium	0.000				mg/L			12/09/21 14:58	1
Ammonia as N	0.000				mg/L			12/09/21 14:58	1
Chloride	0.000				mg/L			12/09/21 14:58	1
Sulfate	0.000				mg/L			12/09/21 14:58	1
Bicarbonate Alkalinity	0.000				mg/L			12/09/21 14:58	1
Nitrate/Nitrite	0.000				mg/L			12/09/21 14:58	1
Iron	0.000				mg/L			12/09/21 14:58	1

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-559218/33
Matrix: Water
Analysis Batch: 559218

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity	ND		10		mg/L			11/30/21 20:29	1

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 280-558321/1
Matrix: Water
Analysis Batch: 558321

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10		mg/L			11/22/21 08:42	1

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 280-558321/2
Matrix: Water
Analysis Batch: 558321

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			501	501		mg/L		100	88 - 114		

Lab Sample ID: 280-155717-A-4 DU
Matrix: Water
Analysis Batch: 558321

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	ND			ND		mg/L				NC	10

GC/MS VOA

Analysis Batch: 558720

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155958-1	TB1	Total/NA	Water	8260B	
280-155958-2	FB1	Total/NA	Water	8260B	
280-155958-3	MW-22A	Total/NA	Water	8260B	
280-155958-4	DUP1	Total/NA	Water	8260B	
MB 280-558720/9	Method Blank	Total/NA	Water	8260B	
LCS 280-558720/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-558720/5	Lab Control Sample Dup	Total/NA	Water	8260B	

GC Semi VOA

Prep Batch: 559015

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155958-1	TB1	Total/NA	Water	8011	
280-155958-2	FB1	Total/NA	Water	8011	
280-155958-3	MW-22A	Total/NA	Water	8011	
280-155958-4	DUP1	Total/NA	Water	8011	
MB 280-559015/1-A	Method Blank	Total/NA	Water	8011	
LCS 280-559015/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 280-559015/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 559026

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155958-1	TB1	Total/NA	Water	8011	559015
280-155958-2	FB1	Total/NA	Water	8011	559015
280-155958-3	MW-22A	Total/NA	Water	8011	559015
280-155958-4	DUP1	Total/NA	Water	8011	559015
MB 280-559015/1-A	Method Blank	Total/NA	Water	8011	559015
LCS 280-559015/2-A	Lab Control Sample	Total/NA	Water	8011	559015
LCSD 280-559015/3-A	Lab Control Sample Dup	Total/NA	Water	8011	559015

Metals

Prep Batch: 558430

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155958-2	FB1	Dissolved	Water	3005A	
280-155958-3	MW-22A	Dissolved	Water	3005A	
280-155958-4	DUP1	Dissolved	Water	3005A	
MB 280-558430/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-558430/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-155959-B-2-B MS	Matrix Spike	Dissolved	Water	3005A	
280-155959-B-2-C MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	

Analysis Batch: 558612

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155958-2	FB1	Dissolved	Water	6010B	558430
280-155958-3	MW-22A	Dissolved	Water	6010B	558430
280-155958-4	DUP1	Dissolved	Water	6010B	558430
MB 280-558430/1-A	Method Blank	Total Recoverable	Water	6010B	558430
LCS 280-558430/2-A	Lab Control Sample	Total Recoverable	Water	6010B	558430
280-155959-B-2-B MS	Matrix Spike	Dissolved	Water	6010B	558430
280-155959-B-2-C MSD	Matrix Spike Duplicate	Dissolved	Water	6010B	558430

General Chemistry

Analysis Batch: 558321

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155958-2	FB1	Total/NA	Water	SM 2540C	
280-155958-3	MW-22A	Total/NA	Water	SM 2540C	
280-155958-4	DUP1	Total/NA	Water	SM 2540C	
MB 280-558321/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-558321/2	Lab Control Sample	Total/NA	Water	SM 2540C	
280-155717-A-4 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 559192

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155958-2	FB1	Total/NA	Water	353.2	
280-155958-4	DUP1	Total/NA	Water	353.2	
MB 280-559192/22	Method Blank	Total/NA	Water	353.2	
LCS 280-559192/21	Lab Control Sample	Total/NA	Water	353.2	
280-155618-A-7 MS	Matrix Spike	Total/NA	Water	353.2	
280-155618-A-7 MSD	Matrix Spike Duplicate	Total/NA	Water	353.2	

Analysis Batch: 559218

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155958-2	FB1	Total/NA	Water	SM 2320B	
280-155958-3	MW-22A	Total/NA	Water	SM 2320B	
280-155958-4	DUP1	Total/NA	Water	SM 2320B	
MB 280-559218/33	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-559218/31	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 280-559218/32	Lab Control Sample Dup	Total/NA	Water	SM 2320B	

Analysis Batch: 559452

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155958-3	MW-22A	Total/NA	Water	353.2	
MB 280-559452/22	Method Blank	Total/NA	Water	353.2	
LCS 280-559452/21	Lab Control Sample	Total/NA	Water	353.2	
280-156013-D-2 MS	Matrix Spike	Total/NA	Water	353.2	
280-156013-D-2 MSD	Matrix Spike Duplicate	Total/NA	Water	353.2	

Analysis Batch: 559569

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155958-2	FB1	Total/NA	Water	350.1	
280-155958-3	MW-22A	Total/NA	Water	350.1	
280-155958-4	DUP1	Total/NA	Water	350.1	
MB 280-559569/20	Method Blank	Total/NA	Water	350.1	
MB 280-559569/66	Method Blank	Total/NA	Water	350.1	
LCS 280-559569/64	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-559569/65	Lab Control Sample Dup	Total/NA	Water	350.1	
280-155883-B-11 MS	Matrix Spike	Total/NA	Water	350.1	
280-155883-B-11 MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	

Analysis Batch: 560085

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155958-2	FB1	Total/NA	Water	9060	
280-155958-3	MW-22A	Total/NA	Water	9060	
280-155958-4	DUP1	Total/NA	Water	9060	
MB 280-560085/4	Method Blank	Total/NA	Water	9060	

General Chemistry (Continued)

Analysis Batch: 560085 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 280-560085/3	Lab Control Sample	Total/NA	Water	9060	
280-155958-2 MS	FB1	Total/NA	Water	9060	
280-155958-2 MSD	FB1	Total/NA	Water	9060	

Analysis Batch: 560188

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155958-2	FB1	Total/NA	Water	SM 1030E	
280-155958-2	FB1	Total/NA	Water	SM 1030E (meq)	
280-155958-3	MW-22A	Total/NA	Water	SM 1030E	
280-155958-3	MW-22A	Total/NA	Water	SM 1030E (meq)	
280-155958-4	DUP1	Total/NA	Water	SM 1030E	
280-155958-4	DUP1	Total/NA	Water	SM 1030E (meq)	
MB 280-560188/1	Method Blank	Total/NA	Water	SM 1030E (meq)	

Analysis Batch: 606967

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155958-2	FB1	Total/NA	Water	300.0	
280-155958-3	MW-22A	Total/NA	Water	300.0	
280-155958-4	DUP1	Total/NA	Water	300.0	
MB 480-606967/4	Method Blank	Total/NA	Water	300.0	
LCS 480-606967/3	Lab Control Sample	Total/NA	Water	300.0	
280-155958-2 MS	FB1	Total/NA	Water	300.0	
280-155958-2 MSD	FB1	Total/NA	Water	300.0	
410-63989-A-1 MS	Matrix Spike	Total/NA	Water	300.0	

Analysis Batch: 607230

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155958-3	MW-22A	Total/NA	Water	300.0	
MB 480-607230/4	Method Blank	Total/NA	Water	300.0	
LCS 480-607230/3	Lab Control Sample	Total/NA	Water	300.0	
240-160667-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
240-160667-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
480-192862-K-1 MS	Matrix Spike	Total/NA	Water	300.0	

Field Service / Mobile Lab

Analysis Batch: 558413

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155958-3	MW-22A	Total/NA	Water	Field Sampling	

Lab Chronicle

Client: Waste Management
Job ID: 280-155958-1
Project/Site: 1003|Riverbend Landfill SCS Engineers - GW

Client Sample ID: TB1
Lab Sample ID: 280-155958-1
Date Collected: 11/16/21 07:00
Matrix: Water
Date Received: 11/19/21 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	558720	11/24/21 22:20	PP	TAL DEN
Total/NA	Prep	8011			35.2 mL	35 mL	559015	11/29/21 14:19	KSA	TAL DEN
Total/NA	Analysis	8011		1			559026	11/30/21 04:21	KSA	TAL DEN

Client Sample ID: FB1
Lab Sample ID: 280-155958-2
Date Collected: 11/16/21 09:30
Matrix: Water
Date Received: 11/19/21 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	558720	11/24/21 22:41	PP	TAL DEN
Total/NA	Prep	8011			35.2 mL	35 mL	559015	11/29/21 14:19	KSA	TAL DEN
Total/NA	Analysis	8011		1			559026	11/30/21 04:45	KSA	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	558430	11/23/21 15:30	CEH	TAL DEN
Dissolved	Analysis	6010B		1			558612	11/24/21 06:25	MAB	TAL DEN
Total/NA	Analysis	300.0		1			606967	11/30/21 09:01	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	559569	12/03/21 15:35	LRB	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	559192	11/30/21 18:12	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	560085	12/08/21 17:23	RAF	TAL DEN
Total/NA	Analysis	SM 1030E		1			560188	12/09/21 14:58	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			560188	12/09/21 14:58	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			559218	11/30/21 22:17	SPG	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	558321	11/22/21 09:42	ABW	TAL DEN

Client Sample ID: MW-22A
Lab Sample ID: 280-155958-3
Date Collected: 11/16/21 10:05
Matrix: Water
Date Received: 11/19/21 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	558720	11/24/21 23:03	PP	TAL DEN
Total/NA	Prep	8011			35 mL	35 mL	559015	11/29/21 14:19	KSA	TAL DEN
Total/NA	Analysis	8011		1			559026	11/30/21 05:10	KSA	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	558430	11/23/21 15:30	CEH	TAL DEN
Dissolved	Analysis	6010B		1			558612	11/24/21 06:29	MAB	TAL DEN
Total/NA	Analysis	300.0		1			606967	11/30/21 11:12	IMZ	TAL BUF
Total/NA	Analysis	300.0		1			607230	12/01/21 17:58	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	559569	12/03/21 15:37	LRB	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	559452	12/02/21 17:32	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	560085	12/08/21 18:10	RAF	TAL DEN
Total/NA	Analysis	SM 1030E		1			560188	12/09/21 14:58	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			560188	12/09/21 14:58	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			559218	11/30/21 22:22	SPG	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	558321	11/22/21 09:42	ABW	TAL DEN
Total/NA	Analysis	Field Sampling		1			558413	11/16/21 11:05	PP	TAL DEN

Lab Chronicle

Client: Waste Management
Job ID: 280-155958-1
Project/Site: 1003|Riverbend Landfill SCS Engineers - GW

Client Sample ID: DUP1
Lab Sample ID: 280-155958-4

Date Collected: 11/16/21 10:10
Matrix: Water

Date Received: 11/19/21 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	558720	11/24/21 23:25	PP	TAL DEN
Total/NA	Prep	8011			35.2 mL	35 mL	559015	11/29/21 14:19	KSA	TAL DEN
Total/NA	Analysis	8011		1			559026	11/30/21 05:34	KSA	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	558430	11/23/21 15:30	CEH	TAL DEN
Dissolved	Analysis	6010B		1			558612	11/24/21 06:33	MAB	TAL DEN
Total/NA	Analysis	300.0		1			606967	11/30/21 11:31	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	559569	12/03/21 15:39	LRB	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	559192	11/30/21 18:28	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	560085	12/08/21 18:25	RAF	TAL DEN
Total/NA	Analysis	SM 1030E		1			560188	12/09/21 14:58	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			560188	12/09/21 14:58	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			559218	11/30/21 22:27	SPG	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	558321	11/22/21 09:42	ABW	TAL DEN

Laboratory References:

TAL BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Eurofins TestAmerica, Denver
4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Fax (303) 431-7171

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: I. Hultquist	Lab PM: Sara, Betsy A	Carrier Tracking No(s):	COC No: 280-32810-13511.1
Client Contact:	Phone: 503 716 6320	E-Mail: Betsy.Sara@Eurofinset.com		Page: Page 1 of 1
Company: Waste Management				Job #:
Address: 13469 SW Highway 18	Due Date Requested:			
City: McMinnville	TAT Requested (days):			
State, Zip: OR, 97128				
Phone: 503-8575870(Tel)	PO #:			
Email:	WO #:			
Project Name: 1003|Riverbend Landfill SCS Engineers	Project #: 28002786 - Annual MW-22A - Apr			
Site: Oregon	SSOW#:			

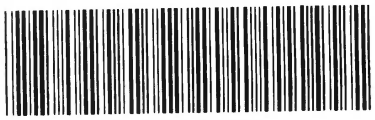
Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Alks/TDS	Dissolved Metals	Ammonia/NOXT/TOC	8260B - VOA	8011 - EDB/DBCP	Chloride/Sulfate (TA Buffalo)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	S	A	R	N		
TB1	11-16-21	0700	G	W						X	X		8	
FB1	11-16-21	0930	G	W	X		X	X	X	X	X	X	11	
MW-22A	11-16-21	1005	G	W	X		X	X	X	X	X	X	11	
DUP1	11-16-21	1010	G	W	X		X	X	X	X	X	X	11	


280-155958 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	11-18-21 1630	SCS		11/19/2021 1025	ESA DEN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: △ Yes △ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 0.0, 0.4, 0.9, 0.4 CF +1.0 IR #11

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** FB1
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	(SW)	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)	CLOUDY	RAIN	?	**TEMPERATURE:**	°F 45.0	°C	[Circle appropriate units]			

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
/ /	:						X 1	
/ /	:						X 3	

Gal/ft = (dia /2)^2 x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other = Transfer

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	√
VOA Glass	11/16/21	09:30	G	3	(40 ml)	(HCl)	YES (NO)	NO		✓
VOA Glass	11/16/21	09:30	G	3	(40 ml)	($Na_2S_2O_3$)	(YES) NO			✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/16/21	09:30	G	2	(250), 500, (1L)	(None)	YES (NO)	NO	NA	✓
Yellow Glass	11/16/21	09:30	G	2	250, (500), 1L	(H_2SO_4)	YES (NO)	NO		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	11/16/21	09:30	G	1	250, (500), 1L	(HNO_3)	(YES) YES	YES		✓
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 | 11 | Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [ ] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX) (NOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	G (0930)	0.00	-	-	-	- .	-	-	-
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Collected near MW-22A using Lab-Supplied DI water

SAMPLER: I. Hultquist
(PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-22A
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	(SW)	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(°F) 42.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
11/16/21	08:23	22.18	.	5.04	.	17.14	X 1	2.74
/ /	:	.	.	.	.		X 3	8.22

Gal/ft = (dia./2)^2 x 0.163 | 1" = 0.041 | (2") = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	√
VOA Glass	11/16/21	10:05	F	3	(40 ml)	(HCl)	(YES)	(NO)	
VOA Glass	11/16/21	10:05	F	3	(40 ml)	($Na_2S_2O_3$)	(YES)	(NO)	
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO	
White Poly	11/16/21	10:05	F	2	(250, 500, 1L)	(None)	(YES)	(NO)	NA
Yellow Glass	11/16/21	10:05	F	2	250, (500), 1L	(H_2SO_4)	(YES)	(NO)	
Red Total Poly	XIN/ /	:			125, 250, 500	HNO_3	YES	NO	
Red Diss. Poly	11/16/21	10:05	F	1	250, (500), 1L	(HNO_3)	(YES)	(YES)	
White Poly	/ /	:			250, 500, 1L	None	YES	YES	
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO	

White no acid, Yellow H2SO4, Red HNO3 | 11 | Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX) Nitrate
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: 08:30 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	F(0831)	0.00	7.50	157.2	414	10.3	5.32	10.26	cloudy/light tan
1	F(0838)	2.75	6.52	154.1	502	11.8	6.12	8.39	Cloudy/light tan
2	F(0925)	5.50	6.43	170.3	450	11.8	6.19	8.34	cloudy/light tan
3	F(1000)	8.25	6.35	186.3	461	11.8	6.33	8.41	Cloudy/ light tan
4	F(1002)	8.50	6.35	186.9	462	11.8	6.33	8.42	Cloudy/light tan
5	F(1004)	8.75	6.34	187.5	462	11.9	6.34	8.43	cloudy/light tan
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Standard purge (2"/8"/2psi) ~ 450 ml/min

SAMPLER: I. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** DUP1
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY	CLOUDY	RAIN	?					**TEMPERATURE:**	°F 45.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
/ /	:	.	.	.	.	.	X 1	
/ /	:	.	.	.	.		X 3	.

Gal/ft = $(dia./2)^2 \times 0.163$	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	√
VOA Glass	11/16/21	10:10	F	3	40 ml	HCl	YES	NO		✓
VOA Glass	11/16/21	10:10	F	3	40 ml	$Na_2S_2O_3$	YES	NO		✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/16/21	10:10	F	2	250 500 1L	None	YES	NO	NA	✓
Yellow Glass	11/16/21	10:10	F	2	250, 500, 1L	H_2SO_4	YES	NO		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	11/16/21	10:10	F	1	250, 500, 1L	HNO_3	YES	YES		✓
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX) None
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0		0.00	.			.	.	.	
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Collected at MW-22A

SAMPLER: I. Hultquist (PRINTED NAME) (SIGNATURE)



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1 From See optional release signature below.

ORDER: 00859798

DECLARED VALUE $100

PACKAGE WEIGHT

( ) ___

eurofins | Environment Testing TestAmerica

1760102

2 To Shipment will not be accepted if address below

SAMPLE RECEIVING
EUROFINS TEST AMERICA
4955 YARROW ST
ARVADA, CO 80002
(303) 736-0100

SATURDAY DELIVERY

Shipments tendered on Friday are delivered on Saturday to most locations.

REF:

8165 7539 5229

Release Signature

For nonresidential deliveries.

Sign within this area. Please do not remove.

By signing you authorize us to deliver this shipment without obtaining a signature and agree to indemnify and hold us harmless from any resulting claims.

For FedEx Use Only

Employee Number | Base Charges

Other | Total Charges

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M-10091 Rev. 12/17

Form ID 0667

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Peel here and attach label to package.

00000077 ORDER:00859798

EUROFINS TEST AMERICA ARVADA,CO

280-155958 Waybill

TRK 0667 8165 7539 5229

FRI - 19 NOV 11:30A
PRIORITY OVERNIGHT

AHS

80002 DEN

CO-US

XALAAA

ORIGIN ID:BNOA

SAMPLE RCVG
TO EUROFINS TESTAMERICA
4955 YARROW ST

ARVADA CO 80002 (US)

(303)736-0100

REF:

INV:

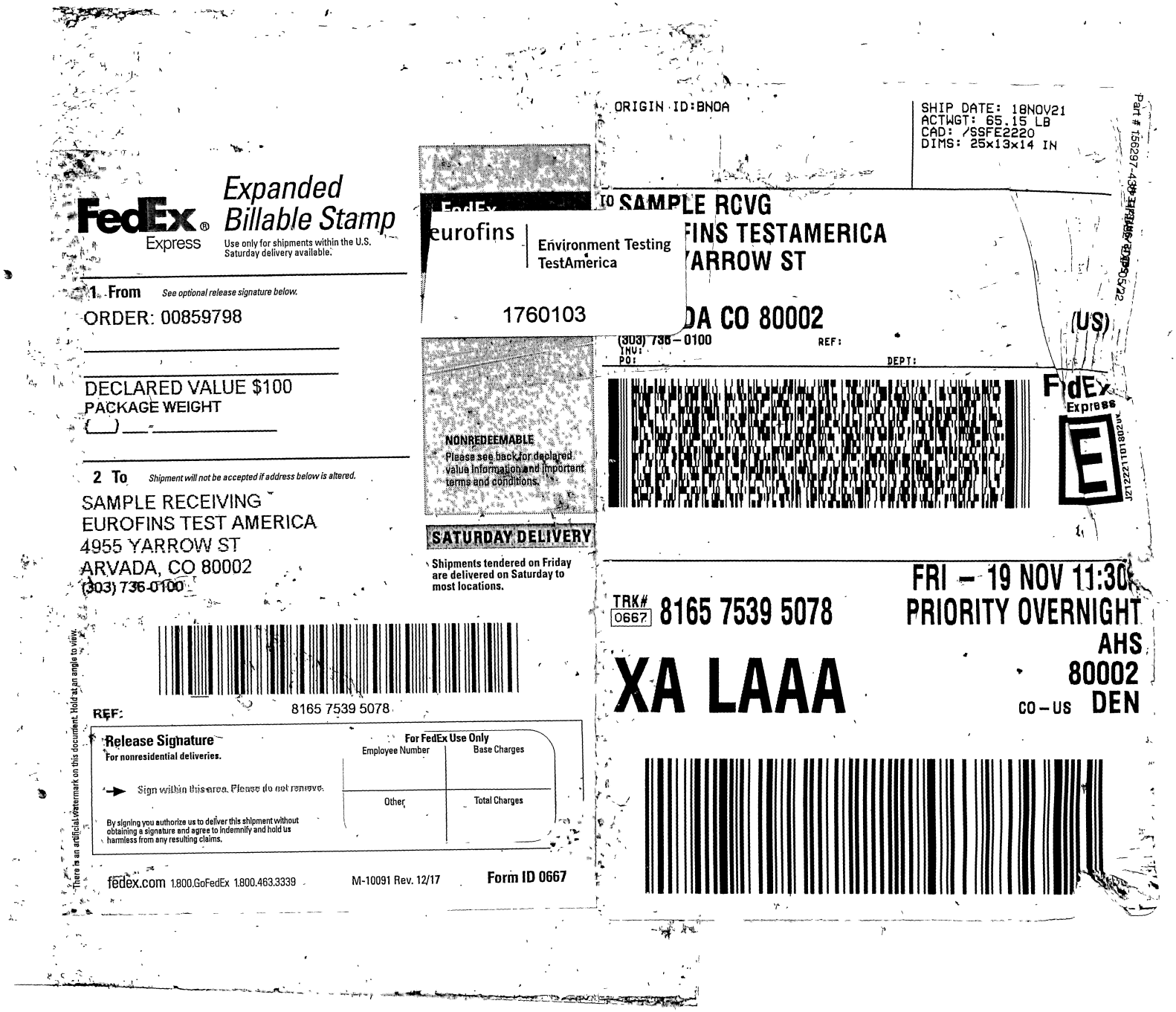
PO:

DEPT:

FedEx Express

SHIP DATE: 18NOV21
ACTWGT: 65.45 LB
CAD: /SSFE2220
DIMS: 25x13x14 IN

1562972-438 FEDEX 2DAY EXP 05/22



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1 From See optional release signature below.

ORDER: 00859798

DECLARED VALUE $100

PACKAGE WEIGHT

( ) ___ -_____

2 To Shipment will not be accepted if address below is altered.

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4955 YARROW ST
ARVADA, CO 80002
(303) 736-0100

8165 7539 5078

REF:

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Employee Number | Base Charges
Other | Total Charges

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eurofins | Environment Testing TestAmerica

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SATURDAY DELIVERY
Shipments tendered on Friday are delivered on Saturday to most locations.

ORIGIN ID:BNOA

SHIP DATE: 18NOV21
ACTWGT: 65.15 LB
CAD: /SSFE2220
DIMS: 25x13x14 IN

TO SAMPLE RCVG
FINS TESTAMERICA
YARROW ST
DA CO 80002 (US)
(303) 736-0100 REF:
INV:
PO: DEPT:

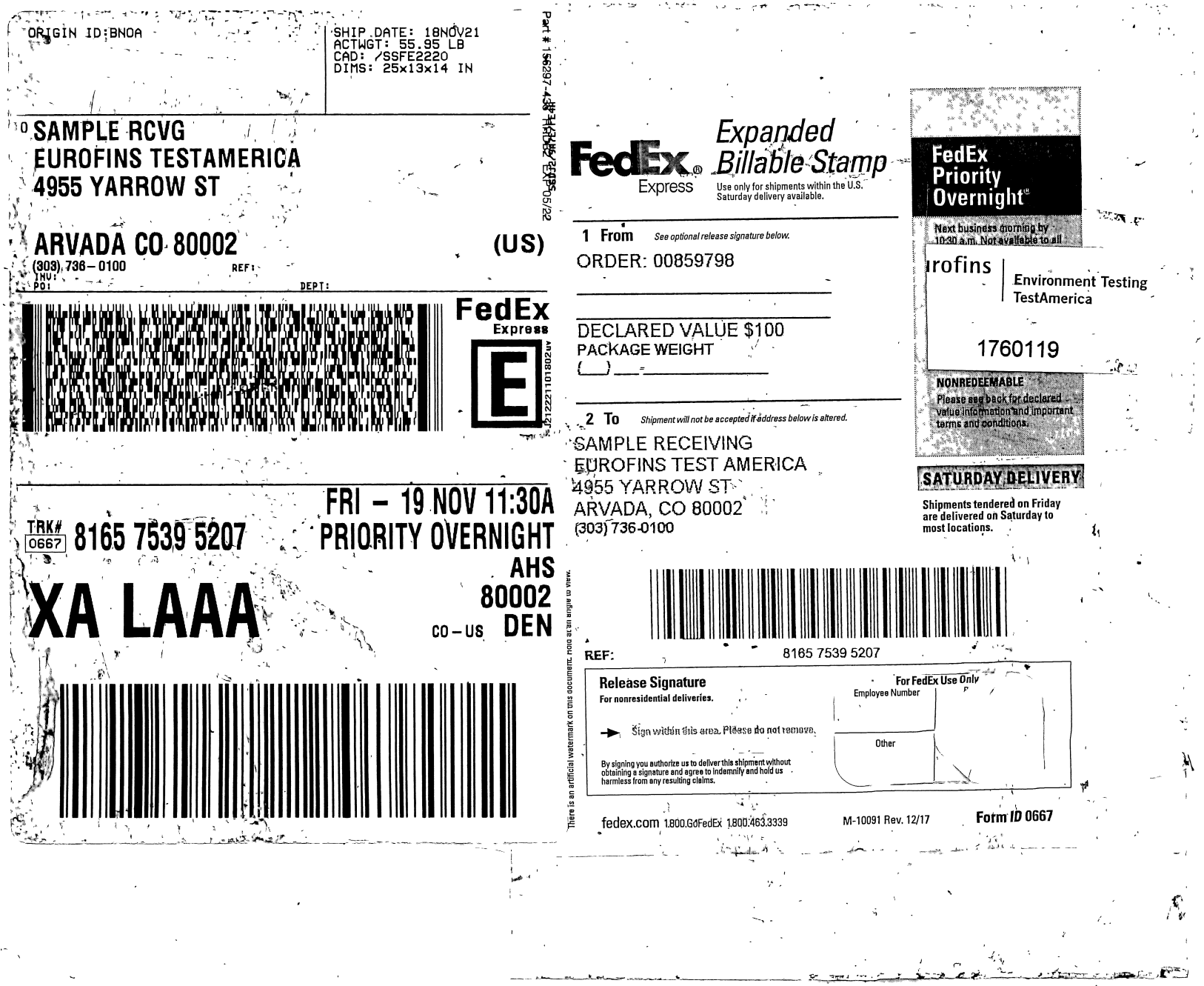
FedEx Express

TRK# 0667 8165 7539 5078

FRI - 19 NOV 11:30
PRIORITY OVERNIGHT
AHS
80002
CO-US DEN

XA LAAA

Part # 156297-438 [illegible] 05/22



ORIGIN ID:BNOA

SHIP DATE: 18NOV21
ACTWGT: 55.95 LB
CAD: /SSFE2220
DIMS: 25x13x14 IN

Part # 156297-438 HAD 02 EXP 05/22

SAMPLE RCVG
EUROFINS TESTAMERICA
4955 YARROW ST

ARVADA CO 80002 (US)
(303) 736-0100
INV:
PO: REF: DEPT:

FedEx Express

E

J212221101802uv

TRK# 0667 8165 7539 5207

FRI - 19 NOV 11:30A
PRIORITY OVERNIGHT
AHS
80002
CO-US DEN

XA LAAA

FedEx Express

Expanded Billable Stamp

Use only for shipments within the U.S. Saturday delivery available.

1 From *See optional release signature below.*

ORDER: 00859798

DECLARED VALUE $100
PACKAGE WEIGHT
( ) ___

2 To *Shipment will not be accepted if address below is altered.*

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EUROFINS TEST AMERICA
4955 YARROW ST
ARVADA, CO 80002
(303) 736-0100

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Next business morning by 10:30 a.m. Not available to all

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1760119

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SATURDAY DELIVERY
Shipments tendered on Friday are delivered on Saturday to most locations.

REF: 8165 7539 5207

Release Signature
For nonresidential deliveries.

→ Sign within this area. Please do not remove.

By signing you authorize us to deliver this shipment without obtaining a signature and agree to indemnify and hold us harmless from any resulting claims.

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Employee Number
Other

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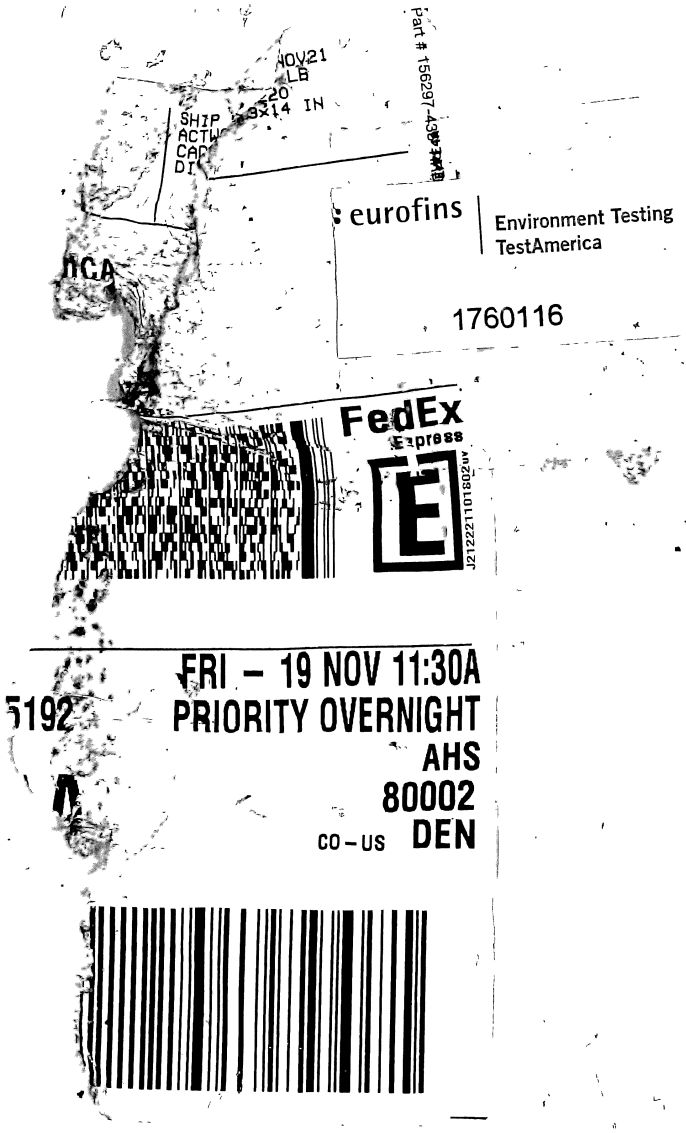
NOV21
LB
20
9x14 IN
SHIP
ACTW
CAP
DI
Part # 156297-43
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Express
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80002
CO-US DEN

Eurofins TestAmerica, Denver
4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0100 Fax: 303-431-7171

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Sara, Betsy A	Carrier Tracking No(s):	COC No: 280-594915.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Betsy.Sara@Eurofinset.com	State of Origin: Oregon	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Oregon		Job #: 280-155958-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 12/12/2021			
City: Amherst	TAT Requested (days):			
State, Zip: NY, 14228-2298				
Phone: 716-691-2600(Tel) 716-691-7991(Fax)	PO #:			
Email:	WO #:			
Project Name: 1003|Riverbend Landfill SCS Engineers	Project #: 28002786			
Site: 1003|Riverbend Landfill	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300.0_28D/ 300.0, Sulfate and Chloride (TA Buffalo)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
FB1 (280-155958-2)	11/16/21	09:30 Pacific		Water			X	1	
MW-22A (280-155958-3)	11/16/21	10:05 Pacific		Water			X	1	
DUP1 (280-155958-4)	11/16/21	10:10 Pacific		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:	Time:	Method of Shipment:			
Relinquished by:	Date/Time: 11-22-21 1627	Company ERGDEN	Received by:	Date/Time: 11/23/21 1030	Company TA		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company		
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 2.9# 1 ICE				

Ver: 06/08/2021

3/15/2022

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-155958-1

Login Number: 155958
List Number: 1
Creator: Roehsner, Karen P

List Source: Eurofins Denver

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	
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: 280-155958-1

Login Number: 155958
List Number: 2
Creator: Kolb, Chris M

List Source: Eurofins Buffalo
List Creation: 11/26/21 09:42 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	2.9 ir gun #1 ice
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

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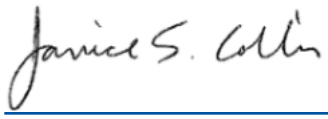
ANALYTICAL REPORT

Eurofins Denver
4955 Yarrow Street
Arvada, CO 80002
Tel: (303)736-0100

Laboratory Job ID: 280-155967-1
Client Project/Site: 1003|Riverbend Landfill SCS Engineers - GW
Sampling Event: Semiannual Detection Wells - Apr Oct

For:
Waste Management
7227 NE 55th Avenue
Portland, Oregon 97218

Attn: Mr. William V Hickey, PMP



Authorized for release by:
3/15/2022 3:03:28 PM
Janice Collins, Project Management Assistant I
(303)736-0100
Janice.Collins@Eurofinset.com

Designee for

Betsy Sara, Project Manager II
(303)736-0189
Betsy.Sara@Eurofinset.com

LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Waste Management
Job ID: 280-155967-1
Project/Site: 1003|Riverbend Landfill SCS Engineers - GW

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

General Chemistry

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 280-155967-1

Laboratory: Eurofins Denver

Narrative

CASE NARRATIVE

Client: Waste Management

Project: 1003|Riverbend Landfill SCS Engineers - GW

Report Number: 280-155967-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

This report may include reporting limits (RLs) less than Eurofins TestAmerica's standard reporting limit. The reported sample results and associated reporting limits are being used specifically to meet the needs of this project. Note that data are not normally reported to these levels without qualification because they are inherently less reliable and potentially less defensible than required by the latest industry standards.

Sample Receiving

The samples were received on 11/19/2021; the samples arrived in good condition, properly preserved and on ice. The temperatures of the coolers at receipt were 0.6°C, 1.0°C, 1.4°C and 1.9°C.

Holding Times

Due to an instrument failure, the Bicarbonate Alkalinity analysis was performed 3 days past the 14-day holding time.

All other holding times were met.

Method Blanks

All Method Blanks met method criteria.

Laboratory Control Samples (LCS)

All Laboratory Control Sample recoveries were within control limits.

Matrix Spike (MS) and Matrix Spike Duplicate (MSD)

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) for Method 8260B and Method 8011, however, LCS/LCSD pairs were analyzed to demonstrate method precision and accuracy.

All other MS and MSD results were within established control limits.

General Comments

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.

The analysis for Chloride and Sulfate Method 300.0 was performed by TestAmerica Buffalo. Their address and phone number are:
TestAmerica Buffalo

Job ID: 280-155967-1 (Continued)

Laboratory: Eurofins Denver (Continued)

10 Hazelwood Drive, Suite 106
Amherst, NY 14228
Phone: 716-691-2600

Detection Summary

Client: Waste Management
Job ID: 280-155967-1
Project/Site: 1003|Riverbend Landfill SCS Engineers - GW

Client Sample ID: TB1 — Lab Sample ID: 280-155967-1

No Detections.

Client Sample ID: MW-20A — Lab Sample ID: 280-155967-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	84000		500		ug/L	1		6010B	Dissolved
Iron	510		30		ug/L	1		6010B	Dissolved
Magnesium	33000		200		ug/L	1		6010B	Dissolved
Manganese	2800		3.0		ug/L	1		6010B	Dissolved
Sodium	32000		1000		ug/L	1		6010B	Dissolved
Chloride	180		0.50		mg/L	1		300.0	Total/NA
Sulfate	7.8		1.0		mg/L	1		300.0	Total/NA
Ammonia as N	0.12		0.030		mg/L	1		350.1	Total/NA
Total Organic Carbon - Average	1.3		1.0		mg/L	1		9060	Total/NA
Total Anions	9.4				meq/L	1		SM 1030E	Total/NA
Total Cations	8.3				meq/L	1		SM 1030E	Total/NA
Percent Difference	-6.2				%	1		SM 1030E	Total/NA
Calcium	84				mg/L	1		SM 1030E	Total/NA
Magnesium	33				mg/L	1		SM 1030E	Total/NA
Potassium	0.00				mg/L	1		SM 1030E	Total/NA
Sodium	32				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.12				mg/L	1		SM 1030E	Total/NA
Chloride	180				mg/L	1		SM 1030E	Total/NA
Sulfate	7.8				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	210				mg/L	1		SM 1030E	Total/NA
Alkalinity	210				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.00				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	-6.2				%	1		SM 1030E	Total/NA
Calculated TDS	460				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.1				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	510				mg/L	1		SM 1030E	Total/NA
Iron	0.51				mg/L	1		SM 1030E	Total/NA
Calcium	4.2				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	2.7				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	1.4				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.0086				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	5.1				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.16				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	210				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	4.2				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.027				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	210	H	10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	510		10		mg/L	1		SM 2540C	Total/NA
Field pH	6.65				SU	1		Field Sampling	Total/NA
Field Conductivity	1547				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	13.4				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	1.04				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	34.4				millivolts	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Waste Management
Job ID: 280-155967-1
Project/Site: 1003|Riverbend Landfill SCS Engineers - GW

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-155967-1	TB1	Water	11/16/21 07:00	11/19/21 10:25
280-155967-2	MW-20A	Water	11/16/21 11:55	11/19/21 10:25

Method Summary

Client: Waste Management
Job ID: 280-155967-1
Project/Site: 1003|Riverbend Landfill SCS Engineers - GW

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL DEN
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	TAL DEN
6010B	Metals (ICP)	SW846	TAL DEN
300.0	Anions, Ion Chromatography	MCAWW	TAL BUF
350.1	Nitrogen, Ammonia	MCAWW	TAL DEN
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	TAL DEN
9060	Organic Carbon, Total (TOC)	SW846	TAL DEN
SM 1030E	Cation Anion Balance	SM	TAL DEN
SM 1030E (meq)	Cation Anion Balance	SM	TAL DEN
SM 2320B	Alkalinity	SM	TAL DEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL DEN
Field Sampling	Field Sampling	EPA	TAL DEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL DEN
5030B	Purge and Trap	SW846	TAL DEN
8011	Microextraction	SW846	TAL DEN

Protocol 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.

Laboratory References:

TAL BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Client Sample ID: TB1
Date Collected: 11/16/21 07:00
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155967-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			11/29/21 17:09	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/29/21 17:09	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/29/21 17:09	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/29/21 17:09	1
1,1-Dichloroethane	ND		1.0		ug/L			11/29/21 17:09	1
1,1-Dichloroethene	ND		1.0		ug/L			11/29/21 17:09	1
1,1-Dichloropropene	ND		1.0		ug/L			11/29/21 17:09	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/29/21 17:09	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/29/21 17:09	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/29/21 17:09	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/29/21 17:09	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/29/21 17:09	1
1,2-Dichloroethane	ND		1.0		ug/L			11/29/21 17:09	1
1,2-Dichloropropane	ND		1.0		ug/L			11/29/21 17:09	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/29/21 17:09	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/29/21 17:09	1
1,3-Dichloropropane	ND		1.0		ug/L			11/29/21 17:09	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/29/21 17:09	1
2,2-Dichloropropane	ND		5.0		ug/L			11/29/21 17:09	1
2-Butanone (MEK)	ND		6.0		ug/L			11/29/21 17:09	1
2-Chlorotoluene	ND		1.0		ug/L			11/29/21 17:09	1
2-Hexanone	ND		5.0		ug/L			11/29/21 17:09	1
4-Chlorotoluene	ND		1.0		ug/L			11/29/21 17:09	1
4-Isopropyltoluene	ND		1.0		ug/L			11/29/21 17:09	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/29/21 17:09	1
Acetone	ND		10		ug/L			11/29/21 17:09	1
Benzene	ND		1.0		ug/L			11/29/21 17:09	1
Bromobenzene	ND		1.0		ug/L			11/29/21 17:09	1
Bromochloromethane	ND		1.0		ug/L			11/29/21 17:09	1
Bromodichloromethane	ND		1.0		ug/L			11/29/21 17:09	1
Bromoform	ND		1.0		ug/L			11/29/21 17:09	1
Bromomethane	ND		2.0		ug/L			11/29/21 17:09	1
Carbon disulfide	ND		2.0		ug/L			11/29/21 17:09	1
Carbon tetrachloride	ND		1.0		ug/L			11/29/21 17:09	1
Chlorobenzene	ND		1.0		ug/L			11/29/21 17:09	1
Chloroethane	ND		2.0		ug/L			11/29/21 17:09	1
Chloroform	ND		1.0		ug/L			11/29/21 17:09	1
Chloromethane	ND		2.0		ug/L			11/29/21 17:09	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/29/21 17:09	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/29/21 17:09	1
Dibromochloromethane	ND		1.0		ug/L			11/29/21 17:09	1
Dibromomethane	ND		1.0		ug/L			11/29/21 17:09	1
Dichlorodifluoromethane	ND		2.0		ug/L			11/29/21 17:09	1
Ethylbenzene	ND		1.0		ug/L			11/29/21 17:09	1
Hexachlorobutadiene	ND		1.0		ug/L			11/29/21 17:09	1
Isopropylbenzene	ND		1.0		ug/L			11/29/21 17:09	1
Methylene Chloride	ND		5.0		ug/L			11/29/21 17:09	1
Naphthalene	ND		1.0		ug/L			11/29/21 17:09	1
n-Butylbenzene	ND		1.0		ug/L			11/29/21 17:09	1

Client Sample ID: TB1

Lab Sample ID: 280-155967-1

Date Collected: 11/16/21 07:00

Matrix: Water

Date Received: 11/19/21 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		1.0		ug/L			11/29/21 17:09	1
sec-Butylbenzene	ND		1.0		ug/L			11/29/21 17:09	1
Styrene	ND		1.0		ug/L			11/29/21 17:09	1
tert-Butylbenzene	ND		1.0		ug/L			11/29/21 17:09	1
Tetrachloroethene	ND		1.0		ug/L			11/29/21 17:09	1
Toluene	ND		1.0		ug/L			11/29/21 17:09	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/29/21 17:09	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/29/21 17:09	1
Trichloroethene	ND		1.0		ug/L			11/29/21 17:09	1
Trichlorofluoromethane	ND		2.0		ug/L			11/29/21 17:09	1
Vinyl chloride	ND		1.0		ug/L			11/29/21 17:09	1
Xylenes (total)	ND		2.0		ug/L			11/29/21 17:09	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*11/29/21 17:09*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 127*		*11/29/21 17:09*	*1*
4-Bromofluorobenzene (Surr)	*92*		*78 - 120*		*11/29/21 17:09*	*1*
Dibromofluoromethane (Surr)	*97*		*77 - 120*		*11/29/21 17:09*	*1*
Toluene-d8 (Surr)	*92*		*80 - 125*		*11/29/21 17:09*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		11/29/21 14:19	11/30/21 05:58	1
1,2-Dibromoethane	ND		0.050		ug/L		11/29/21 14:19	11/30/21 05:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*106*		*70 - 130*	*11/29/21 14:19*	*11/30/21 05:58*	*1*

Client Sample ID: MW-20A

Lab Sample ID: 280-155967-2

Date Collected: 11/16/21 11:55

Matrix: Water

Date Received: 11/19/21 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			11/29/21 17:31	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/29/21 17:31	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/29/21 17:31	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/29/21 17:31	1
1,1-Dichloroethane	ND		1.0		ug/L			11/29/21 17:31	1
1,1-Dichloroethene	ND		1.0		ug/L			11/29/21 17:31	1
1,1-Dichloropropene	ND		1.0		ug/L			11/29/21 17:31	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/29/21 17:31	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/29/21 17:31	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/29/21 17:31	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/29/21 17:31	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/29/21 17:31	1
1,2-Dichloroethane	ND		1.0		ug/L			11/29/21 17:31	1
1,2-Dichloropropane	ND		1.0		ug/L			11/29/21 17:31	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/29/21 17:31	1

Client Sample ID: MW-20A
Date Collected: 11/16/21 11:55
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155967-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0		ug/L			11/29/21 17:31	1
1,3-Dichloropropane	ND		1.0		ug/L			11/29/21 17:31	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/29/21 17:31	1
2,2-Dichloropropane	ND		5.0		ug/L			11/29/21 17:31	1
2-Butanone (MEK)	ND		6.0		ug/L			11/29/21 17:31	1
2-Chlorotoluene	ND		1.0		ug/L			11/29/21 17:31	1
2-Hexanone	ND		5.0		ug/L			11/29/21 17:31	1
4-Chlorotoluene	ND		1.0		ug/L			11/29/21 17:31	1
4-Isopropyltoluene	ND		1.0		ug/L			11/29/21 17:31	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/29/21 17:31	1
Acetone	ND		10		ug/L			11/29/21 17:31	1
Benzene	ND		1.0		ug/L			11/29/21 17:31	1
Bromobenzene	ND		1.0		ug/L			11/29/21 17:31	1
Bromochloromethane	ND		1.0		ug/L			11/29/21 17:31	1
Bromodichloromethane	ND		1.0		ug/L			11/29/21 17:31	1
Bromoform	ND		1.0		ug/L			11/29/21 17:31	1
Bromomethane	ND		2.0		ug/L			11/29/21 17:31	1
Carbon disulfide	ND		2.0		ug/L			11/29/21 17:31	1
Carbon tetrachloride	ND		1.0		ug/L			11/29/21 17:31	1
Chlorobenzene	ND		1.0		ug/L			11/29/21 17:31	1
Chloroethane	ND		2.0		ug/L			11/29/21 17:31	1
Chloroform	ND		1.0		ug/L			11/29/21 17:31	1
Chloromethane	ND		2.0		ug/L			11/29/21 17:31	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/29/21 17:31	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/29/21 17:31	1
Dibromochloromethane	ND		1.0		ug/L			11/29/21 17:31	1
Dibromomethane	ND		1.0		ug/L			11/29/21 17:31	1
Dichlorodifluoromethane	ND		2.0		ug/L			11/29/21 17:31	1
Ethylbenzene	ND		1.0		ug/L			11/29/21 17:31	1
Hexachlorobutadiene	ND		1.0		ug/L			11/29/21 17:31	1
Isopropylbenzene	ND		1.0		ug/L			11/29/21 17:31	1
Methylene Chloride	ND		5.0		ug/L			11/29/21 17:31	1
Naphthalene	ND		1.0		ug/L			11/29/21 17:31	1
n-Butylbenzene	ND		1.0		ug/L			11/29/21 17:31	1
N-Propylbenzene	ND		1.0		ug/L			11/29/21 17:31	1
sec-Butylbenzene	ND		1.0		ug/L			11/29/21 17:31	1
Styrene	ND		1.0		ug/L			11/29/21 17:31	1
tert-Butylbenzene	ND		1.0		ug/L			11/29/21 17:31	1
Tetrachloroethene	ND		1.0		ug/L			11/29/21 17:31	1
Toluene	ND		1.0		ug/L			11/29/21 17:31	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/29/21 17:31	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/29/21 17:31	1
Trichloroethene	ND		1.0		ug/L			11/29/21 17:31	1
Trichlorofluoromethane	ND		2.0		ug/L			11/29/21 17:31	1
Vinyl chloride	ND		1.0		ug/L			11/29/21 17:31	1
Xylenes (total)	ND		2.0		ug/L			11/29/21 17:31	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*11/29/21 17:31*	*1*

Client Sample ID: MW-20A

Date Collected: 11/16/21 11:55
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155967-2

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 127*		*11/29/21 17:31*	*1*
4-Bromofluorobenzene (Surr)	*92*		*78 - 120*		*11/29/21 17:31*	*1*
Dibromofluoromethane (Surr)	*98*		*77 - 120*		*11/29/21 17:31*	*1*
Toluene-d8 (Surr)	*87*		*80 - 125*		*11/29/21 17:31*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		11/29/21 14:19	11/30/21 06:22	1
1,2-Dibromoethane	ND		0.050		ug/L		11/29/21 14:19	11/30/21 06:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*103*		*70 - 130*	*11/29/21 14:19*	*11/30/21 06:22*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**84000**		500		ug/L		11/23/21 15:30	11/24/21 06:46	1
Iron	**510**		30		ug/L		11/23/21 15:30	11/24/21 06:46	1
Magnesium	**33000**		200		ug/L		11/23/21 15:30	11/24/21 06:46	1
Manganese	**2800**		3.0		ug/L		11/23/21 15:30	11/24/21 06:46	1
Potassium	ND		500		ug/L		11/23/21 15:30	11/24/21 06:46	1
Sodium	**32000**		1000		ug/L		11/23/21 15:30	11/24/21 06:46	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	**9.4**				meq/L			12/09/21 14:58	1
Total Cations	**8.3**				meq/L			12/09/21 14:58	1
Percent Difference	**-6.2**				%			12/09/21 14:58	1
Calcium	**84**				mg/L			12/09/21 14:58	1
Magnesium	**33**				mg/L			12/09/21 14:58	1
Potassium	**0.00**				mg/L			12/09/21 14:58	1
Sodium	**32**				mg/L			12/09/21 14:58	1
Ammonia as N	**0.12**				mg/L			12/09/21 14:58	1
Chloride	**180**				mg/L			12/09/21 14:58	1
Sulfate	**7.8**				mg/L			12/09/21 14:58	1
Bicarbonate Alkalinity	**210**				mg/L			12/09/21 14:58	1
Alkalinity	**210**				mg/L			12/09/21 14:58	1
Nitrate/Nitrite	**0.00**				mg/L			12/09/21 14:58	1
Anion/Cation Balance	**-6.2**				%			12/09/21 14:58	1
Calculated TDS	**460**				mg/L			12/09/21 14:58	1
TDS Ratio	**1.1**				NONE			12/09/21 14:58	1
Total Dissolved Solids	**510**				mg/L			12/09/21 14:58	1
Iron	**0.51**				mg/L			12/09/21 14:58	1
Calcium	**4.2**				meq/L			12/09/21 14:58	1
Magnesium	**2.7**				meq/L			12/09/21 14:58	1
Potassium	**0.00**				meq/L			12/09/21 14:58	1
Sodium	**1.4**				meq/L			12/09/21 14:58	1
Ammonia as N	**0.0086**				meq/L			12/09/21 14:58	1
Chloride	**5.1**				meq/L			12/09/21 14:58	1
Sulfate	**0.16**				meq/L			12/09/21 14:58	1
Alkalinity	**210**				mg/L			12/09/21 14:58	1
Bicarbonate Alkalinity	**4.2**				meq/L			12/09/21 14:58	1

Client Sample ID: MW-20A
Lab Sample ID: 280-155967-2

Date Collected: 11/16/21 11:55
Matrix: Water

Date Received: 11/19/21 10:25

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate/Nitrite	0.00				meq/L			12/09/21 14:58	1
Iron	0.027				meq/L			12/09/21 14:58	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	180		0.50		mg/L			11/30/21 11:49	1
Sulfate	7.8		1.0		mg/L			11/30/21 11:49	1
Ammonia as N	0.12		0.030		mg/L			12/08/21 11:43	1
Nitrate/Nitrite	ND		0.050		mg/L			12/02/21 19:04	1
Total Organic Carbon - Average	1.3		1.0		mg/L			12/09/21 04:19	1
Bicarbonate Alkalinity	210	H	10		mg/L			12/03/21 22:36	1
Total Dissolved Solids	510		10		mg/L			11/22/21 09:42	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.65				SU			11/16/21 12:55	1
Field Conductivity	1547				umhos/cm			11/16/21 12:55	1
Field Temperature	13.4				Degrees C			11/16/21 12:55	1
Field Dissolved Oxygen	1.04				mg/L			11/16/21 12:55	1
Field EH/ORP	34.4				millivolts			11/16/21 12:55	1

Surrogate Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers - GW

Job ID: 280-155967-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-127)	(78-120)	(77-120)	(80-125)
280-155967-1	TB1	98	92	97	92
280-155967-2	MW-20A	99	92	98	87
LCS 280-558919/4	Lab Control Sample	96	92	99	92
LCSD 280-558919/5	Lab Control Sample Dup	97	91	100	92
MB 280-558919/9	Method Blank	98	93	98	93

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		12DBP1
Lab Sample ID	Client Sample ID	(70-130)
280-155967-1	TB1	106
280-155967-2	MW-20A	103
LCS 280-559015/2-A	Lab Control Sample	108
LCSD 280-559015/3-A	Lab Control Sample Dup	107
MB 280-559015/1-A	Method Blank	109

Surrogate Legend

12DBP = 1,2-Dibromopropane

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 280-558919/9
Matrix: Water
Analysis Batch: 558919

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			11/29/21 11:29	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/29/21 11:29	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/29/21 11:29	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/29/21 11:29	1
1,1-Dichloroethane	ND		1.0		ug/L			11/29/21 11:29	1
1,1-Dichloroethene	ND		1.0		ug/L			11/29/21 11:29	1
1,1-Dichloropropene	ND		1.0		ug/L			11/29/21 11:29	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/29/21 11:29	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/29/21 11:29	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/29/21 11:29	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/29/21 11:29	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/29/21 11:29	1
1,2-Dichloroethane	ND		1.0		ug/L			11/29/21 11:29	1
1,2-Dichloropropane	ND		1.0		ug/L			11/29/21 11:29	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/29/21 11:29	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/29/21 11:29	1
1,3-Dichloropropane	ND		1.0		ug/L			11/29/21 11:29	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/29/21 11:29	1
2,2-Dichloropropane	ND		5.0		ug/L			11/29/21 11:29	1
2-Butanone (MEK)	ND		6.0		ug/L			11/29/21 11:29	1
2-Chlorotoluene	ND		1.0		ug/L			11/29/21 11:29	1
2-Hexanone	ND		5.0		ug/L			11/29/21 11:29	1
4-Chlorotoluene	ND		1.0		ug/L			11/29/21 11:29	1
4-Isopropyltoluene	ND		1.0		ug/L			11/29/21 11:29	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/29/21 11:29	1
Acetone	ND		10		ug/L			11/29/21 11:29	1
Benzene	ND		1.0		ug/L			11/29/21 11:29	1
Bromobenzene	ND		1.0		ug/L			11/29/21 11:29	1
Bromochloromethane	ND		1.0		ug/L			11/29/21 11:29	1
Bromodichloromethane	ND		1.0		ug/L			11/29/21 11:29	1
Bromoform	ND		1.0		ug/L			11/29/21 11:29	1
Bromomethane	ND		2.0		ug/L			11/29/21 11:29	1
Carbon disulfide	ND		2.0		ug/L			11/29/21 11:29	1
Carbon tetrachloride	ND		1.0		ug/L			11/29/21 11:29	1
Chlorobenzene	ND		1.0		ug/L			11/29/21 11:29	1
Chloroethane	ND		2.0		ug/L			11/29/21 11:29	1
Chloroform	ND		1.0		ug/L			11/29/21 11:29	1
Chloromethane	ND		2.0		ug/L			11/29/21 11:29	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/29/21 11:29	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/29/21 11:29	1
Dibromochloromethane	ND		1.0		ug/L			11/29/21 11:29	1
Dibromomethane	ND		1.0		ug/L			11/29/21 11:29	1
Dichlorodifluoromethane	ND		2.0		ug/L			11/29/21 11:29	1
Ethylbenzene	ND		1.0		ug/L			11/29/21 11:29	1
Hexachlorobutadiene	ND		1.0		ug/L			11/29/21 11:29	1
Isopropylbenzene	ND		1.0		ug/L			11/29/21 11:29	1
Methylene Chloride	ND		5.0		ug/L			11/29/21 11:29	1
Naphthalene	ND		1.0		ug/L			11/29/21 11:29	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 280-558919/9
Matrix: Water
Analysis Batch: 558919

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		1.0		ug/L			11/29/21 11:29	1
N-Propylbenzene	ND		1.0		ug/L			11/29/21 11:29	1
sec-Butylbenzene	ND		1.0		ug/L			11/29/21 11:29	1
Styrene	ND		1.0		ug/L			11/29/21 11:29	1
tert-Butylbenzene	ND		1.0		ug/L			11/29/21 11:29	1
Tetrachloroethene	ND		1.0		ug/L			11/29/21 11:29	1
Toluene	ND		1.0		ug/L			11/29/21 11:29	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/29/21 11:29	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/29/21 11:29	1
Trichloroethene	ND		1.0		ug/L			11/29/21 11:29	1
Trichlorofluoromethane	ND		2.0		ug/L			11/29/21 11:29	1
Vinyl chloride	ND		1.0		ug/L			11/29/21 11:29	1
Xylenes (total)	ND		2.0		ug/L			11/29/21 11:29	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*11/29/21 11:29*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 127*		*11/29/21 11:29*	*1*
4-Bromofluorobenzene (Surr)	*93*		*78 - 120*		*11/29/21 11:29*	*1*
Dibromofluoromethane (Surr)	*98*		*77 - 120*		*11/29/21 11:29*	*1*
Toluene-d8 (Surr)	*93*		*80 - 125*		*11/29/21 11:29*	*1*

Lab Sample ID: LCS 280-558919/4
Matrix: Water
Analysis Batch: 558919

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	23.2		ug/L		93	65 - 135
1,1,1-Trichloroethane	25.0	23.3		ug/L		93	65 - 135
1,1,2,2-Tetrachloroethane	25.0	24.0		ug/L		96	58 - 135
1,1,2-Trichloroethane	25.0	24.8		ug/L		99	64 - 135
1,1-Dichloroethane	25.0	22.2		ug/L		89	65 - 135
1,1-Dichloroethene	25.0	23.9		ug/L		96	65 - 136
1,1-Dichloropropene	25.0	23.3		ug/L		93	65 - 135
1,2,3-Trichlorobenzene	25.0	24.4		ug/L		98	60 - 135
1,2,3-Trichloropropane	25.0	24.2		ug/L		97	65 - 135
1,2,4-Trichlorobenzene	25.0	23.6		ug/L		94	58 - 135
1,2,4-Trimethylbenzene	25.0	22.8		ug/L		91	65 - 135
1,2-Dichlorobenzene	25.0	23.9		ug/L		96	65 - 135
1,2-Dichloroethane	25.0	23.1		ug/L		92	65 - 135
1,2-Dichloropropane	25.0	22.6		ug/L		91	64 - 135
1,3,5-Trimethylbenzene	25.0	22.8		ug/L		91	65 - 135
1,3-Dichlorobenzene	25.0	24.0		ug/L		96	65 - 135
1,3-Dichloropropane	25.0	23.3		ug/L		93	64 - 135
1,4-Dichlorobenzene	25.0	23.6		ug/L		94	65 - 135
2,2-Dichloropropane	25.0	20.0		ug/L		80	65 - 135
2-Butanone (MEK)	100	90.1		ug/L		90	44 - 177

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-558919/4
Matrix: Water
Analysis Batch: 558919

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chlorotoluene	25.0	23.1		ug/L		93	65 - 135
2-Hexanone	100	83.2		ug/L		83	57 - 139
4-Chlorotoluene	25.0	23.3		ug/L		93	65 - 135
4-Isopropyltoluene	25.0	22.4		ug/L		90	65 - 135
4-Methyl-2-pentanone	100	86.4		ug/L		86	60 - 150
Acetone	100	86.4		ug/L		86	39 - 156
Benzene	25.0	23.5		ug/L		94	65 - 135
Bromobenzene	25.0	24.7		ug/L		99	65 - 135
Bromochloromethane	25.0	24.7		ug/L		99	65 - 135
Bromodichloromethane	25.0	24.0		ug/L		96	65 - 135
Bromoform	25.0	28.2		ug/L		113	62 - 135
Bromomethane	25.0	21.1		ug/L		84	45 - 135
Carbon disulfide	25.0	21.8		ug/L		87	55 - 143
Carbon tetrachloride	25.0	22.3		ug/L		89	65 - 135
Chlorobenzene	25.0	22.9		ug/L		91	65 - 135
Chloroethane	25.0	18.2		ug/L		73	46 - 136
Chloroform	25.0	24.1		ug/L		96	65 - 135
Chloromethane	25.0	18.9		ug/L		76	34 - 145
cis-1,2-Dichloroethene	25.0	23.9		ug/L		96	65 - 135
cis-1,3-Dichloropropene	25.0	21.7		ug/L		87	65 - 135
Dibromochloromethane	25.0	25.1		ug/L		100	65 - 135
Dibromomethane	25.0	25.1		ug/L		100	65 - 135
Dichlorodifluoromethane	25.0	20.5		ug/L		82	43 - 142
Ethylbenzene	25.0	23.0		ug/L		92	65 - 135
Hexachlorobutadiene	25.0	26.5		ug/L		106	65 - 135
Isopropylbenzene	25.0	22.7		ug/L		91	65 - 135
Methylene Chloride	25.0	22.2		ug/L		89	54 - 141
Naphthalene	25.0	23.5		ug/L		94	42 - 135
n-Butylbenzene	25.0	21.9		ug/L		88	64 - 135
N-Propylbenzene	25.0	22.1		ug/L		88	65 - 135
sec-Butylbenzene	25.0	22.8		ug/L		91	64 - 135
Styrene	25.0	23.9		ug/L		96	65 - 135
tert-Butylbenzene	25.0	22.4		ug/L		89	65 - 135
Tetrachloroethene	25.0	23.7		ug/L		95	65 - 135
Toluene	25.0	23.4		ug/L		93	65 - 135
trans-1,2-Dichloroethene	25.0	22.9		ug/L		92	65 - 135
trans-1,3-Dichloropropene	25.0	21.7		ug/L		87	65 - 135
Trichloroethene	25.0	22.1		ug/L		88	65 - 135
Trichlorofluoromethane	25.0	21.3		ug/L		85	53 - 137
Vinyl chloride	25.0	17.6		ug/L		70	40 - 137

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 127*
4-Bromofluorobenzene (Surr)	*92*		*78 - 120*
Dibromofluoromethane (Surr)	*99*		*77 - 120*
Toluene-d8 (Surr)	*92*		*80 - 125*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 280-558919/5
Matrix: Water
Analysis Batch: 558919

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane			25.0	23.3		ug/L		93	65 - 135	0	20
1,1,1-Trichloroethane			25.0	24.3		ug/L		97	65 - 135	4	20
1,1,2,2-Tetrachloroethane			25.0	24.5		ug/L		98	58 - 135	2	20
1,1,2-Trichloroethane			25.0	24.7		ug/L		99	64 - 135	0	27
1,1-Dichloroethane			25.0	23.8		ug/L		95	65 - 135	7	21
1,1-Dichloroethene			25.0	23.9		ug/L		96	65 - 136	0	20
1,1-Dichloropropene			25.0	23.9		ug/L		96	65 - 135	3	21
1,2,3-Trichlorobenzene			25.0	24.4		ug/L		98	60 - 135	0	36
1,2,3-Trichloropropane			25.0	24.7		ug/L		99	65 - 135	2	23
1,2,4-Trichlorobenzene			25.0	23.9		ug/L		95	58 - 135	1	25
1,2,4-Trimethylbenzene			25.0	22.7		ug/L		91	65 - 135	0	20
1,2-Dichlorobenzene			25.0	24.0		ug/L		96	65 - 135	0	20
1,2-Dichloroethane			25.0	23.8		ug/L		95	65 - 135	3	20
1,2-Dichloropropane			25.0	23.1		ug/L		92	64 - 135	2	20
1,3,5-Trimethylbenzene			25.0	22.3		ug/L		89	65 - 135	2	20
1,3-Dichlorobenzene			25.0	24.1		ug/L		96	65 - 135	0	20
1,3-Dichloropropane			25.0	24.2		ug/L		97	64 - 135	4	20
1,4-Dichlorobenzene			25.0	23.9		ug/L		96	65 - 135	1	23
2,2-Dichloropropane			25.0	20.3		ug/L		81	65 - 135	2	20
2-Butanone (MEK)			100	94.6		ug/L		95	44 - 177	5	32
2-Chlorotoluene			25.0	23.2		ug/L		93	65 - 135	0	20
2-Hexanone			100	88.7		ug/L		89	57 - 139	6	25
4-Chlorotoluene			25.0	23.8		ug/L		95	65 - 135	2	20
4-Isopropyltoluene			25.0	22.8		ug/L		91	65 - 135	2	20
4-Methyl-2-pentanone			100	92.6		ug/L		93	60 - 150	7	22
Acetone			100	92.3		ug/L		92	39 - 156	7	23
Benzene			25.0	24.2		ug/L		97	65 - 135	3	20
Bromobenzene			25.0	24.7		ug/L		99	65 - 135	0	26
Bromochloromethane			25.0	24.9		ug/L		100	65 - 135	1	29
Bromodichloromethane			25.0	24.6		ug/L		98	65 - 135	2	20
Bromoform			25.0	28.8		ug/L		115	62 - 135	2	27
Bromomethane			25.0	22.8		ug/L		91	45 - 135	7	33
Carbon disulfide			25.0	22.4		ug/L		90	55 - 143	3	20
Carbon tetrachloride			25.0	23.3		ug/L		93	65 - 135	4	21
Chlorobenzene			25.0	23.2		ug/L		93	65 - 135	1	20
Chloroethane			25.0	19.9		ug/L		79	46 - 136	9	25
Chloroform			25.0	24.9		ug/L		100	65 - 135	3	20
Chloromethane			25.0	19.6		ug/L		78	34 - 145	4	24
cis-1,2-Dichloroethene			25.0	23.7		ug/L		95	65 - 135	1	20
cis-1,3-Dichloropropene			25.0	22.0		ug/L		88	65 - 135	1	26
Dibromochloromethane			25.0	25.3		ug/L		101	65 - 135	1	20
Dibromomethane			25.0	25.3		ug/L		101	65 - 135	1	26
Dichlorodifluoromethane			25.0	21.7		ug/L		87	43 - 142	6	30
Ethylbenzene			25.0	23.8		ug/L		95	65 - 135	3	20
Hexachlorobutadiene			25.0	26.1		ug/L		104	65 - 135	1	25
Isopropylbenzene			25.0	23.2		ug/L		93	65 - 135	2	20
Methylene Chloride			25.0	22.9		ug/L		92	54 - 141	3	26
Naphthalene			25.0	24.3		ug/L		97	42 - 135	3	23

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 280-558919/5
Matrix: Water
Analysis Batch: 558919

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
n-Butylbenzene			25.0	22.0		ug/L		88	64 - 135	0	21
N-Propylbenzene			25.0	22.3		ug/L		89	65 - 135	1	20
sec-Butylbenzene			25.0	23.1		ug/L		92	64 - 135	1	21
Styrene			25.0	24.3		ug/L		97	65 - 135	1	26
tert-Butylbenzene			25.0	22.7		ug/L		91	65 - 135	2	21
Tetrachloroethene			25.0	24.4		ug/L		98	65 - 135	3	20
Toluene			25.0	23.7		ug/L		95	65 - 135	1	20
trans-1,2-Dichloroethene			25.0	23.9		ug/L		96	65 - 135	4	24
trans-1,3-Dichloropropene			25.0	22.5		ug/L		90	65 - 135	4	26
Trichloroethene			25.0	22.9		ug/L		92	65 - 135	4	20
Trichlorofluoromethane			25.0	23.5		ug/L		94	53 - 137	10	27
Vinyl chloride			25.0	19.8		ug/L		79	40 - 137	12	24

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 127*
4-Bromofluorobenzene (Surr)	*91*		*78 - 120*
Dibromofluoromethane (Surr)	*100*		*77 - 120*
Toluene-d8 (Surr)	*92*		*80 - 125*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Lab Sample ID: MB 280-559015/1-A
Matrix: Water
Analysis Batch: 559026

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 559015

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		11/29/21 14:19	11/29/21 21:25	1
1,2-Dibromoethane	ND		0.050		ug/L		11/29/21 14:19	11/29/21 21:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*109*		*70 - 130*	*11/29/21 14:19*	*11/29/21 21:25*	*1*

Lab Sample ID: LCS 280-559015/2-A
Matrix: Water
Analysis Batch: 559026

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 559015

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane			0.250	0.228		ug/L		91	60 - 140
1,2-Dibromoethane			0.250	0.224		ug/L		90	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dibromopropane	*108*		*70 - 130*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC) (Continued)

Lab Sample ID: LCSD 280-559015/3-A
Matrix: Water
Analysis Batch: 559026

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 559015

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.250	0.236		ug/L		94	60 - 140	3	10
1,2-Dibromoethane			0.250	0.233		ug/L		93	60 - 140	4	10

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dibromopropane	*107*		*70 - 130*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 280-558430/1-A
Matrix: Water
Analysis Batch: 558612

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 558430

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		500		ug/L		11/23/21 15:30	11/24/21 04:43	1
Iron	ND		30		ug/L		11/23/21 15:30	11/24/21 04:43	1
Magnesium	ND		200		ug/L		11/23/21 15:30	11/24/21 04:43	1
Manganese	ND		3.0		ug/L		11/23/21 15:30	11/24/21 04:43	1
Potassium	ND		500		ug/L		11/23/21 15:30	11/24/21 04:43	1
Sodium	ND		1000		ug/L		11/23/21 15:30	11/24/21 04:43	1

Lab Sample ID: LCS 280-558430/2-A
Matrix: Water
Analysis Batch: 558612

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 558430

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Calcium			50000	48600		ug/L		97	90 - 111		
Iron			10000	9840		ug/L		98	89 - 115		
Magnesium			50000	49900		ug/L		100	90 - 113		
Manganese			1000	1000		ug/L		100	90 - 110		
Potassium			50000	50000		ug/L		100	89 - 114		
Sodium			50000	48500		ug/L		97	90 - 115		

Lab Sample ID: 280-155959-B-2-B MS
Matrix: Water
Analysis Batch: 558612

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 558430

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Calcium	130000		50000	172000		ug/L		94	48 - 153		
Iron	350000		10000	359000	4	ug/L		60	52 - 155		
Magnesium	81000		50000	131000		ug/L		100	62 - 146		
Manganese	5600		1000	6480	4	ug/L		91	79 - 121		
Potassium	14000		50000	65500		ug/L		104	76 - 132		
Sodium	52000		50000	106000		ug/L		107	70 - 203		

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 280-155959-B-2-C MSD
Matrix: Water
Analysis Batch: 558612

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 558430

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium	130000		50000	174000		ug/L		97	48 - 153	1	20
Iron	350000		10000	362000	4	ug/L		89	52 - 155	1	20
Magnesium	81000		50000	132000		ug/L		102	62 - 146	1	20
Manganese	5600		1000	6530	4	ug/L		97	79 - 121	1	20
Potassium	14000		50000	66300		ug/L		105	76 - 132	1	20
Sodium	52000		50000	107000		ug/L		109	70 - 203	1	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 480-606967/4
Matrix: Water
Analysis Batch: 606967

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			11/30/21 07:10	1
Sulfate	ND		1.0		mg/L			11/30/21 07:10	1

Lab Sample ID: LCS 480-606967/3
Matrix: Water
Analysis Batch: 606967

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	49.3		mg/L		99	90 - 110
Sulfate	50.0	49.1		mg/L		98	90 - 110

Lab Sample ID: 280-155958-E-2 MS
Matrix: Water
Analysis Batch: 606967

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	ND		50.0	48.8		mg/L		98	81 - 120
Sulfate	ND		50.0	48.4		mg/L		97	80 - 120

Lab Sample ID: 280-155958-E-2 MSD
Matrix: Water
Analysis Batch: 606967

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	ND		50.0	49.1		mg/L		98	81 - 120	1	15
Sulfate	ND		50.0	48.9		mg/L		98	80 - 120	1	15

Lab Sample ID: 410-63989-A-1 MS
Matrix: Water
Analysis Batch: 606967

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	13		50.0	61.3		mg/L		96	81 - 120
Sulfate	8.5		50.0	56.6		mg/L		96	80 - 120

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-560016/20
Matrix: Water
Analysis Batch: 560016

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.030		mg/L			12/08/21 11:05	1

Lab Sample ID: LCS 280-560016/18
Matrix: Water
Analysis Batch: 560016

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia as N			2.50	2.48		mg/L		99	90 - 110		

Lab Sample ID: LCSD 280-560016/19
Matrix: Water
Analysis Batch: 560016

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N			2.50	2.50		mg/L		100	90 - 110	1	10

Lab Sample ID: 280-155967-2 MS
Matrix: Water
Analysis Batch: 560016

Client Sample ID: MW-20A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia as N	0.12		1.00	1.17		mg/L		105	90 - 110		

Lab Sample ID: 280-155967-2 MSD
Matrix: Water
Analysis Batch: 560016

Client Sample ID: MW-20A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N	0.12		1.00	1.15		mg/L		103	90 - 110	1	10

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-559452/60
Matrix: Water
Analysis Batch: 559452

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate/Nitrite	ND		0.050		mg/L			12/02/21 18:38	1

Lab Sample ID: LCS 280-559452/59
Matrix: Water
Analysis Batch: 559452

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate/Nitrite			5.00	4.92		mg/L		98	90 - 110		

Method: 353.2 - Nitrogen, Nitrate-Nitrite (Continued)

Lab Sample ID: 280-155883-B-17 MS
Matrix: Water
Analysis Batch: 559452

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate/Nitrite	ND		4.00	4.05		mg/L		101	90 - 110		

Lab Sample ID: 280-155883-B-17 MSD
Matrix: Water
Analysis Batch: 559452

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate/Nitrite	ND		4.00	3.90		mg/L		97	90 - 110	4	10

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 280-560085/35
Matrix: Water
Analysis Batch: 560085

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Average	ND		1.0		mg/L			12/08/21 21:35	1

Lab Sample ID: MB 280-560085/4
Matrix: Water
Analysis Batch: 560085

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Average	ND		1.0		mg/L			12/08/21 13:15	1

Lab Sample ID: LCS 280-560085/34
Matrix: Water
Analysis Batch: 560085

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon - Average			25.0	25.9		mg/L		103	88 - 112		

Lab Sample ID: 280-156013-D-2 MS
Matrix: Water
Analysis Batch: 560085

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon - Average	3.2		25.0	28.4		mg/L		101	88 - 112		

Lab Sample ID: 280-156013-D-2 MSD
Matrix: Water
Analysis Batch: 560085

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Average	3.2		25.0	28.5		mg/L		101	88 - 112	0	15

Method: SM 1030E (meq) - Cation Anion Balance

Lab Sample ID: MB 280-560188/1
Matrix: Water
Analysis Batch: 560188

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	0.000				meq/L			12/09/21 14:58	1
Magnesium	0.000				meq/L			12/09/21 14:58	1
Potassium	0.000				meq/L			12/09/21 14:58	1
Sodium	0.000				meq/L			12/09/21 14:58	1
Ammonia as N	0.000				meq/L			12/09/21 14:58	1
Chloride	0.000				meq/L			12/09/21 14:58	1
Sulfate	0.000				meq/L			12/09/21 14:58	1
Alkalinity	0.000				mg/L			12/09/21 14:58	1
Bicarbonate Alkalinity	0.000				meq/L			12/09/21 14:58	1
Nitrate/Nitrite	0.000				meq/L			12/09/21 14:58	1
Iron	0.000				meq/L			12/09/21 14:58	1

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-559675/57
Matrix: Water
Analysis Batch: 559675

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity	ND		10		mg/L			12/03/21 21:08	1

Lab Sample ID: 280-155806-A-9 DU
Matrix: Water
Analysis Batch: 559675

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Bicarbonate Alkalinity	260			256		mg/L				0.4	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 280-558321/1
Matrix: Water
Analysis Batch: 558321

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10		mg/L			11/22/21 08:42	1

Lab Sample ID: LCS 280-558321/2
Matrix: Water
Analysis Batch: 558321

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			501	501		mg/L		100	88 - 114		

Lab Sample ID: 280-155967-2 DU
Matrix: Water
Analysis Batch: 558321

Client Sample ID: MW-20A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	510			521		mg/L				1	10

QC Association Summary

Client: Waste Management
Job ID: 280-155967-1
Project/Site: 1003|Riverbend Landfill SCS Engineers - GW

GC/MS VOA

Analysis Batch: 558919

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155967-1	TB1	Total/NA	Water	8260B	
280-155967-2	MW-20A	Total/NA	Water	8260B	
MB 280-558919/9	Method Blank	Total/NA	Water	8260B	
LCS 280-558919/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-558919/5	Lab Control Sample Dup	Total/NA	Water	8260B	

GC Semi VOA

Prep Batch: 559015

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155967-1	TB1	Total/NA	Water	8011	
280-155967-2	MW-20A	Total/NA	Water	8011	
MB 280-559015/1-A	Method Blank	Total/NA	Water	8011	
LCS 280-559015/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 280-559015/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 559026

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155967-1	TB1	Total/NA	Water	8011	559015
280-155967-2	MW-20A	Total/NA	Water	8011	559015
MB 280-559015/1-A	Method Blank	Total/NA	Water	8011	559015
LCS 280-559015/2-A	Lab Control Sample	Total/NA	Water	8011	559015
LCSD 280-559015/3-A	Lab Control Sample Dup	Total/NA	Water	8011	559015

Metals

Prep Batch: 558430

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155967-2	MW-20A	Dissolved	Water	3005A	
MB 280-558430/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-558430/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-155959-B-2-B MS	Matrix Spike	Dissolved	Water	3005A	
280-155959-B-2-C MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	

Analysis Batch: 558612

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155967-2	MW-20A	Dissolved	Water	6010B	558430
MB 280-558430/1-A	Method Blank	Total Recoverable	Water	6010B	558430
LCS 280-558430/2-A	Lab Control Sample	Total Recoverable	Water	6010B	558430
280-155959-B-2-B MS	Matrix Spike	Dissolved	Water	6010B	558430
280-155959-B-2-C MSD	Matrix Spike Duplicate	Dissolved	Water	6010B	558430

General Chemistry

Analysis Batch: 558321

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155967-2	MW-20A	Total/NA	Water	SM 2540C	
MB 280-558321/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-558321/2	Lab Control Sample	Total/NA	Water	SM 2540C	
280-155967-2 DU	MW-20A	Total/NA	Water	SM 2540C	

General Chemistry

Analysis Batch: 559452

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155967-2	MW-20A	Total/NA	Water	353.2	
MB 280-559452/60	Method Blank	Total/NA	Water	353.2	
LCS 280-559452/59	Lab Control Sample	Total/NA	Water	353.2	
280-155883-B-17 MS	Matrix Spike	Total/NA	Water	353.2	
280-155883-B-17 MSD	Matrix Spike Duplicate	Total/NA	Water	353.2	

Analysis Batch: 559675

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155967-2	MW-20A	Total/NA	Water	SM 2320B	
MB 280-559675/57	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-559675/56	Lab Control Sample	Total/NA	Water	SM 2320B	
280-155806-A-9 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 560016

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155967-2	MW-20A	Total/NA	Water	350.1	
MB 280-560016/20	Method Blank	Total/NA	Water	350.1	
LCS 280-560016/18	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-560016/19	Lab Control Sample Dup	Total/NA	Water	350.1	
280-155967-2 MS	MW-20A	Total/NA	Water	350.1	
280-155967-2 MSD	MW-20A	Total/NA	Water	350.1	

Analysis Batch: 560085

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155967-2	MW-20A	Total/NA	Water	9060	
MB 280-560085/35	Method Blank	Total/NA	Water	9060	
MB 280-560085/4	Method Blank	Total/NA	Water	9060	
LCS 280-560085/34	Lab Control Sample	Total/NA	Water	9060	
280-156013-D-2 MS	Matrix Spike	Total/NA	Water	9060	
280-156013-D-2 MSD	Matrix Spike Duplicate	Total/NA	Water	9060	

Analysis Batch: 560188

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155967-2	MW-20A	Total/NA	Water	SM 1030E	
280-155967-2	MW-20A	Total/NA	Water	SM 1030E (meq)	
MB 280-560188/1	Method Blank	Total/NA	Water	SM 1030E (meq)	

Analysis Batch: 606967

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155967-2	MW-20A	Total/NA	Water	300.0	
MB 480-606967/4	Method Blank	Total/NA	Water	300.0	
LCS 480-606967/3	Lab Control Sample	Total/NA	Water	300.0	
280-155958-E-2 MS	Matrix Spike	Total/NA	Water	300.0	
280-155958-E-2 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
410-63989-A-1 MS	Matrix Spike	Total/NA	Water	300.0	

Field Service / Mobile Lab

Analysis Batch: 558416

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155967-2	MW-20A	Total/NA	Water	Field Sampling	

Lab Chronicle

Client: Waste Management
Job ID: 280-155967-1
Project/Site: 1003|Riverbend Landfill SCS Engineers - GW

Client Sample ID: TB1
Lab Sample ID: 280-155967-1
Date Collected: 11/16/21 07:00
Matrix: Water
Date Received: 11/19/21 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	558919	11/29/21 17:09	JLS	TAL DEN
Total/NA	Prep	8011			34.9 mL	35 mL	559015	11/29/21 14:19	KSA	TAL DEN
Total/NA	Analysis	8011		1			559026	11/30/21 05:58	KSA	TAL DEN

Client Sample ID: MW-20A
Lab Sample ID: 280-155967-2
Date Collected: 11/16/21 11:55
Matrix: Water
Date Received: 11/19/21 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	558919	11/29/21 17:31	JLS	TAL DEN
Total/NA	Prep	8011			34.9 mL	35 mL	559015	11/29/21 14:19	KSA	TAL DEN
Total/NA	Analysis	8011		1			559026	11/30/21 06:22	KSA	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	558430	11/23/21 15:30	CEH	TAL DEN
Dissolved	Analysis	6010B		1			558612	11/24/21 06:46	MAB	TAL DEN
Total/NA	Analysis	300.0		1			606967	11/30/21 11:49	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	560016	12/08/21 11:43	MMP	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	559452	12/02/21 19:04	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	560085	12/09/21 04:19	RAF	TAL DEN
Total/NA	Analysis	SM 1030E		1			560188	12/09/21 14:58	SPG	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			560188	12/09/21 14:58	SPG	TAL DEN
Total/NA	Analysis	SM 2320B		1			559675	12/03/21 22:36	SPG	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	558321	11/22/21 09:42	ABW	TAL DEN
Total/NA	Analysis	Field Sampling		1			558416	11/16/21 12:55	TJ	TAL DEN

Laboratory References:

TAL BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Eurofins TestAmerica, Denver
4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Fax (303) 431-7171

Chain of Custody Record

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Client Information	Sampler: (303) 716-6320	Lab PM: Sara, Betsy A	Carrier Tracking No(s):	COC No: 280-16508-865.1
Client Contact:	Phone: I. Hultquist	E-Mail: Betsy.Sara@Eurofinset.com		Page: Page 1 of 1
Company: Waste Management				Job #:
Address: 13469 SW Highway 18	Due Date Requested:			
City: McMinnville	TAT Requested (days):			
State, Zip: OR, 97128				
Phone:	PO #:			
Email:	WO #:			
Project Name:1003|Riverbend Landfill SCS Engineers Event Desc: Semiannual Detection Wells - Apr Oct	Project #: 28002786			
Site: Oregon	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	TDS/Alk	Dissolved Metals	Ammonia/TOC/NO3+NO2	8260B	8011	Cation/Anion Balance	Chloride/Sulfate (TA Buffalo)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	S	A	R		N		
TB1	11-16-21	0700	G	W						X	X			8	
MW-20A	11-16-21	1155	G	W	X		X	X	X	X	X	X	X	10	

280-155967 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	11-18-21 1630	SCS		11/19/2021 1025	EJA DFW
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 0.0, -0.4, 0.9, 0.4 CF+TD IR#11

Page 28 of 36

3/15/2022

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-20A
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	(SW)	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)	CLOUDY	RAIN	?	**TEMPERATURE:**	(°F) / 7.0 °C					

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
11/16/21	11 :00	23.60	.	5.36	.	18.24	X 1	2.97
/ /	:	.	.	.	.		X 3	8.91

Gal/ft = (dia./2)² x 0.163	1" = 0.041	(2") = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	√
VOA Glass	11/16/21	11 :55	F	3	40 ml HCl	YES	NO		✓
VOA Glass	11/16/21	11 :55	F	3	40 ml $Na_2S_2O_3$	YES	NO		✓
Amber Glass	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
White Poly	11/16/21	11 :55	F	2	250, 500, 1L None	YES	NO	NA	✓
Yellow Glass	11/16/21	11 :55	F	8" 1	250, 500, 1L H_2SO_4	YES	NO		✓
Red Total Poly	/ /	:			125, 250, 500 HNO_3	YES	NO		
Red Diss. Poly	11/16/21	11 :55	F	1	250, 500, 1L HNO_3	YES	YES		✓
White Poly	/ /	:			250, 500, 1L None	YES	YES		
Clear Poly	/ /	:			100, 250, 500 $Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — 10 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica T) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: 11 :02 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	F(1102)	0.00	6.54	173	1469	12.9	6.23	8.69	clear/colorless
1	F(1116)	3.00	6.59	63.9	1537	13.3	10.28	0.27	clear/colorless
2	F(1132)	6.00	6.64	45.5	~~1553~~ 1353 µH	13.5	11.46	1.06	clear/colorless
3	F(1148)	9.00	6.66	36.1	1547	13.4	12.04	1.04	clear/colorless
4	F(1150)	9.40	6.66	35.4	1550	13.4	12.22	1.03	clear/colorless
5	F(1152)	9.80	6.65	34.4	1547	13.4	12.21	1.04	clear/colorless
6		.	.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Standard purge method (20/10/25psi) ~800 ml/min

SAMPLER: T. Holtquist (PRINTED NAME) (SIGNATURE)



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Next business morning by 10:30 a.m. Not available to all locations. Please consult the current FedEx Service Guide for specific commitments.

1 From *See optional release signature below.*

ORDER: 00859798

DECLARED VALUE $100

PACKAGE WEIGHT

( ) _____

eurofins | Environment Testing TestAmerica

1760102

2 To *Shipment will not be accepted if address below*

SAMPLE RECEIVING
EUROFINS TEST AMERICA
4955 YARROW ST
ARVADA, CO 80002
(303) 736-0100

SATURDAY DELIVERY

Shipments tendered on Friday are delivered on Saturday to most locations.

REF: 8165 7539 5229

Release Signature

For nonresidential deliveries.

→ Sign within this area. Please do not remove.

• By signing you authorize us to deliver this shipment without obtaining a signature and agree to indemnify and hold us harmless from any resulting claims.

For FedEx Use Only

Employee Number	Base Charges
Other	Total Charges

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EUROFINS TEST AMERICA
ARVADA CO

Peel here and attach label to package.

00000077
ORDER: 00859798

280-155967 Waybill

FRI - 19 NOV 11:30A
PRIORITY OVERNIGHT
AHS
80002
DEN
CO-US

TRK 0667 8165 7539 5229

YALAAA

FedEx Express

J212221101802uv

DEPT:

INV:
PO:

REF:

ARVADA CO 80002
(303) 736-0100

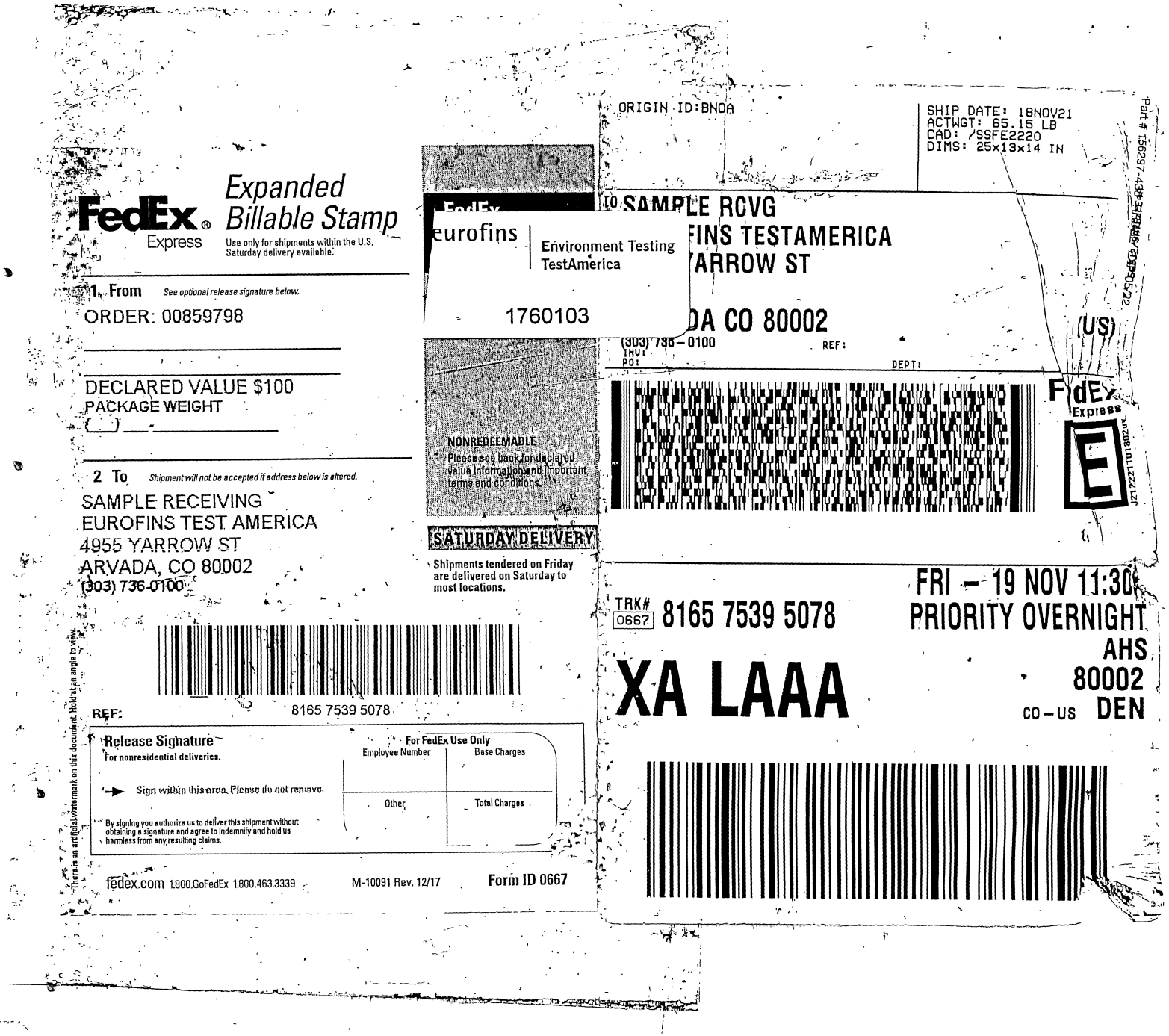
(US)

TO SAMPLE RCVG
EUROFINS TESTAMERICA
4955 YARROW ST

ORIGIN ID:BNOA

SHIP DATE: 18NOV21
ACTWGT: 65.45 LB
CAD: /SSFE2220
DIMS: 25x13x14 IN

156297-438 FRIDAY 2 EXT 05/22



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(303) 736-0100

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Other	Total Charges

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SATURDAY DELIVERY
Shipments tendered on Friday are delivered on Saturday to most locations.

ORIGIN ID:BNOA

SHIP DATE: 18NOV21
ACTWGT: 65.15 LB
CAD: /SSFE2220
DIMS: 25x13x14 IN

TO SAMPLE RCVG
FINS TESTAMERICA
YARROW ST
DA CO 80002
(303) 736-0100 REF:
INV:
PO: DEPT:

(US)

FedEx Express

E

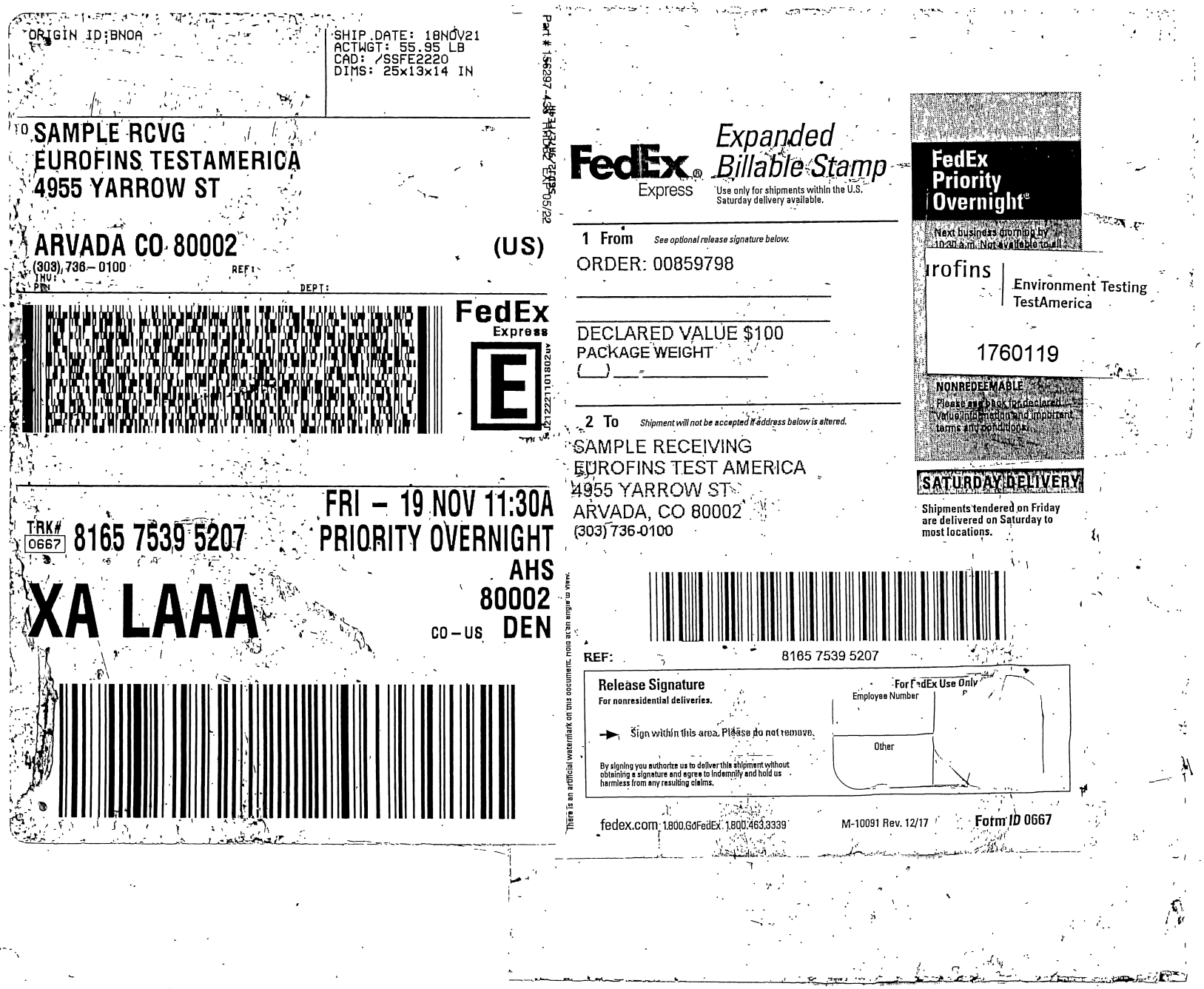
J212221101802UX

TRK# 0667 8165 7539 5078

FRI - 19 NOV 11:30
PRIORITY OVERNIGHT
AHS
80002
CO-US DEN

XA LAAA

Part # 156297-439 [illegible]



ORIGIN ID:BNOA

SHIP DATE: 18NOV21
ACTWGT: 55.95 LB
CAD: /SSFE2220
DIMS: 25x13x14 IN

TO SAMPLE RCVG
EUROFINS TESTAMERICA
4955 YARROW ST

ARVADA CO 80002 (US)
(303) 736-0100 REF:
INV:
PO: DEPT:

FedEx Express

E

FRI - 19 NOV 11:30A
PRIORITY OVERNIGHT
AHS
80002
CO-US DEN

TRK# 0667 8165 7539 5207

XA LAAA

Part # 156297-438 RAD62 EXP 05/22

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DECLARED VALUE $100
PACKAGE WEIGHT
( ) ___

2 To *Shipment will not be accepted if address below is altered.*

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ARVADA, CO 80002
(303) 736-0100

FedEx Priority Overnight®

Next business morning by 10:30 a.m. Not available to all

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REF: 8165 7539 5207

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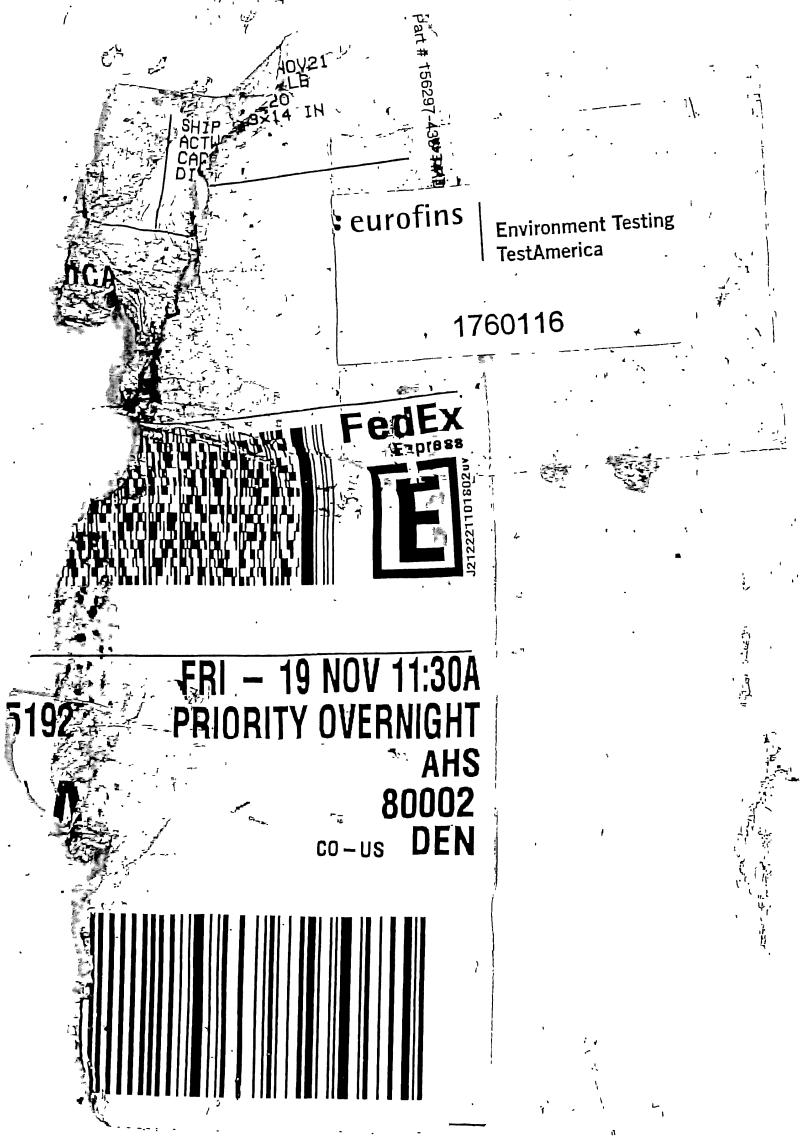
NOV21
LB
20
9x14 IN
SHIP
ACTW
CAP
DI
Part # 156297-43
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TestAmerica
1760116
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Express
E
J212221101802uv
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80002
CO-US DEN
5192

Eurofins TestAmerica, Denver
4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0100 Fax: 303-431-7171

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Sara, Betsy A	Carrier Tracking No(s):	COC No: 280-594916.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Betsy.Sara@Eurofinset.com	State of Origin: Oregon	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Oregon		Job #: 280-155967-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 12/12/2021			
City: Amherst	TAT Requested (days):			
State, Zip: NY, 14228-2298				
Phone: 716-691-2600(Tel) 716-691-7991(Fax)	PO #:			
Email:	WO #:			
Project Name: 1003|Riverbend Landfill SCS Engineers	Project #: 28002786			
Site: 1003|Riverbend Landfill	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300.0_28D/ 300.0, Sulfate and Chloride (TA Buffalo)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-20A (280-155967-2)	11/16/21	11:55 Pacific		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:			
Relinquished by:	Date/Time: 11-22-21 1627	Company EPADEN	Received by:	Date/Time: 11/23/21 1030	Company TA	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 2.4 # 1 ICE			

Ver: 06/08/2021

3/15/2022

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-155967-1

Login Number: 155967
List Number: 1
Creator: Roehsner, Karen P

List Source: Eurofins Denver

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	
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: 280-155967-1

Login Number: 155967
List Number: 2
Creator: Kolb, Chris M

List Source: Eurofins Buffalo
List Creation: 11/26/21 09:35 AM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	False	
The cooler's custody seal, if present, is intact.	False	
The cooler or samples do not appear to have been compromised or tampered with.	False	
Samples were received on ice.	False	
Cooler Temperature is acceptable.	False	
Cooler Temperature is recorded.	False	2.9 ir gun #1 ice
COC is present.	False	
COC is filled out in ink and legible.	False	
COC is filled out with all pertinent information.	False	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the sample IDs on the containers and the COC.	False	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	False	
Sample containers have legible labels.	False	
Containers are not broken or leaking.	False	
Sample collection date/times are provided.	False	
Appropriate sample containers are used.	False	
Sample bottles are completely filled.	False	
Sample Preservation Verified	False	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	False	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	False	
If necessary, staff have been informed of any short hold time or quick TAT needs	False	
Multiphasic samples are not present.	False	
Samples do not require splitting or compositing.	False	
Sampling Company provided.	False	
Samples received within 48 hours of sampling.	False	
Samples requiring field filtration have been filtered in the field.	False	
Chlorine Residual checked.	False	

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ANALYTICAL REPORT

Eurofins TestAmerica, Denver
4955 Yarrow Street
Arvada, CO 80002
Tel: (303)736-0100

Laboratory Job ID: 280-155968-1
Client Project/Site: 1003|Riverbend Landfill - Groundwater
Sampling Event: Downgradient Det. Wells - Oct

For:
Waste Management
7227 NE 55th Avenue
Portland, Oregon 97218

Attn: Mr. William V Hickey, PMP

Betsy Sara

Authorized for release by:
12/6/2021 9:13:37 AM

Betsy Sara, Project Manager II
(303)736-0189
Betsy.Sara@Eurofinset.com

LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Waste Management
Job ID: 280-155968-1
Project/Site: 1003|Riverbend Landfill - Groundwater

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 280-155968-1

Laboratory: Eurofins TestAmerica, Denver

Narrative

CASE NARRATIVE

Client: Waste Management

Project: 1003|Riverbend Landfill SCS Engineers

Report Number: 280-155968-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

This report may include reporting limits (RLs) less than Eurofins TestAmerica's standard reporting limit. The reported sample results and associated reporting limits are being used specifically to meet the needs of this project. Note that data are not normally reported to these levels without qualification because they are inherently less reliable and potentially less defensible than required by the latest industry standards.

Sample Receiving

The samples were received on 11/19/2021; the samples arrived in good condition, properly preserved and on ice. The temperatures of the coolers at receipt were 0.6°C, 1.0°C, 1.4°C and 1.9°C.

Holding Times

The holding times were met.

Method Blanks

All Method Blanks met method criteria.

Laboratory Control Samples (LCS)

All Laboratory Control Sample recoveries were within control limits.

Matrix Spike (MS) and Matrix Spike Duplicate (MSD)

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) for Method 8260B (batch 558919) and Method 8011, however, LCS/LCSD pairs were analyzed to demonstrate method precision and accuracy.

The Matrix Spike and Matrix Spike Duplicate performed on a sample from another client exhibited recoveries outside control limits for cis-1,2-Dichloroethene Method 8260B. 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 results were within established control limits.

General Comments

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.

Detection Summary

Client: Waste Management
Job ID: 280-155968-1
Project/Site: 1003|Riverbend Landfill - Groundwater

Client Sample ID: TB1
Lab Sample ID: 280-155968-1

No Detections.

Client Sample ID: MW-5A
Lab Sample ID: 280-155968-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	7.7		1.0		ug/L	1		8260B	Total/NA
Benzene	1.3		1.0		ug/L	1		8260B	Total/NA
Chlorobenzene	5.2		1.0		ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	1.5		1.0		ug/L	1		8260B	Total/NA
Field pH	5.80				SU	1		Field Sampling	Total/NA
Field Conductivity	1220.0				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	14.5				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	0.81				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	21.9				millivolts	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Waste Management
Job ID: 280-155968-1
Project/Site: 1003|Riverbend Landfill - Groundwater

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL DEN
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	TAL DEN
Field Sampling	Field Sampling	EPA	TAL DEN
5030B	Purge and Trap	SW846	TAL DEN
8011	Microextraction	SW846	TAL DEN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL DEN = Eurofins TestAmerica, Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Sample Summary

Client: Waste Management
Job ID: 280-155968-1
Project/Site: 1003|Riverbend Landfill - Groundwater

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-155968-1	TB1	Water	11/16/21 07:00	11/19/21 10:25
280-155968-2	MW-5A	Water	11/17/21 14:15	11/19/21 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: TB1
Date Collected: 11/16/21 07:00
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155968-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			11/29/21 17:54	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/29/21 17:54	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/29/21 17:54	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/29/21 17:54	1
1,1-Dichloroethane	ND		1.0		ug/L			11/29/21 17:54	1
1,1-Dichloroethene	ND		1.0		ug/L			11/29/21 17:54	1
1,1-Dichloropropene	ND		1.0		ug/L			11/29/21 17:54	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/29/21 17:54	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/29/21 17:54	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/29/21 17:54	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/29/21 17:54	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/29/21 17:54	1
1,2-Dichloroethane	ND		1.0		ug/L			11/29/21 17:54	1
1,2-Dichloropropane	ND		1.0		ug/L			11/29/21 17:54	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/29/21 17:54	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/29/21 17:54	1
1,3-Dichloropropane	ND		1.0		ug/L			11/29/21 17:54	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/29/21 17:54	1
2,2-Dichloropropane	ND		5.0		ug/L			11/29/21 17:54	1
2-Butanone (MEK)	ND		6.0		ug/L			11/29/21 17:54	1
2-Chlorotoluene	ND		1.0		ug/L			11/29/21 17:54	1
2-Hexanone	ND		5.0		ug/L			11/29/21 17:54	1
4-Chlorotoluene	ND		1.0		ug/L			11/29/21 17:54	1
4-Isopropyltoluene	ND		1.0		ug/L			11/29/21 17:54	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/29/21 17:54	1
Acetone	ND		10		ug/L			11/29/21 17:54	1
Benzene	ND		1.0		ug/L			11/29/21 17:54	1
Bromobenzene	ND		1.0		ug/L			11/29/21 17:54	1
Bromochloromethane	ND		1.0		ug/L			11/29/21 17:54	1
Bromodichloromethane	ND		1.0		ug/L			11/29/21 17:54	1
Bromoform	ND		1.0		ug/L			11/29/21 17:54	1
Bromomethane	ND		2.0		ug/L			11/29/21 17:54	1
Carbon disulfide	ND		2.0		ug/L			11/29/21 17:54	1
Carbon tetrachloride	ND		1.0		ug/L			11/29/21 17:54	1
Chlorobenzene	ND		1.0		ug/L			11/29/21 17:54	1
Chloroethane	ND		2.0		ug/L			11/29/21 17:54	1
Chloroform	ND		1.0		ug/L			11/29/21 17:54	1
Chloromethane	ND		2.0		ug/L			11/29/21 17:54	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/29/21 17:54	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/29/21 17:54	1
Dibromochloromethane	ND		1.0		ug/L			11/29/21 17:54	1
Dibromomethane	ND		1.0		ug/L			11/29/21 17:54	1
Dichlorodifluoromethane	ND		2.0		ug/L			11/29/21 17:54	1
Ethylbenzene	ND		1.0		ug/L			11/29/21 17:54	1
Hexachlorobutadiene	ND		1.0		ug/L			11/29/21 17:54	1
Isopropylbenzene	ND		1.0		ug/L			11/29/21 17:54	1
Methylene Chloride	ND		5.0		ug/L			11/29/21 17:54	1
Naphthalene	ND		1.0		ug/L			11/29/21 17:54	1
n-Butylbenzene	ND		1.0		ug/L			11/29/21 17:54	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: TB1
Date Collected: 11/16/21 07:00
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155968-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		1.0		ug/L			11/29/21 17:54	1
sec-Butylbenzene	ND		1.0		ug/L			11/29/21 17:54	1
Styrene	ND		1.0		ug/L			11/29/21 17:54	1
tert-Butylbenzene	ND		1.0		ug/L			11/29/21 17:54	1
Tetrachloroethene	ND		1.0		ug/L			11/29/21 17:54	1
Toluene	ND		1.0		ug/L			11/29/21 17:54	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/29/21 17:54	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/29/21 17:54	1
Trichloroethene	ND		1.0		ug/L			11/29/21 17:54	1
Trichlorofluoromethane	ND		2.0		ug/L			11/29/21 17:54	1
Vinyl chloride	ND		1.0		ug/L			11/29/21 17:54	1
Xylenes (total)	ND		2.0		ug/L			11/29/21 17:54	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*11/29/21 17:54*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 127*		*11/29/21 17:54*	*1*
4-Bromofluorobenzene (Surr)	*91*		*78 - 120*		*11/29/21 17:54*	*1*
Dibromofluoromethane (Surr)	*98*		*77 - 120*		*11/29/21 17:54*	*1*
Toluene-d8 (Surr)	*93*		*80 - 125*		*11/29/21 17:54*	*1*

Client Sample ID: MW-5A
Date Collected: 11/17/21 14:15
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155968-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			11/29/21 16:04	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/29/21 16:04	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/29/21 16:04	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/29/21 16:04	1
1,1-Dichloroethane	ND		1.0		ug/L			11/29/21 16:04	1
1,1-Dichloroethene	ND		1.0		ug/L			11/29/21 16:04	1
1,1-Dichloropropene	ND		1.0		ug/L			11/29/21 16:04	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/29/21 16:04	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/29/21 16:04	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/29/21 16:04	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/29/21 16:04	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/29/21 16:04	1
1,2-Dichloroethane	ND		1.0		ug/L			11/29/21 16:04	1
1,2-Dichloropropane	ND		1.0		ug/L			11/29/21 16:04	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/29/21 16:04	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/29/21 16:04	1
1,3-Dichloropropane	ND		1.0		ug/L			11/29/21 16:04	1
1,4-Dichlorobenzene	**7.7**		1.0		ug/L			11/29/21 16:04	1
2,2-Dichloropropane	ND		5.0		ug/L			11/29/21 16:04	1
2-Butanone (MEK)	ND		6.0		ug/L			11/29/21 16:04	1
2-Chlorotoluene	ND		1.0		ug/L			11/29/21 16:04	1
2-Hexanone	ND		5.0		ug/L			11/29/21 16:04	1
4-Chlorotoluene	ND		1.0		ug/L			11/29/21 16:04	1
4-Isopropyltoluene	ND		1.0		ug/L			11/29/21 16:04	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: MW-5A
Lab Sample ID: 280-155968-2
Date Collected: 11/17/21 14:15
Matrix: Water
Date Received: 11/19/21 10:25

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone	ND		5.0		ug/L			11/29/21 16:04	1
Acetone	ND		10		ug/L			11/29/21 16:04	1
Benzene	**1.3**		1.0		ug/L			11/29/21 16:04	1
Bromobenzene	ND		1.0		ug/L			11/29/21 16:04	1
Bromochloromethane	ND		1.0		ug/L			11/29/21 16:04	1
Bromodichloromethane	ND		1.0		ug/L			11/29/21 16:04	1
Bromoform	ND		1.0		ug/L			11/29/21 16:04	1
Bromomethane	ND		2.0		ug/L			11/29/21 16:04	1
Carbon disulfide	ND		2.0		ug/L			11/29/21 16:04	1
Carbon tetrachloride	ND		1.0		ug/L			11/29/21 16:04	1
Chlorobenzene	**5.2**		1.0		ug/L			11/29/21 16:04	1
Chloroethane	ND		2.0		ug/L			11/29/21 16:04	1
Chloroform	ND		1.0		ug/L			11/29/21 16:04	1
Chloromethane	ND		2.0		ug/L			11/29/21 16:04	1
cis-1,2-Dichloroethene	**1.5**		1.0		ug/L			11/29/21 16:04	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/29/21 16:04	1
Dibromochloromethane	ND		1.0		ug/L			11/29/21 16:04	1
Dibromomethane	ND		1.0		ug/L			11/29/21 16:04	1
Dichlorodifluoromethane	ND		2.0		ug/L			11/29/21 16:04	1
Ethylbenzene	ND		1.0		ug/L			11/29/21 16:04	1
Hexachlorobutadiene	ND		1.0		ug/L			11/29/21 16:04	1
Isopropylbenzene	ND		1.0		ug/L			11/29/21 16:04	1
Methylene Chloride	ND		5.0		ug/L			11/29/21 16:04	1
Naphthalene	ND		1.0		ug/L			11/29/21 16:04	1
n-Butylbenzene	ND		1.0		ug/L			11/29/21 16:04	1
N-Propylbenzene	ND		1.0		ug/L			11/29/21 16:04	1
sec-Butylbenzene	ND		1.0		ug/L			11/29/21 16:04	1
Styrene	ND		1.0		ug/L			11/29/21 16:04	1
tert-Butylbenzene	ND		1.0		ug/L			11/29/21 16:04	1
Tetrachloroethene	ND		1.0		ug/L			11/29/21 16:04	1
Toluene	ND		1.0		ug/L			11/29/21 16:04	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/29/21 16:04	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/29/21 16:04	1
Trichloroethene	ND		1.0		ug/L			11/29/21 16:04	1
Trichlorofluoromethane	ND		2.0		ug/L			11/29/21 16:04	1
Vinyl chloride	ND		1.0		ug/L			11/29/21 16:04	1
Xylenes (total)	ND		2.0		ug/L			11/29/21 16:04	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*11/29/21 16:04*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 127*		*11/29/21 16:04*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*11/29/21 16:04*	*1*
Dibromofluoromethane (Surr)	*103*		*77 - 120*		*11/29/21 16:04*	*1*
Toluene-d8 (Surr)	*104*		*80 - 125*		*11/29/21 16:04*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Client Sample ID: TB1
Date Collected: 11/16/21 07:00
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155968-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		11/30/21 14:02	12/01/21 20:10	1
1,2-Dibromoethane	ND		0.050		ug/L		11/30/21 14:02	12/01/21 20:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*114*		*70 - 130*	*11/30/21 14:02*	*12/01/21 20:10*	*1*

Client Sample ID: MW-5A
Date Collected: 11/17/21 14:15
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155968-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		11/30/21 14:02	12/01/21 20:33	1
1,2-Dibromoethane	ND		0.050		ug/L		11/30/21 14:02	12/01/21 20:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*117*		*70 - 130*	*11/30/21 14:02*	*12/01/21 20:33*	*1*

Method: Field Sampling - Field Sampling

Client Sample ID: MW-5A
Date Collected: 11/17/21 14:15
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155968-2
Matrix: Water

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**5.80**				SU			11/17/21 15:15	1
Field Conductivity	**1220.0**				umhos/cm			11/17/21 15:15	1
Field Temperature	**14.5**				Degrees C			11/17/21 15:15	1
Field Dissolved Oxygen	**0.81**				mg/L			11/17/21 15:15	1
Field EH/ORP	**21.9**				millivolts			11/17/21 15:15	1

Surrogate Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Groundwater

Job ID: 280-155968-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-127)	(78-120)	(77-120)	(80-125)
280-155968-1	TB1	100	91	98	93
280-155968-2	MW-5A	98	96	103	104
280-155990-B-12 MSD	Matrix Spike Duplicate	95	97	95	105
280-155990-C-12 MS	Matrix Spike	96	96	99	102
LCS 280-558919/4	Lab Control Sample	96	92	99	92
LCS 280-558920/4	Lab Control Sample	92	95	99	103
LCSD 280-558919/5	Lab Control Sample Dup	97	91	100	92
LCSD 280-558920/5	Lab Control Sample Dup	94	96	97	100
MB 280-558919/9	Method Blank	98	93	98	93
MB 280-558920/9	Method Blank	99	96	101	102

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		12DBP1
Lab Sample ID	Client Sample ID	(70-130)
280-155968-1	TB1	114
280-155968-2	MW-5A	117
LCS 280-559134/2-A	Lab Control Sample	113
LCSD 280-559134/3-A	Lab Control Sample Dup	113
MB 280-559134/1-A	Method Blank	109

Surrogate Legend

12DBP = 1,2-Dibromopropane

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 280-558919/9
Matrix: Water
Analysis Batch: 558919

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			11/29/21 11:29	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/29/21 11:29	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/29/21 11:29	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/29/21 11:29	1
1,1-Dichloroethane	ND		1.0		ug/L			11/29/21 11:29	1
1,1-Dichloroethene	ND		1.0		ug/L			11/29/21 11:29	1
1,1-Dichloropropene	ND		1.0		ug/L			11/29/21 11:29	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/29/21 11:29	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/29/21 11:29	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/29/21 11:29	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/29/21 11:29	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/29/21 11:29	1
1,2-Dichloroethane	ND		1.0		ug/L			11/29/21 11:29	1
1,2-Dichloropropane	ND		1.0		ug/L			11/29/21 11:29	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/29/21 11:29	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/29/21 11:29	1
1,3-Dichloropropane	ND		1.0		ug/L			11/29/21 11:29	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/29/21 11:29	1
2,2-Dichloropropane	ND		5.0		ug/L			11/29/21 11:29	1
2-Butanone (MEK)	ND		6.0		ug/L			11/29/21 11:29	1
2-Chlorotoluene	ND		1.0		ug/L			11/29/21 11:29	1
2-Hexanone	ND		5.0		ug/L			11/29/21 11:29	1
4-Chlorotoluene	ND		1.0		ug/L			11/29/21 11:29	1
4-Isopropyltoluene	ND		1.0		ug/L			11/29/21 11:29	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/29/21 11:29	1
Acetone	ND		10		ug/L			11/29/21 11:29	1
Benzene	ND		1.0		ug/L			11/29/21 11:29	1
Bromobenzene	ND		1.0		ug/L			11/29/21 11:29	1
Bromochloromethane	ND		1.0		ug/L			11/29/21 11:29	1
Bromodichloromethane	ND		1.0		ug/L			11/29/21 11:29	1
Bromoform	ND		1.0		ug/L			11/29/21 11:29	1
Bromomethane	ND		2.0		ug/L			11/29/21 11:29	1
Carbon disulfide	ND		2.0		ug/L			11/29/21 11:29	1
Carbon tetrachloride	ND		1.0		ug/L			11/29/21 11:29	1
Chlorobenzene	ND		1.0		ug/L			11/29/21 11:29	1
Chloroethane	ND		2.0		ug/L			11/29/21 11:29	1
Chloroform	ND		1.0		ug/L			11/29/21 11:29	1
Chloromethane	ND		2.0		ug/L			11/29/21 11:29	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/29/21 11:29	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/29/21 11:29	1
Dibromochloromethane	ND		1.0		ug/L			11/29/21 11:29	1
Dibromomethane	ND		1.0		ug/L			11/29/21 11:29	1
Dichlorodifluoromethane	ND		2.0		ug/L			11/29/21 11:29	1
Ethylbenzene	ND		1.0		ug/L			11/29/21 11:29	1
Hexachlorobutadiene	ND		1.0		ug/L			11/29/21 11:29	1
Isopropylbenzene	ND		1.0		ug/L			11/29/21 11:29	1
Methylene Chloride	ND		5.0		ug/L			11/29/21 11:29	1
Naphthalene	ND		1.0		ug/L			11/29/21 11:29	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 280-558919/9
Matrix: Water
Analysis Batch: 558919

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		1.0		ug/L			11/29/21 11:29	1
N-Propylbenzene	ND		1.0		ug/L			11/29/21 11:29	1
sec-Butylbenzene	ND		1.0		ug/L			11/29/21 11:29	1
Styrene	ND		1.0		ug/L			11/29/21 11:29	1
tert-Butylbenzene	ND		1.0		ug/L			11/29/21 11:29	1
Tetrachloroethene	ND		1.0		ug/L			11/29/21 11:29	1
Toluene	ND		1.0		ug/L			11/29/21 11:29	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/29/21 11:29	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/29/21 11:29	1
Trichloroethene	ND		1.0		ug/L			11/29/21 11:29	1
Trichlorofluoromethane	ND		2.0		ug/L			11/29/21 11:29	1
Vinyl chloride	ND		1.0		ug/L			11/29/21 11:29	1
Xylenes (total)	ND		2.0		ug/L			11/29/21 11:29	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*11/29/21 11:29*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 127*		*11/29/21 11:29*	*1*
4-Bromofluorobenzene (Surr)	*93*		*78 - 120*		*11/29/21 11:29*	*1*
Dibromofluoromethane (Surr)	*98*		*77 - 120*		*11/29/21 11:29*	*1*
Toluene-d8 (Surr)	*93*		*80 - 125*		*11/29/21 11:29*	*1*

Lab Sample ID: LCS 280-558919/4
Matrix: Water
Analysis Batch: 558919

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	23.2		ug/L		93	65 - 135
1,1,1-Trichloroethane	25.0	23.3		ug/L		93	65 - 135
1,1,2,2-Tetrachloroethane	25.0	24.0		ug/L		96	58 - 135
1,1,2-Trichloroethane	25.0	24.8		ug/L		99	64 - 135
1,1-Dichloroethane	25.0	22.2		ug/L		89	65 - 135
1,1-Dichloroethene	25.0	23.9		ug/L		96	65 - 136
1,1-Dichloropropene	25.0	23.3		ug/L		93	65 - 135
1,2,3-Trichlorobenzene	25.0	24.4		ug/L		98	60 - 135
1,2,3-Trichloropropane	25.0	24.2		ug/L		97	65 - 135
1,2,4-Trichlorobenzene	25.0	23.6		ug/L		94	58 - 135
1,2,4-Trimethylbenzene	25.0	22.8		ug/L		91	65 - 135
1,2-Dichlorobenzene	25.0	23.9		ug/L		96	65 - 135
1,2-Dichloroethane	25.0	23.1		ug/L		92	65 - 135
1,2-Dichloropropane	25.0	22.6		ug/L		91	64 - 135
1,3,5-Trimethylbenzene	25.0	22.8		ug/L		91	65 - 135
1,3-Dichlorobenzene	25.0	24.0		ug/L		96	65 - 135
1,3-Dichloropropane	25.0	23.3		ug/L		93	64 - 135
1,4-Dichlorobenzene	25.0	23.6		ug/L		94	65 - 135
2,2-Dichloropropane	25.0	20.0		ug/L		80	65 - 135
2-Butanone (MEK)	100	90.1		ug/L		90	44 - 177

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-558919/4
Matrix: Water
Analysis Batch: 558919

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chlorotoluene	25.0	23.1		ug/L		93	65 - 135
2-Hexanone	100	83.2		ug/L		83	57 - 139
4-Chlorotoluene	25.0	23.3		ug/L		93	65 - 135
4-Isopropyltoluene	25.0	22.4		ug/L		90	65 - 135
4-Methyl-2-pentanone	100	86.4		ug/L		86	60 - 150
Acetone	100	86.4		ug/L		86	39 - 156
Benzene	25.0	23.5		ug/L		94	65 - 135
Bromobenzene	25.0	24.7		ug/L		99	65 - 135
Bromochloromethane	25.0	24.7		ug/L		99	65 - 135
Bromodichloromethane	25.0	24.0		ug/L		96	65 - 135
Bromoform	25.0	28.2		ug/L		113	62 - 135
Bromomethane	25.0	21.1		ug/L		84	45 - 135
Carbon disulfide	25.0	21.8		ug/L		87	55 - 143
Carbon tetrachloride	25.0	22.3		ug/L		89	65 - 135
Chlorobenzene	25.0	22.9		ug/L		91	65 - 135
Chloroethane	25.0	18.2		ug/L		73	46 - 136
Chloroform	25.0	24.1		ug/L		96	65 - 135
Chloromethane	25.0	18.9		ug/L		76	34 - 145
cis-1,2-Dichloroethene	25.0	23.9		ug/L		96	65 - 135
cis-1,3-Dichloropropene	25.0	21.7		ug/L		87	65 - 135
Dibromochloromethane	25.0	25.1		ug/L		100	65 - 135
Dibromomethane	25.0	25.1		ug/L		100	65 - 135
Dichlorodifluoromethane	25.0	20.5		ug/L		82	43 - 142
Ethylbenzene	25.0	23.0		ug/L		92	65 - 135
Hexachlorobutadiene	25.0	26.5		ug/L		106	65 - 135
Isopropylbenzene	25.0	22.7		ug/L		91	65 - 135
Methylene Chloride	25.0	22.2		ug/L		89	54 - 141
Naphthalene	25.0	23.5		ug/L		94	42 - 135
n-Butylbenzene	25.0	21.9		ug/L		88	64 - 135
N-Propylbenzene	25.0	22.1		ug/L		88	65 - 135
sec-Butylbenzene	25.0	22.8		ug/L		91	64 - 135
Styrene	25.0	23.9		ug/L		96	65 - 135
tert-Butylbenzene	25.0	22.4		ug/L		89	65 - 135
Tetrachloroethene	25.0	23.7		ug/L		95	65 - 135
Toluene	25.0	23.4		ug/L		93	65 - 135
trans-1,2-Dichloroethene	25.0	22.9		ug/L		92	65 - 135
trans-1,3-Dichloropropene	25.0	21.7		ug/L		87	65 - 135
Trichloroethene	25.0	22.1		ug/L		88	65 - 135
Trichlorofluoromethane	25.0	21.3		ug/L		85	53 - 137
Vinyl chloride	25.0	17.6		ug/L		70	40 - 137

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 127*
4-Bromofluorobenzene (Surr)	*92*		*78 - 120*
Dibromofluoromethane (Surr)	*99*		*77 - 120*
Toluene-d8 (Surr)	*92*		*80 - 125*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 280-558919/5
Matrix: Water
Analysis Batch: 558919

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane			25.0	23.3		ug/L		93	65 - 135	0	20
1,1,1-Trichloroethane			25.0	24.3		ug/L		97	65 - 135	4	20
1,1,2,2-Tetrachloroethane			25.0	24.5		ug/L		98	58 - 135	2	20
1,1,2-Trichloroethane			25.0	24.7		ug/L		99	64 - 135	0	27
1,1-Dichloroethane			25.0	23.8		ug/L		95	65 - 135	7	21
1,1-Dichloroethene			25.0	23.9		ug/L		96	65 - 136	0	20
1,1-Dichloropropene			25.0	23.9		ug/L		96	65 - 135	3	21
1,2,3-Trichlorobenzene			25.0	24.4		ug/L		98	60 - 135	0	36
1,2,3-Trichloropropane			25.0	24.7		ug/L		99	65 - 135	2	23
1,2,4-Trichlorobenzene			25.0	23.9		ug/L		95	58 - 135	1	25
1,2,4-Trimethylbenzene			25.0	22.7		ug/L		91	65 - 135	0	20
1,2-Dichlorobenzene			25.0	24.0		ug/L		96	65 - 135	0	20
1,2-Dichloroethane			25.0	23.8		ug/L		95	65 - 135	3	20
1,2-Dichloropropane			25.0	23.1		ug/L		92	64 - 135	2	20
1,3,5-Trimethylbenzene			25.0	22.3		ug/L		89	65 - 135	2	20
1,3-Dichlorobenzene			25.0	24.1		ug/L		96	65 - 135	0	20
1,3-Dichloropropane			25.0	24.2		ug/L		97	64 - 135	4	20
1,4-Dichlorobenzene			25.0	23.9		ug/L		96	65 - 135	1	23
2,2-Dichloropropane			25.0	20.3		ug/L		81	65 - 135	2	20
2-Butanone (MEK)			100	94.6		ug/L		95	44 - 177	5	32
2-Chlorotoluene			25.0	23.2		ug/L		93	65 - 135	0	20
2-Hexanone			100	88.7		ug/L		89	57 - 139	6	25
4-Chlorotoluene			25.0	23.8		ug/L		95	65 - 135	2	20
4-Isopropyltoluene			25.0	22.8		ug/L		91	65 - 135	2	20
4-Methyl-2-pentanone			100	92.6		ug/L		93	60 - 150	7	22
Acetone			100	92.3		ug/L		92	39 - 156	7	23
Benzene			25.0	24.2		ug/L		97	65 - 135	3	20
Bromobenzene			25.0	24.7		ug/L		99	65 - 135	0	26
Bromochloromethane			25.0	24.9		ug/L		100	65 - 135	1	29
Bromodichloromethane			25.0	24.6		ug/L		98	65 - 135	2	20
Bromoform			25.0	28.8		ug/L		115	62 - 135	2	27
Bromomethane			25.0	22.8		ug/L		91	45 - 135	7	33
Carbon disulfide			25.0	22.4		ug/L		90	55 - 143	3	20
Carbon tetrachloride			25.0	23.3		ug/L		93	65 - 135	4	21
Chlorobenzene			25.0	23.2		ug/L		93	65 - 135	1	20
Chloroethane			25.0	19.9		ug/L		79	46 - 136	9	25
Chloroform			25.0	24.9		ug/L		100	65 - 135	3	20
Chloromethane			25.0	19.6		ug/L		78	34 - 145	4	24
cis-1,2-Dichloroethene			25.0	23.7		ug/L		95	65 - 135	1	20
cis-1,3-Dichloropropene			25.0	22.0		ug/L		88	65 - 135	1	26
Dibromochloromethane			25.0	25.3		ug/L		101	65 - 135	1	20
Dibromomethane			25.0	25.3		ug/L		101	65 - 135	1	26
Dichlorodifluoromethane			25.0	21.7		ug/L		87	43 - 142	6	30
Ethylbenzene			25.0	23.8		ug/L		95	65 - 135	3	20
Hexachlorobutadiene			25.0	26.1		ug/L		104	65 - 135	1	25
Isopropylbenzene			25.0	23.2		ug/L		93	65 - 135	2	20
Methylene Chloride			25.0	22.9		ug/L		92	54 - 141	3	26
Naphthalene			25.0	24.3		ug/L		97	42 - 135	3	23

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 280-558919/5
Matrix: Water
Analysis Batch: 558919

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
n-Butylbenzene			25.0	22.0		ug/L		88	64 - 135	0	21
N-Propylbenzene			25.0	22.3		ug/L		89	65 - 135	1	20
sec-Butylbenzene			25.0	23.1		ug/L		92	64 - 135	1	21
Styrene			25.0	24.3		ug/L		97	65 - 135	1	26
tert-Butylbenzene			25.0	22.7		ug/L		91	65 - 135	2	21
Tetrachloroethene			25.0	24.4		ug/L		98	65 - 135	3	20
Toluene			25.0	23.7		ug/L		95	65 - 135	1	20
trans-1,2-Dichloroethene			25.0	23.9		ug/L		96	65 - 135	4	24
trans-1,3-Dichloropropene			25.0	22.5		ug/L		90	65 - 135	4	26
Trichloroethene			25.0	22.9		ug/L		92	65 - 135	4	20
Trichlorofluoromethane			25.0	23.5		ug/L		94	53 - 137	10	27
Vinyl chloride			25.0	19.8		ug/L		79	40 - 137	12	24

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 127*
4-Bromofluorobenzene (Surr)	*91*		*78 - 120*
Dibromofluoromethane (Surr)	*100*		*77 - 120*
Toluene-d8 (Surr)	*92*		*80 - 125*

Lab Sample ID: MB 280-558920/9
Matrix: Water
Analysis Batch: 558920

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			11/29/21 10:00	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/29/21 10:00	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/29/21 10:00	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/29/21 10:00	1
1,1-Dichloroethane	ND		1.0		ug/L			11/29/21 10:00	1
1,1-Dichloroethene	ND		1.0		ug/L			11/29/21 10:00	1
1,1-Dichloropropene	ND		1.0		ug/L			11/29/21 10:00	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/29/21 10:00	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/29/21 10:00	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/29/21 10:00	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/29/21 10:00	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/29/21 10:00	1
1,2-Dichloroethane	ND		1.0		ug/L			11/29/21 10:00	1
1,2-Dichloropropane	ND		1.0		ug/L			11/29/21 10:00	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/29/21 10:00	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/29/21 10:00	1
1,3-Dichloropropane	ND		1.0		ug/L			11/29/21 10:00	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/29/21 10:00	1
2,2-Dichloropropane	ND		5.0		ug/L			11/29/21 10:00	1
2-Butanone (MEK)	ND		6.0		ug/L			11/29/21 10:00	1
2-Chlorotoluene	ND		1.0		ug/L			11/29/21 10:00	1
2-Hexanone	ND		5.0		ug/L			11/29/21 10:00	1
4-Chlorotoluene	ND		1.0		ug/L			11/29/21 10:00	1
4-Isopropyltoluene	ND		1.0		ug/L			11/29/21 10:00	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 280-558920/9
Matrix: Water
Analysis Batch: 558920

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone	ND		5.0		ug/L			11/29/21 10:00	1
Acetone	ND		10		ug/L			11/29/21 10:00	1
Benzene	ND		1.0		ug/L			11/29/21 10:00	1
Bromobenzene	ND		1.0		ug/L			11/29/21 10:00	1
Bromochloromethane	ND		1.0		ug/L			11/29/21 10:00	1
Bromodichloromethane	ND		1.0		ug/L			11/29/21 10:00	1
Bromoform	ND		1.0		ug/L			11/29/21 10:00	1
Bromomethane	ND		2.0		ug/L			11/29/21 10:00	1
Carbon disulfide	ND		2.0		ug/L			11/29/21 10:00	1
Carbon tetrachloride	ND		1.0		ug/L			11/29/21 10:00	1
Chlorobenzene	ND		1.0		ug/L			11/29/21 10:00	1
Chloroethane	ND		2.0		ug/L			11/29/21 10:00	1
Chloroform	ND		1.0		ug/L			11/29/21 10:00	1
Chloromethane	ND		2.0		ug/L			11/29/21 10:00	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/29/21 10:00	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/29/21 10:00	1
Dibromochloromethane	ND		1.0		ug/L			11/29/21 10:00	1
Dibromomethane	ND		1.0		ug/L			11/29/21 10:00	1
Dichlorodifluoromethane	ND		2.0		ug/L			11/29/21 10:00	1
Ethylbenzene	ND		1.0		ug/L			11/29/21 10:00	1
Hexachlorobutadiene	ND		1.0		ug/L			11/29/21 10:00	1
Isopropylbenzene	ND		1.0		ug/L			11/29/21 10:00	1
Methylene Chloride	ND		5.0		ug/L			11/29/21 10:00	1
Naphthalene	ND		1.0		ug/L			11/29/21 10:00	1
n-Butylbenzene	ND		1.0		ug/L			11/29/21 10:00	1
N-Propylbenzene	ND		1.0		ug/L			11/29/21 10:00	1
sec-Butylbenzene	ND		1.0		ug/L			11/29/21 10:00	1
Styrene	ND		1.0		ug/L			11/29/21 10:00	1
tert-Butylbenzene	ND		1.0		ug/L			11/29/21 10:00	1
Tetrachloroethene	ND		1.0		ug/L			11/29/21 10:00	1
Toluene	ND		1.0		ug/L			11/29/21 10:00	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/29/21 10:00	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/29/21 10:00	1
Trichloroethene	ND		1.0		ug/L			11/29/21 10:00	1
Trichlorofluoromethane	ND		2.0		ug/L			11/29/21 10:00	1
Vinyl chloride	ND		1.0		ug/L			11/29/21 10:00	1
Xylenes (total)	ND		2.0		ug/L			11/29/21 10:00	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*11/29/21 10:00*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 127*		*11/29/21 10:00*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*11/29/21 10:00*	*1*
Dibromofluoromethane (Surr)	*101*		*77 - 120*		*11/29/21 10:00*	*1*
Toluene-d8 (Surr)	*102*		*80 - 125*		*11/29/21 10:00*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-558920/4
Matrix: Water
Analysis Batch: 558920

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	24.0		ug/L		96	65 - 135
1,1,1-Trichloroethane	25.0	22.7		ug/L		91	65 - 135
1,1,2,2-Tetrachloroethane	25.0	26.9		ug/L		108	58 - 135
1,1,2-Trichloroethane	25.0	24.4		ug/L		98	64 - 135
1,1-Dichloroethane	25.0	23.2		ug/L		93	65 - 135
1,1-Dichloroethene	25.0	22.1		ug/L		88	65 - 136
1,1-Dichloropropene	25.0	25.4		ug/L		101	65 - 135
1,2,3-Trichlorobenzene	25.0	23.2		ug/L		93	60 - 135
1,2,3-Trichloropropane	25.0	25.3		ug/L		101	65 - 135
1,2,4-Trichlorobenzene	25.0	25.3		ug/L		101	58 - 135
1,2,4-Trimethylbenzene	25.0	25.3		ug/L		101	65 - 135
1,2-Dichlorobenzene	25.0	24.7		ug/L		99	65 - 135
1,2-Dichloroethane	25.0	22.3		ug/L		89	65 - 135
1,2-Dichloropropane	25.0	25.5		ug/L		102	64 - 135
1,3,5-Trimethylbenzene	25.0	24.4		ug/L		97	65 - 135
1,3-Dichlorobenzene	25.0	24.3		ug/L		97	65 - 135
1,3-Dichloropropane	25.0	26.1		ug/L		104	64 - 135
1,4-Dichlorobenzene	25.0	24.8		ug/L		99	65 - 135
2,2-Dichloropropane	25.0	23.2		ug/L		93	65 - 135
2-Butanone (MEK)	100	96.4		ug/L		96	44 - 177
2-Chlorotoluene	25.0	26.4		ug/L		105	65 - 135
2-Hexanone	100	111		ug/L		111	57 - 139
4-Chlorotoluene	25.0	24.9		ug/L		100	65 - 135
4-Isopropyltoluene	25.0	25.3		ug/L		101	65 - 135
4-Methyl-2-pentanone	100	100		ug/L		100	60 - 150
Acetone	100	95.6		ug/L		96	39 - 156
Benzene	25.0	23.7		ug/L		95	65 - 135
Bromobenzene	25.0	25.7		ug/L		103	65 - 135
Bromochloromethane	25.0	22.5		ug/L		90	65 - 135
Bromodichloromethane	25.0	22.9		ug/L		92	65 - 135
Bromoform	25.0	25.2		ug/L		101	62 - 135
Bromomethane	25.0	24.6		ug/L		98	45 - 135
Carbon disulfide	25.0	23.2		ug/L		93	55 - 143
Carbon tetrachloride	25.0	23.8		ug/L		95	65 - 135
Chlorobenzene	25.0	25.2		ug/L		101	65 - 135
Chloroethane	25.0	25.6		ug/L		103	46 - 136
Chloroform	25.0	24.6		ug/L		99	65 - 135
Chloromethane	25.0	25.8		ug/L		103	34 - 145
cis-1,2-Dichloroethene	25.0	24.6		ug/L		98	65 - 135
cis-1,3-Dichloropropene	25.0	25.9		ug/L		104	65 - 135
Dibromochloromethane	25.0	25.4		ug/L		102	65 - 135
Dibromomethane	25.0	23.3		ug/L		93	65 - 135
Dichlorodifluoromethane	25.0	23.8		ug/L		95	43 - 142
Ethylbenzene	25.0	25.6		ug/L		102	65 - 135
Hexachlorobutadiene	25.0	23.4		ug/L		94	65 - 135
Isopropylbenzene	25.0	24.7		ug/L		99	65 - 135
Methylene Chloride	25.0	23.9		ug/L		96	54 - 141
Naphthalene	25.0	24.4		ug/L		98	42 - 135

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-558920/4
Matrix: Water
Analysis Batch: 558920

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
n-Butylbenzene			25.0	25.2		ug/L		101	64 - 135		
N-Propylbenzene			25.0	25.4		ug/L		102	65 - 135		
sec-Butylbenzene			25.0	25.5		ug/L		102	64 - 135		
Styrene			25.0	26.5		ug/L		106	65 - 135		
tert-Butylbenzene			25.0	24.7		ug/L		99	65 - 135		
Tetrachloroethene			25.0	25.3		ug/L		101	65 - 135		
Toluene			25.0	23.3		ug/L		93	65 - 135		
trans-1,2-Dichloroethene			25.0	24.9		ug/L		100	65 - 135		
trans-1,3-Dichloropropene			25.0	22.8		ug/L		91	65 - 135		
Trichloroethene			25.0	25.3		ug/L		101	65 - 135		
Trichlorofluoromethane			25.0	23.1		ug/L		93	53 - 137		
Vinyl chloride			25.0	28.0		ug/L		112	40 - 137		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 127*
4-Bromofluorobenzene (Surr)	*95*		*78 - 120*
Dibromofluoromethane (Surr)	*99*		*77 - 120*
Toluene-d8 (Surr)	*103*		*80 - 125*

Lab Sample ID: LCSD 280-558920/5
Matrix: Water
Analysis Batch: 558920

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane			25.0	22.6		ug/L		91	65 - 135	6	20
1,1,1-Trichloroethane			25.0	22.5		ug/L		90	65 - 135	1	20
1,1,2,2-Tetrachloroethane			25.0	26.9		ug/L		108	58 - 135	0	20
1,1,2-Trichloroethane			25.0	24.7		ug/L		99	64 - 135	1	27
1,1-Dichloroethane			25.0	22.1		ug/L		89	65 - 135	5	21
1,1-Dichloroethene			25.0	20.9		ug/L		84	65 - 136	5	20
1,1-Dichloropropene			25.0	24.4		ug/L		98	65 - 135	4	21
1,2,3-Trichlorobenzene			25.0	23.7		ug/L		95	60 - 135	2	36
1,2,3-Trichloropropane			25.0	26.2		ug/L		105	65 - 135	4	23
1,2,4-Trichlorobenzene			25.0	25.2		ug/L		101	58 - 135	0	25
1,2,4-Trimethylbenzene			25.0	24.8		ug/L		99	65 - 135	2	20
1,2-Dichlorobenzene			25.0	24.7		ug/L		99	65 - 135	0	20
1,2-Dichloroethane			25.0	22.0		ug/L		88	65 - 135	1	20
1,2-Dichloropropane			25.0	25.7		ug/L		103	64 - 135	1	20
1,3,5-Trimethylbenzene			25.0	24.6		ug/L		98	65 - 135	1	20
1,3-Dichlorobenzene			25.0	24.3		ug/L		97	65 - 135	0	20
1,3-Dichloropropane			25.0	24.9		ug/L		100	64 - 135	4	20
1,4-Dichlorobenzene			25.0	25.1		ug/L		100	65 - 135	1	23
2,2-Dichloropropane			25.0	23.5		ug/L		94	65 - 135	2	20
2-Butanone (MEK)			100	101		ug/L		101	44 - 177	5	32
2-Chlorotoluene			25.0	25.4		ug/L		102	65 - 135	4	20
2-Hexanone			100	111		ug/L		111	57 - 139	0	25
4-Chlorotoluene			25.0	25.0		ug/L		100	65 - 135	0	20
4-Isopropyltoluene			25.0	25.3		ug/L		101	65 - 135	0	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 280-558920/5
Matrix: Water
Analysis Batch: 558920

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Methyl-2-pentanone			100	103		ug/L		103	60 - 150	3	22
Acetone			100	93.4		ug/L		93	39 - 156	2	23
Benzene			25.0	22.8		ug/L		91	65 - 135	4	20
Bromobenzene			25.0	24.8		ug/L		99	65 - 135	4	26
Bromochloromethane			25.0	22.5		ug/L		90	65 - 135	0	29
Bromodichloromethane			25.0	23.9		ug/L		96	65 - 135	4	20
Bromoform			25.0	25.0		ug/L		100	62 - 135	1	27
Bromomethane			25.0	22.8		ug/L		91	45 - 135	8	33
Carbon disulfide			25.0	23.4		ug/L		93	55 - 143	1	20
Carbon tetrachloride			25.0	24.1		ug/L		96	65 - 135	1	21
Chlorobenzene			25.0	24.3		ug/L		97	65 - 135	3	20
Chloroethane			25.0	23.7		ug/L		95	46 - 136	8	25
Chloroform			25.0	23.2		ug/L		93	65 - 135	6	20
Chloromethane			25.0	23.1		ug/L		92	34 - 145	11	24
cis-1,2-Dichloroethene			25.0	24.1		ug/L		96	65 - 135	2	20
cis-1,3-Dichloropropene			25.0	24.7		ug/L		99	65 - 135	5	26
Dibromochloromethane			25.0	24.2		ug/L		97	65 - 135	5	20
Dibromomethane			25.0	23.2		ug/L		93	65 - 135	0	26
Dichlorodifluoromethane			25.0	20.8		ug/L		83	43 - 142	13	30
Ethylbenzene			25.0	23.9		ug/L		96	65 - 135	7	20
Hexachlorobutadiene			25.0	24.9		ug/L		100	65 - 135	6	25
Isopropylbenzene			25.0	24.6		ug/L		98	65 - 135	1	20
Methylene Chloride			25.0	23.8		ug/L		95	54 - 141	1	26
Naphthalene			25.0	26.0		ug/L		104	42 - 135	6	23
n-Butylbenzene			25.0	24.6		ug/L		99	64 - 135	2	21
N-Propylbenzene			25.0	26.2		ug/L		105	65 - 135	3	20
sec-Butylbenzene			25.0	24.9		ug/L		100	64 - 135	2	21
Styrene			25.0	25.1		ug/L		100	65 - 135	5	26
tert-Butylbenzene			25.0	25.1		ug/L		101	65 - 135	2	21
Tetrachloroethene			25.0	24.2		ug/L		97	65 - 135	4	20
Toluene			25.0	22.8		ug/L		91	65 - 135	2	20
trans-1,2-Dichloroethene			25.0	23.6		ug/L		94	65 - 135	5	24
trans-1,3-Dichloropropene			25.0	22.3		ug/L		89	65 - 135	2	26
Trichloroethene			25.0	23.5		ug/L		94	65 - 135	8	20
Trichlorofluoromethane			25.0	21.2		ug/L		85	53 - 137	9	27
Vinyl chloride			25.0	24.7		ug/L		99	40 - 137	13	24

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 127*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*
Dibromofluoromethane (Surr)	*97*		*77 - 120*
Toluene-d8 (Surr)	*100*		*80 - 125*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 280-155990-B-12 MSD
Matrix: Water
Analysis Batch: 558920

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		25.0	25.3		ug/L		101	65 - 135	5	20
1,1,1-Trichloroethane	ND		25.0	23.2		ug/L		93	65 - 135	0	20
1,1,2,2-Tetrachloroethane	ND		25.0	26.9		ug/L		107	58 - 135	1	20
1,1,2-Trichloroethane	ND		25.0	24.6		ug/L		99	64 - 135	2	27
1,1-Dichloroethane	ND		25.0	22.0		ug/L		88	65 - 135	7	21
1,1-Dichloroethene	ND		25.0	20.6		ug/L		83	65 - 136	6	20
1,1-Dichloropropene	ND		25.0	25.3		ug/L		101	65 - 135	2	21
1,2,3-Trichlorobenzene	ND		25.0	23.5		ug/L		94	60 - 135	1	36
1,2,3-Trichloropropane	ND		25.0	24.8		ug/L		99	65 - 135	1	23
1,2,4-Trichlorobenzene	ND		25.0	25.6		ug/L		102	58 - 135	2	25
1,2,4-Trimethylbenzene	ND		25.0	25.1		ug/L		100	65 - 135	1	20
1,2-Dichlorobenzene	ND		25.0	25.4		ug/L		101	65 - 135	1	20
1,2-Dichloroethane	ND		25.0	22.4		ug/L		90	65 - 135	1	20
1,2-Dichloropropane	ND		25.0	26.0		ug/L		104	64 - 135	5	20
1,3,5-Trimethylbenzene	ND		25.0	25.4		ug/L		102	65 - 135	2	20
1,3-Dichlorobenzene	ND		25.0	24.9		ug/L		99	65 - 135	0	20
1,3-Dichloropropane	ND		25.0	26.3		ug/L		105	64 - 135	2	20
1,4-Dichlorobenzene	ND		25.0	25.1		ug/L		100	65 - 135	1	23
2,2-Dichloropropane	ND		25.0	21.2		ug/L		85	65 - 135	0	20
2-Butanone (MEK)	ND		100	104		ug/L		104	44 - 177	2	32
2-Chlorotoluene	ND		25.0	26.6		ug/L		106	65 - 135	3	20
2-Hexanone	ND		100	119		ug/L		119	57 - 139	1	25
4-Chlorotoluene	ND		25.0	26.1		ug/L		104	65 - 135	3	20
4-Isopropyltoluene	ND		25.0	24.4		ug/L		98	65 - 135	0	20
4-Methyl-2-pentanone	ND		100	105		ug/L		105	60 - 150	1	22
Acetone	ND		100	98.1		ug/L		98	39 - 156	4	23
Benzene	ND		25.0	23.8		ug/L		95	65 - 135	1	20
Bromobenzene	ND		25.0	25.0		ug/L		100	65 - 135	7	26
Bromochloromethane	ND		25.0	24.7		ug/L		99	65 - 135	5	29
Bromodichloromethane	ND		25.0	23.0		ug/L		92	65 - 135	2	20
Bromoform	ND		25.0	26.1		ug/L		104	62 - 135	5	27
Bromomethane	ND		25.0	19.9		ug/L		79	45 - 135	7	33
Carbon disulfide	ND		25.0	22.8		ug/L		91	55 - 143	2	20
Carbon tetrachloride	ND		25.0	24.2		ug/L		97	65 - 135	5	21
Chlorobenzene	ND		25.0	25.7		ug/L		103	65 - 135	0	20
Chloroethane	ND		25.0	25.3		ug/L		101	46 - 136	4	25
Chloroform	ND		25.0	24.4		ug/L		98	65 - 135	2	20
Chloromethane	ND		25.0	24.0		ug/L		96	34 - 145	4	24
cis-1,2-Dichloroethene	23	F1	25.0	63.1	F1	ug/L		160	65 - 135	13	20
cis-1,3-Dichloropropene	ND		25.0	25.3		ug/L		101	65 - 135	2	26
Dibromochloromethane	ND		25.0	24.4		ug/L		97	65 - 135	0	20
Dibromomethane	ND		25.0	24.0		ug/L		96	65 - 135	1	26
Dichlorodifluoromethane	ND		25.0	20.8		ug/L		83	43 - 142	8	30
Ethylbenzene	ND		25.0	25.3		ug/L		101	65 - 135	2	20
Hexachlorobutadiene	ND		25.0	23.4		ug/L		93	65 - 135	5	25
Isopropylbenzene	ND		25.0	24.6		ug/L		98	65 - 135	0	20
Methylene Chloride	ND		25.0	24.3		ug/L		97	54 - 141	3	26
Naphthalene	ND		25.0	26.4		ug/L		106	42 - 135	3	23

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 280-155990-B-12 MSD
Matrix: Water
Analysis Batch: 558920

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
n-Butylbenzene	ND		25.0	24.6		ug/L		98	64 - 135	4	21
N-Propylbenzene	ND		25.0	25.6		ug/L		102	65 - 135	1	20
sec-Butylbenzene	ND		25.0	24.6		ug/L		99	64 - 135	1	21
Styrene	ND		25.0	26.9		ug/L		108	65 - 135	2	26
tert-Butylbenzene	ND		25.0	24.9		ug/L		100	65 - 135	0	21
Tetrachloroethene	ND		25.0	24.8		ug/L		99	65 - 135	1	20
Toluene	ND		25.0	23.5		ug/L		94	65 - 135	1	20
trans-1,2-Dichloroethene	6.2		25.0	32.3		ug/L		105	65 - 135	0	24
trans-1,3-Dichloropropene	ND		25.0	22.3		ug/L		89	65 - 135	0	26
Trichloroethene	ND		25.0	26.0		ug/L		104	65 - 135	0	20
Trichlorofluoromethane	ND		25.0	21.0		ug/L		84	53 - 137	3	27
Vinyl chloride	4.9		25.0	36.9		ug/L		128	40 - 137	12	24

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 127*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*
Dibromofluoromethane (Surr)	*95*		*77 - 120*
Toluene-d8 (Surr)	*105*		*80 - 125*

Lab Sample ID: 280-155990-C-12 MS
Matrix: Water
Analysis Batch: 558920

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	ND		25.0	24.1		ug/L		96	65 - 135
1,1,1-Trichloroethane	ND		25.0	23.2		ug/L		93	65 - 135
1,1,2,2-Tetrachloroethane	ND		25.0	27.0		ug/L		108	58 - 135
1,1,2-Trichloroethane	ND		25.0	25.2		ug/L		101	64 - 135
1,1-Dichloroethane	ND		25.0	23.6		ug/L		94	65 - 135
1,1-Dichloroethene	ND		25.0	22.0		ug/L		88	65 - 136
1,1-Dichloropropene	ND		25.0	24.8		ug/L		99	65 - 135
1,2,3-Trichlorobenzene	ND		25.0	23.6		ug/L		95	60 - 135
1,2,3-Trichloropropane	ND		25.0	24.6		ug/L		98	65 - 135
1,2,4-Trichlorobenzene	ND		25.0	26.0		ug/L		104	58 - 135
1,2,4-Trimethylbenzene	ND		25.0	25.4		ug/L		102	65 - 135
1,2-Dichlorobenzene	ND		25.0	25.2		ug/L		101	65 - 135
1,2-Dichloroethane	ND		25.0	22.1		ug/L		89	65 - 135
1,2-Dichloropropane	ND		25.0	27.3		ug/L		109	64 - 135
1,3,5-Trimethylbenzene	ND		25.0	25.0		ug/L		100	65 - 135
1,3-Dichlorobenzene	ND		25.0	24.7		ug/L		99	65 - 135
1,3-Dichloropropane	ND		25.0	25.8		ug/L		103	64 - 135
1,4-Dichlorobenzene	ND		25.0	25.4		ug/L		102	65 - 135
2,2-Dichloropropane	ND		25.0	21.2		ug/L		85	65 - 135
2-Butanone (MEK)	ND		100	101		ug/L		101	44 - 177
2-Chlorotoluene	ND		25.0	25.9		ug/L		104	65 - 135
2-Hexanone	ND		100	118		ug/L		118	57 - 139
4-Chlorotoluene	ND		25.0	25.2		ug/L		101	65 - 135
4-Isopropyltoluene	ND		25.0	24.4		ug/L		98	65 - 135

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 280-155990-C-12 MS
Matrix: Water
Analysis Batch: 558920

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Methyl-2-pentanone	ND		100	106		ug/L		106	60 - 150
Acetone	ND		100	94.1		ug/L		94	39 - 156
Benzene	ND		25.0	24.1		ug/L		97	65 - 135
Bromobenzene	ND		25.0	26.9		ug/L		108	65 - 135
Bromochloromethane	ND		25.0	23.6		ug/L		94	65 - 135
Bromodichloromethane	ND		25.0	23.6		ug/L		94	65 - 135
Bromoform	ND		25.0	24.7		ug/L		99	62 - 135
Bromomethane	ND		25.0	18.5		ug/L		74	45 - 135
Carbon disulfide	ND		25.0	23.3		ug/L		93	55 - 143
Carbon tetrachloride	ND		25.0	23.1		ug/L		92	65 - 135
Chlorobenzene	ND		25.0	25.9		ug/L		103	65 - 135
Chloroethane	ND		25.0	24.3		ug/L		97	46 - 136
Chloroform	ND		25.0	24.8		ug/L		99	65 - 135
Chloromethane	ND		25.0	25.0		ug/L		100	34 - 145
cis-1,2-Dichloroethene	23	F1	25.0	55.5		ug/L		129	65 - 135
cis-1,3-Dichloropropene	ND		25.0	25.7		ug/L		103	65 - 135
Dibromochloromethane	ND		25.0	24.3		ug/L		97	65 - 135
Dibromomethane	ND		25.0	24.3		ug/L		97	65 - 135
Dichlorodifluoromethane	ND		25.0	22.4		ug/L		90	43 - 142
Ethylbenzene	ND		25.0	24.8		ug/L		99	65 - 135
Hexachlorobutadiene	ND		25.0	22.3		ug/L		89	65 - 135
Isopropylbenzene	ND		25.0	24.7		ug/L		99	65 - 135
Methylene Chloride	ND		25.0	25.0		ug/L		100	54 - 141
Naphthalene	ND		25.0	25.5		ug/L		102	42 - 135
n-Butylbenzene	ND		25.0	23.7		ug/L		95	64 - 135
N-Propylbenzene	ND		25.0	25.7		ug/L		103	65 - 135
sec-Butylbenzene	ND		25.0	25.0		ug/L		100	64 - 135
Styrene	ND		25.0	27.4		ug/L		110	65 - 135
tert-Butylbenzene	ND		25.0	24.9		ug/L		99	65 - 135
Tetrachloroethene	ND		25.0	24.5		ug/L		98	65 - 135
Toluene	ND		25.0	23.2		ug/L		93	65 - 135
trans-1,2-Dichloroethene	6.2		25.0	32.3		ug/L		105	65 - 135
trans-1,3-Dichloropropene	ND		25.0	22.3		ug/L		89	65 - 135
Trichloroethene	ND		25.0	26.1		ug/L		105	65 - 135
Trichlorofluoromethane	ND		25.0	21.6		ug/L		86	53 - 137
Vinyl chloride	4.9		25.0	32.7		ug/L		111	40 - 137

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 127*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*
Dibromofluoromethane (Surr)	*99*		*77 - 120*
Toluene-d8 (Surr)	*102*		*80 - 125*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Lab Sample ID: MB 280-559134/1-A
Matrix: Water
Analysis Batch: 559266

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 559134

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		11/30/21 14:02	12/01/21 18:58	1
1,2-Dibromoethane	ND		0.050		ug/L		11/30/21 14:02	12/01/21 18:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*109*		*70 - 130*	*11/30/21 14:02*	*12/01/21 18:58*	*1*

Lab Sample ID: LCS 280-559134/2-A
Matrix: Water
Analysis Batch: 559266

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 559134

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2-Dibromo-3-Chloropropane			0.250	0.245		ug/L		98	60 - 140		
1,2-Dibromoethane			0.250	0.256		ug/L		102	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dibromopropane	*113*		*70 - 130*

Lab Sample ID: LCSD 280-559134/3-A
Matrix: Water
Analysis Batch: 559266

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 559134

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.250	0.249		ug/L		100	60 - 140	2	10
1,2-Dibromoethane			0.250	0.240		ug/L		96	60 - 140	7	10

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dibromopropane	*113*		*70 - 130*

QC Association Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Groundwater

Job ID: 280-155968-1

GC/MS VOA

Analysis Batch: 558919

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155968-1	TB1	Total/NA	Water	8260B	
MB 280-558919/9	Method Blank	Total/NA	Water	8260B	
LCS 280-558919/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-558919/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 558920

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155968-2	MW-5A	Total/NA	Water	8260B	
MB 280-558920/9	Method Blank	Total/NA	Water	8260B	
LCS 280-558920/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-558920/5	Lab Control Sample Dup	Total/NA	Water	8260B	
280-155990-B-12 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
280-155990-C-12 MS	Matrix Spike	Total/NA	Water	8260B	

GC Semi VOA

Prep Batch: 559134

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155968-1	TB1	Total/NA	Water	8011	
280-155968-2	MW-5A	Total/NA	Water	8011	
MB 280-559134/1-A	Method Blank	Total/NA	Water	8011	
LCS 280-559134/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 280-559134/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 559266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155968-1	TB1	Total/NA	Water	8011	559134
280-155968-2	MW-5A	Total/NA	Water	8011	559134
MB 280-559134/1-A	Method Blank	Total/NA	Water	8011	559134
LCS 280-559134/2-A	Lab Control Sample	Total/NA	Water	8011	559134
LCSD 280-559134/3-A	Lab Control Sample Dup	Total/NA	Water	8011	559134

Field Service / Mobile Lab

Analysis Batch: 558413

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155968-2	MW-5A	Total/NA	Water	Field Sampling	

Lab Chronicle

Client: Waste Management
Job ID: 280-155968-1
Project/Site: 1003|Riverbend Landfill - Groundwater

Client Sample ID: TB1
Lab Sample ID: 280-155968-1
Date Collected: 11/16/21 07:00
Matrix: Water
Date Received: 11/19/21 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	558919	11/29/21 17:54	JLS	TAL DEN
Total/NA	Prep	8011			35.3 mL	35 mL	559134	11/30/21 14:02	KSA	TAL DEN
Total/NA	Analysis	8011		1			559266	12/01/21 20:10	KSA	TAL DEN

Client Sample ID: MW-5A
Lab Sample ID: 280-155968-2
Date Collected: 11/17/21 14:15
Matrix: Water
Date Received: 11/19/21 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	558920	11/29/21 16:04	JLS	TAL DEN
Total/NA	Prep	8011			35.1 mL	35 mL	559134	11/30/21 14:02	KSA	TAL DEN
Total/NA	Analysis	8011		1			559266	12/01/21 20:33	KSA	TAL DEN
Total/NA	Analysis	Field Sampling		1			558413	11/17/21 15:15	PP	TAL DEN

Laboratory References:
TAL DEN = Eurofins TestAmerica, Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Eurofins TestAmerica, Denver
4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Fax (303) 431-7171

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: I. Hultquist	Lab PM: Sara, Betsy A	Carrier Tracking No(s):	COC No: 280-19762-2725.1
Client Contact:	Phone: (503) 7166320	E-Mail: Betsy.Sara@Eurofinset.com		Page: Page 1 of 1
Company: Waste Management				Job #:

Address: 13469 SW Highway 18	Due Date Requested:
City: McMinnville	TAT Requested (days):
State, Zip: OR, 97128	
Phone:	PO #:
Email:	WO #:
Project Name: 1003|Riverbend Landfill SCS Engineers	Project #: 28002786 - Downgradient Det. Wells - Oct
Site: Oregon	SSOW#:

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - VOA	8011 - EDB/DBCP	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	R		
TB1	11-16-21	0700	G	W			X	X	8	
MW-5A	11-17-21		G	W			X	X	6	

280-155968 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 11-18-21 1630	Company SCS	Received by:	Date/Time: 11/19/2021 1025	Company EDA DEN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.0, -0.4, 0.9, 0.4 CF +1.0 IR #11

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12/6/2021

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-5A
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	(N)	NE	E	SE	S	SW	W	NW	LIGHT	(MEDIUM)	HEAVY
WEATHER:	(SUNNY)	CLOUDY	RAIN	?	**TEMPERATURE:**	(°F) 50.0 °C				

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
11/17/21	12 :55	34.40	.	16.10	.	18.30	X 1	2 .98
/ /	:	.	.	.	.		X 3	8 .94

Gal/ft = (dia./2)^2 x 0.163	1" =	0.041	(2") =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	√
VOA Glass	11/17/21	14 :15	F	3	(40 ml)	HCl	YES	NO	✓
VOA Glass	11 /17/21	14:15	F	3	(40 ml)	$Na_2S_2O_3$	YES	NO	✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L	HNO_3	YES	YES		
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — 6 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: 12 :56 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	F(1257)	0.00	6.89	119.2	1409	11.7	16.92	8.51	clear/colorless
1	F(1318)	3.00	5.81	22.3	1207	14.6	25.08	3.23	clear/colorless
2	F(1341)	6.00	5.78	23.8	1213	14.5	26.50	1.68	clear/colorless
3	F(1406)	9.00	5.80	23.5	1216	14.5	27.62	0.98	clear/colorless
4	F(1408)	9.30	5.80	22.5	1217	14.5	27.78	0.87	clear/colorless
5	F(1410)	9.60	5.80	22.1	1219	14.5	27.83	0.85	clear/colorless
6	F(1412)	9.90	5.80	21.9	1220	14.5	27.88	0.81	clear/colorless

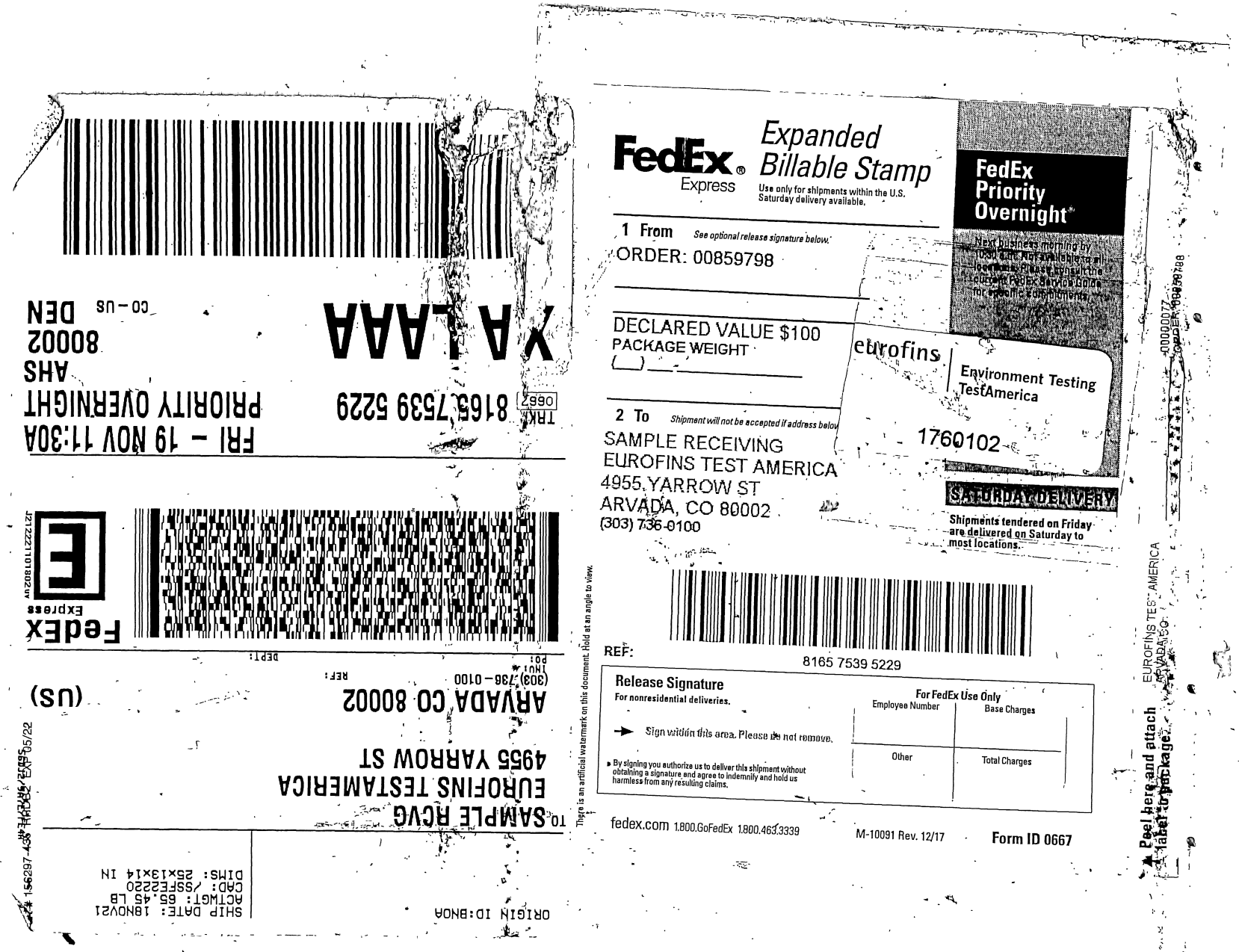
[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Standard purge (11/9/25psi) ~ 600ml/min

SAMPLER: I. Hultquist (PRINTED NAME) (SIGNATURE)



280-155968 Waybill



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ARVADA, CO 80002
(303) 736-0100

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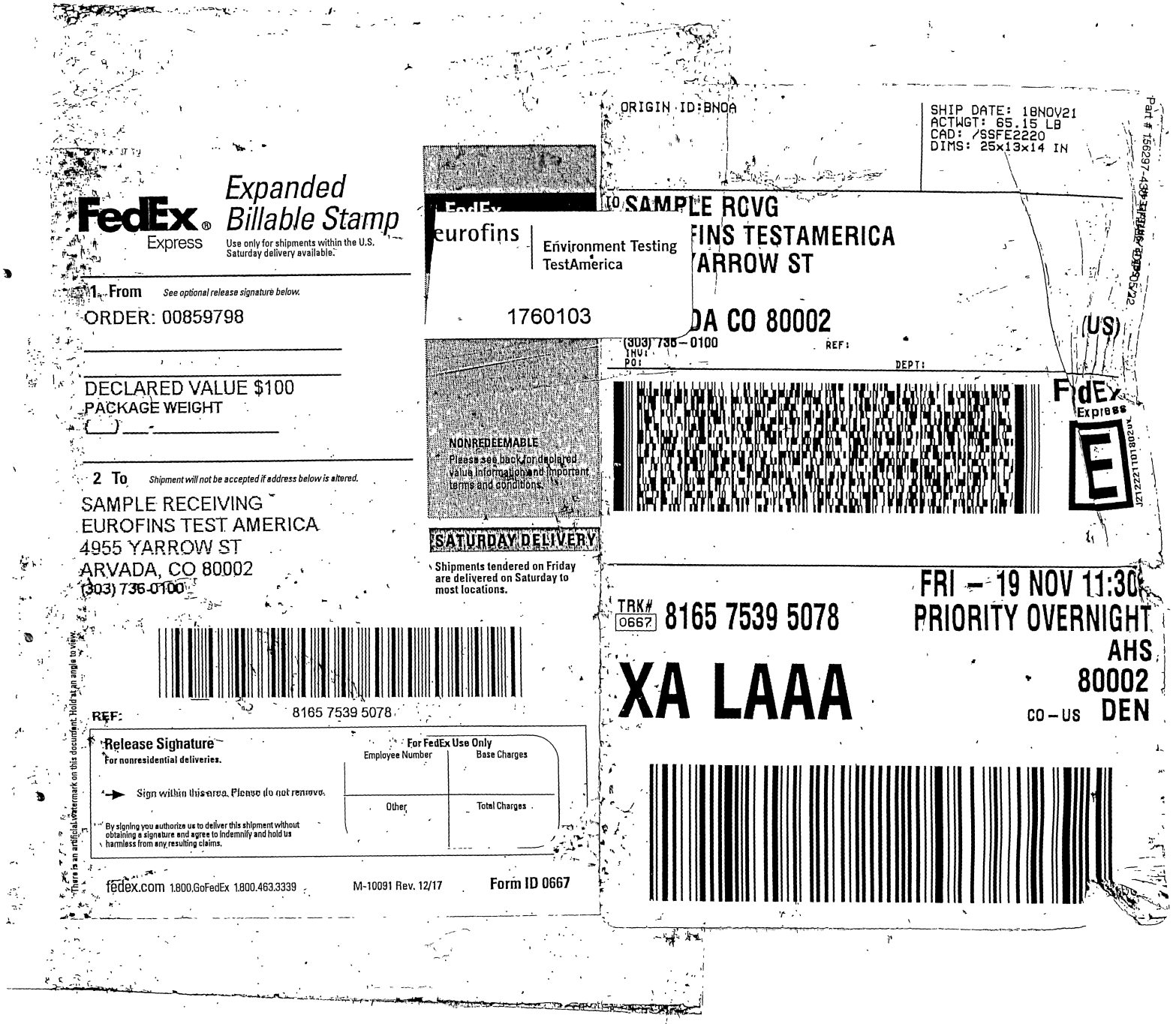
ACTWGT: 65.45 LB
CAD: /SSFE2220
DIMS: 25x13x14 IN

156297-438 FRI-02 EXP 05/22



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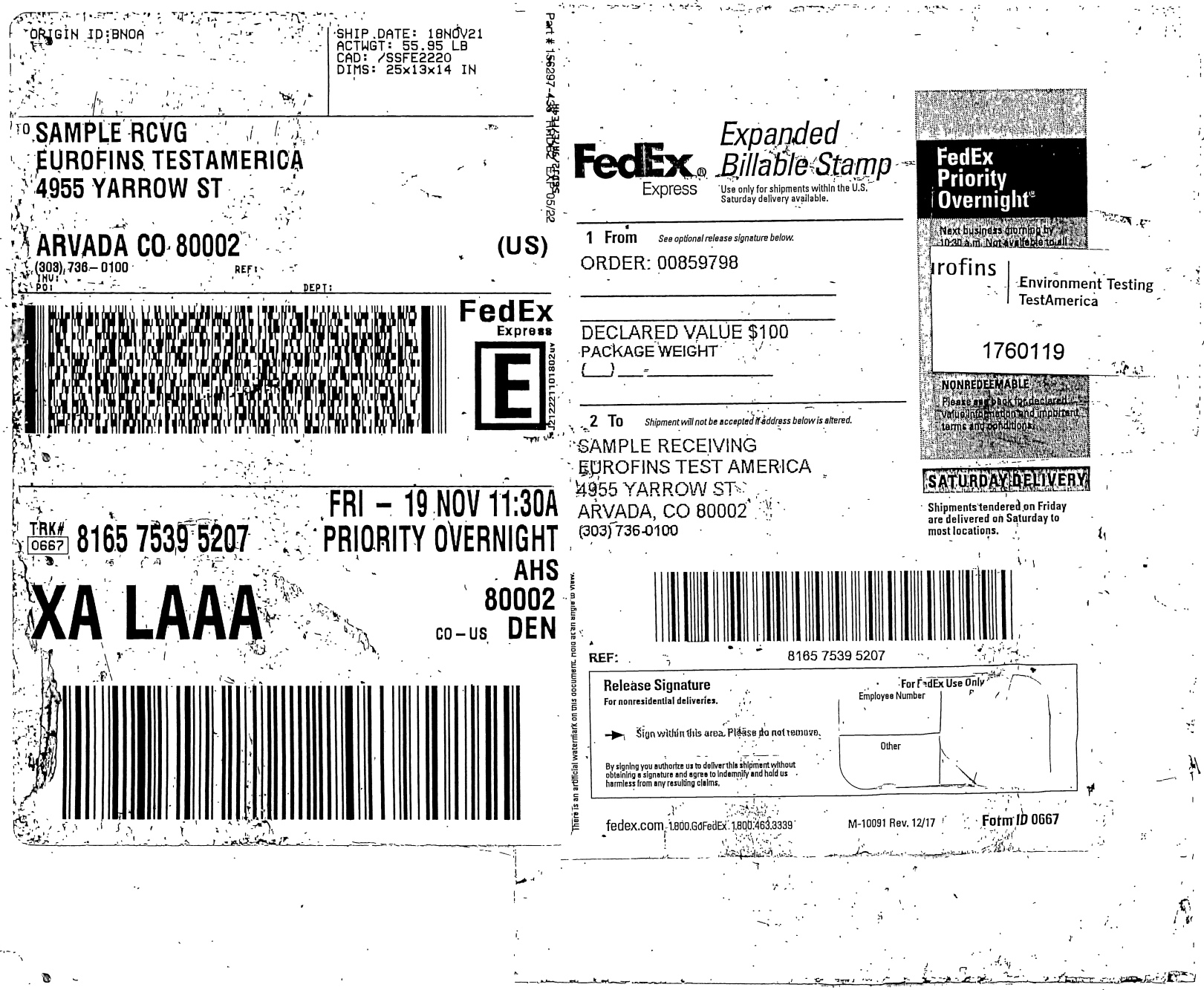

ORIGIN ID:BNOA

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ACTWGT: 55.95 LB
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DIMS: 25x13x14 IN

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TRK# 0667 8165 7539 5207

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80002
CO-US DEN

XA LAAA

Part # 156297-438 HAD EXP 05/22

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SATURDAY DELIVERY

Shipments tendered on Friday are delivered on Saturday to most locations.

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Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-155968-1

Login Number: 155968
List Number: 1
Creator: Roehsner, Karen P

List Source: Eurofins TestAmerica, Denver

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	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	No: No sample date and/or time on COC, logged in per container labels.
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	

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ANALYTICAL REPORT

Eurofins Denver
4955 Yarrow Street
Arvada, CO 80002
Tel: (303)736-0100

Laboratory Job ID: 280-156011-1
Client Project/Site: 1003|Riverbend Landfill - GW
Sampling Event: Semiannual Detection Wells - Apr Oct

For:
Waste Management
7227 NE 55th Avenue
Portland, Oregon 97218

Attn: Mr. William V Hickey, PMP

Janice S. Collins

Authorized for release by:
3/15/2022 3:06:20 PM
Janice Collins, Project Management Assistant I
(303)736-0100
Janice.Collins@Eurofinset.com

Designee for

Betsy Sara, Project Manager II
(303)736-0189
Betsy.Sara@Eurofinset.com

LINKS

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Waste Management
Job ID: 280-156011-1
Project/Site: 1003|Riverbend Landfill - GW

Qualifiers

General Chemistry

Qualifier	Qualifier Description
F3	Duplicate RPD exceeds the control limit

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 280-156011-1

Laboratory: Eurofins Denver

Narrative

CASE NARRATIVE

Client: Waste Management

Project: 1003|Riverbend Landfill SCS Engineers

Report Number: 280-156011-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

This report may include reporting limits (RLs) less than Eurofins TestAmerica's standard reporting limit. The reported sample results and associated reporting limits are being used specifically to meet the needs of this project. Note that data are not normally reported to these levels without qualification because they are inherently less reliable and potentially less defensible than required by the latest industry standards.

Sample Receiving

The samples were received on 11/22/2021; the samples arrived in good condition, properly preserved and on ice. The temperatures of the coolers at receipt were 1.2°C and 2.8°C.

Holding Times

All holding times were met.

Method Blanks

All Method Blanks met method criteria.

Laboratory Control Samples (LCS)

All Laboratory Control Sample recoveries were within control limits.

Matrix Spike (MS) and Matrix Spike Duplicate (MSD)

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) for Method 8260B and Method 8011, however, LCS/LCSD pairs were analyzed to demonstrate method precision and accuracy.

All other MS and MSD results were within established control limits.

Sample Duplicate

The RPD for Total Dissolved Solids (TDS) Method 2540C performed on a sample from another client was outside control limits. Because all other QC and calibration criteria were met no corrective action was needed.

General Comments

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.

Job ID: 280-156011-1 (Continued)

Laboratory: Eurofins Denver (Continued)

The analysis for Chloride and Sulfate Method 300.0 was performed by TestAmerica Buffalo. Their address and phone number are:
TestAmerica Buffalo
10 Hazelwood Drive, Suite 106
Amherst, NY 14228
Phone: 716-691-2600

Detection Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - GW

Job ID: 280-156011-1

Client Sample ID: TB3 — Lab Sample ID: 280-156011-1

No Detections.

Client Sample ID: FB4 — Lab Sample ID: 280-156011-2

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Total Anions	0.00				meq/L	1		SM 1030E	Total/NA
Total Cations	0.00				meq/L	1		SM 1030E	Total/NA
Percent Difference	NC				%	1		SM 1030E	Total/NA
Calcium	0.00				mg/L	1		SM 1030E	Total/NA
Magnesium	0.00				mg/L	1		SM 1030E	Total/NA
Potassium	0.00				mg/L	1		SM 1030E	Total/NA
Sodium	0.00				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.00				mg/L	1		SM 1030E	Total/NA
Chloride	0.00				mg/L	1		SM 1030E	Total/NA
Sulfate	0.00				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	0.00				mg/L	1		SM 1030E	Total/NA
Alkalinity	0.00				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.00				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	NC				%	1		SM 1030E	Total/NA
Calculated TDS	0.00				mg/L	1		SM 1030E	Total/NA
TDS Ratio	NC				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	12				mg/L	1		SM 1030E	Total/NA
Iron	0.00				mg/L	1		SM 1030E	Total/NA
Calcium	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	0.00				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Total Dissolved Solids	12		10		mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-19A — Lab Sample ID: 280-156011-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	31000		500		ug/L	1		6010B	Dissolved
Iron	200		30		ug/L	1		6010B	Dissolved
Magnesium	10000		200		ug/L	1		6010B	Dissolved
Manganese	120		3.0		ug/L	1		6010B	Dissolved
Potassium	970		500		ug/L	1		6010B	Dissolved
Sodium	11000		1000		ug/L	1		6010B	Dissolved
Chloride	18		0.50		mg/L	1		300.0	Total/NA
Sulfate	3.9		1.0		mg/L	1		300.0	Total/NA
Ammonia as N	0.11		0.030		mg/L	1		350.1	Total/NA
Total Anions	3.2				meq/L	1		SM 1030E	Total/NA
Total Cations	2.9				meq/L	1		SM 1030E	Total/NA
Percent Difference	-4.9				%	1		SM 1030E	Total/NA
Calcium	31				mg/L	1		SM 1030E	Total/NA
Magnesium	10				mg/L	1		SM 1030E	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-19A (Continued) — Lab Sample ID: 280-156011-3

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Potassium	0.97				mg/L	1		SM 1030E	Total/NA
Sodium	11				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.11				mg/L	1		SM 1030E	Total/NA
Chloride	18				mg/L	1		SM 1030E	Total/NA
Sulfate	3.9				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	130				mg/L	1		SM 1030E	Total/NA
Alkalinity	130				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.00				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	-4.9				%	1		SM 1030E	Total/NA
Calculated TDS	150				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.2				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	180				mg/L	1		SM 1030E	Total/NA
Iron	0.20				mg/L	1		SM 1030E	Total/NA
Calcium	1.5				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	0.82				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.025				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	0.48				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.0079				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	0.51				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.081				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	130				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	2.6				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.011				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	130		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	180		10		mg/L	1		SM 2540C	Total/NA
Field pH	7.90				SU	1		Field Sampling	Total/NA
Field Conductivity	298				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	12.4				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	0.59				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	-104.3				millivolts	1		Field Sampling	Total/NA

Client Sample ID: DUP4 — Lab Sample ID: 280-156011-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	31000		500		ug/L	1		6010B	Dissolved
Iron	220		30		ug/L	1		6010B	Dissolved
Magnesium	10000		200		ug/L	1		6010B	Dissolved
Manganese	120		3.0		ug/L	1		6010B	Dissolved
Potassium	970		500		ug/L	1		6010B	Dissolved
Sodium	11000		1000		ug/L	1		6010B	Dissolved
Chloride	18		0.50		mg/L	1		300.0	Total/NA
Sulfate	4.0		1.0		mg/L	1		300.0	Total/NA
Ammonia as N	0.077		0.030		mg/L	1		350.1	Total/NA
Total Anions	3.2				meq/L	1		SM 1030E	Total/NA
Total Cations	2.1				meq/L	1		SM 1030E	Total/NA
Percent Difference	-19				%	1		SM 1030E	Total/NA
Calcium	31				mg/L	1		SM 1030E	Total/NA
Magnesium	1.0				mg/L	1		SM 1030E	Total/NA
Potassium	0.97				mg/L	1		SM 1030E	Total/NA
Sodium	11				mg/L	1		SM 1030E	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DUP4 (Continued)

Lab Sample ID: 280-156011-4

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Ammonia as N	0.077				mg/L	1		SM 1030E	Total/NA
Chloride	18				mg/L	1		SM 1030E	Total/NA
Sulfate	4.0				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	130				mg/L	1		SM 1030E	Total/NA
Alkalinity	130				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.00				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	-19				%	1		SM 1030E	Total/NA
Calculated TDS	140				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.4				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	200				mg/L	1		SM 1030E	Total/NA
Iron	0.22				mg/L	1		SM 1030E	Total/NA
Calcium	1.5				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	0.082				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.025				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	0.48				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.0055				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	0.51				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.083				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	130				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	2.6				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.012				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	130		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	200		10		mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - GW

Job ID: 280-156011-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-156011-1	TB3	Water	11/19/21 07:00	11/22/21 09:35
280-156011-2	FB4	Water	11/19/21 12:05	11/22/21 09:35
280-156011-3	MW-19A	Water	11/19/21 12:45	11/22/21 09:35
280-156011-4	DUP4	Water	11/19/21 12:50	11/22/21 09:35

Method Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - GW

Job ID: 280-156011-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL DEN
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	TAL DEN
6010B	Metals (ICP)	SW846	TAL DEN
300.0	Anions, Ion Chromatography	MCAWW	TAL BUF
350.1	Nitrogen, Ammonia	MCAWW	TAL DEN
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	TAL DEN
9060	Organic Carbon, Total (TOC)	SW846	TAL DEN
SM 1030E	Cation Anion Balance	SM	TAL DEN
SM 1030E (meq)	Cation Anion Balance	SM	TAL DEN
SM 2320B	Alkalinity	SM	TAL DEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL DEN
Field Sampling	Field Sampling	EPA	TAL DEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL DEN
5030B	Purge and Trap	SW846	TAL DEN
8011	Microextraction	SW846	TAL DEN

Protocol 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.

Laboratory References:

TAL BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - GW

Job ID: 280-156011-1

Client Sample ID: TB3
Date Collected: 11/19/21 07:00
Date Received: 11/22/21 09:35

Lab Sample ID: 280-156011-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			12/02/21 00:01	1
1,1,1-Trichloroethane	ND		1.0		ug/L			12/02/21 00:01	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			12/02/21 00:01	1
1,1,2-Trichloroethane	ND		1.0		ug/L			12/02/21 00:01	1
1,1-Dichloroethane	ND		1.0		ug/L			12/02/21 00:01	1
1,1-Dichloroethene	ND		1.0		ug/L			12/02/21 00:01	1
1,1-Dichloropropene	ND		1.0		ug/L			12/02/21 00:01	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			12/02/21 00:01	1
1,2,3-Trichloropropane	ND		1.0		ug/L			12/02/21 00:01	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			12/02/21 00:01	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			12/02/21 00:01	1
1,2-Dichlorobenzene	ND		1.0		ug/L			12/02/21 00:01	1
1,2-Dichloroethane	ND		1.0		ug/L			12/02/21 00:01	1
1,2-Dichloropropane	ND		1.0		ug/L			12/02/21 00:01	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			12/02/21 00:01	1
1,3-Dichlorobenzene	ND		1.0		ug/L			12/02/21 00:01	1
1,3-Dichloropropane	ND		1.0		ug/L			12/02/21 00:01	1
1,4-Dichlorobenzene	ND		1.0		ug/L			12/02/21 00:01	1
2,2-Dichloropropane	ND		5.0		ug/L			12/02/21 00:01	1
2-Butanone (MEK)	ND		6.0		ug/L			12/02/21 00:01	1
2-Chlorotoluene	ND		1.0		ug/L			12/02/21 00:01	1
2-Hexanone	ND		5.0		ug/L			12/02/21 00:01	1
4-Chlorotoluene	ND		1.0		ug/L			12/02/21 00:01	1
4-Isopropyltoluene	ND		1.0		ug/L			12/02/21 00:01	1
4-Methyl-2-pentanone	ND		5.0		ug/L			12/02/21 00:01	1
Acetone	ND		10		ug/L			12/02/21 00:01	1
Benzene	ND		1.0		ug/L			12/02/21 00:01	1
Bromobenzene	ND		1.0		ug/L			12/02/21 00:01	1
Bromochloromethane	ND		1.0		ug/L			12/02/21 00:01	1
Bromodichloromethane	ND		1.0		ug/L			12/02/21 00:01	1
Bromoform	ND		1.0		ug/L			12/02/21 00:01	1
Bromomethane	ND		2.0		ug/L			12/02/21 00:01	1
Carbon disulfide	ND		2.0		ug/L			12/02/21 00:01	1
Carbon tetrachloride	ND		1.0		ug/L			12/02/21 00:01	1
Chlorobenzene	ND		1.0		ug/L			12/02/21 00:01	1
Chloroethane	ND		2.0		ug/L			12/02/21 00:01	1
Chloroform	ND		1.0		ug/L			12/02/21 00:01	1
Chloromethane	ND		2.0		ug/L			12/02/21 00:01	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			12/02/21 00:01	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			12/02/21 00:01	1
Dibromochloromethane	ND		1.0		ug/L			12/02/21 00:01	1
Dibromomethane	ND		1.0		ug/L			12/02/21 00:01	1
Dichlorodifluoromethane	ND		2.0		ug/L			12/02/21 00:01	1
Ethylbenzene	ND		1.0		ug/L			12/02/21 00:01	1
Hexachlorobutadiene	ND		1.0		ug/L			12/02/21 00:01	1
Isopropylbenzene	ND		1.0		ug/L			12/02/21 00:01	1
Methylene Chloride	ND		5.0		ug/L			12/02/21 00:01	1
Naphthalene	ND		1.0		ug/L			12/02/21 00:01	1
n-Butylbenzene	ND		1.0		ug/L			12/02/21 00:01	1

Client Sample ID: TB3

Lab Sample ID: 280-156011-1

Date Collected: 11/19/21 07:00

Matrix: Water

Date Received: 11/22/21 09:35

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		1.0		ug/L			12/02/21 00:01	1
sec-Butylbenzene	ND		1.0		ug/L			12/02/21 00:01	1
Styrene	ND		1.0		ug/L			12/02/21 00:01	1
tert-Butylbenzene	ND		1.0		ug/L			12/02/21 00:01	1
Tetrachloroethene	ND		1.0		ug/L			12/02/21 00:01	1
Toluene	ND		1.0		ug/L			12/02/21 00:01	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			12/02/21 00:01	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			12/02/21 00:01	1
Trichloroethene	ND		1.0		ug/L			12/02/21 00:01	1
Trichlorofluoromethane	ND		2.0		ug/L			12/02/21 00:01	1
Vinyl chloride	ND		1.0		ug/L			12/02/21 00:01	1
Xylenes (total)	ND		2.0		ug/L			12/02/21 00:01	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*12/02/21 00:01*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 127*		*12/02/21 00:01*	*1*
4-Bromofluorobenzene (Surr)	*107*		*78 - 120*		*12/02/21 00:01*	*1*
Dibromofluoromethane (Surr)	*99*		*77 - 120*		*12/02/21 00:01*	*1*
Toluene-d8 (Surr)	*98*		*80 - 125*		*12/02/21 00:01*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		11/30/21 14:02	12/02/21 01:48	1
1,2-Dibromoethane	ND		0.050		ug/L		11/30/21 14:02	12/02/21 01:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*112*		*70 - 130*	*11/30/21 14:02*	*12/02/21 01:48*	*1*

Client Sample ID: FB4

Lab Sample ID: 280-156011-2

Date Collected: 11/19/21 12:05

Matrix: Water

Date Received: 11/22/21 09:35

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			12/02/21 00:46	1
1,1,1-Trichloroethane	ND		1.0		ug/L			12/02/21 00:46	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			12/02/21 00:46	1
1,1,2-Trichloroethane	ND		1.0		ug/L			12/02/21 00:46	1
1,1-Dichloroethane	ND		1.0		ug/L			12/02/21 00:46	1
1,1-Dichloroethene	ND		1.0		ug/L			12/02/21 00:46	1
1,1-Dichloropropene	ND		1.0		ug/L			12/02/21 00:46	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			12/02/21 00:46	1
1,2,3-Trichloropropane	ND		1.0		ug/L			12/02/21 00:46	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			12/02/21 00:46	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			12/02/21 00:46	1
1,2-Dichlorobenzene	ND		1.0		ug/L			12/02/21 00:46	1
1,2-Dichloroethane	ND		1.0		ug/L			12/02/21 00:46	1
1,2-Dichloropropane	ND		1.0		ug/L			12/02/21 00:46	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			12/02/21 00:46	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - GW

Job ID: 280-156011-1

Client Sample ID: FB4
Date Collected: 11/19/21 12:05
Date Received: 11/22/21 09:35

Lab Sample ID: 280-156011-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0		ug/L			12/02/21 00:46	1
1,3-Dichloropropane	ND		1.0		ug/L			12/02/21 00:46	1
1,4-Dichlorobenzene	ND		1.0		ug/L			12/02/21 00:46	1
2,2-Dichloropropane	ND		5.0		ug/L			12/02/21 00:46	1
2-Butanone (MEK)	ND		6.0		ug/L			12/02/21 00:46	1
2-Chlorotoluene	ND		1.0		ug/L			12/02/21 00:46	1
2-Hexanone	ND		5.0		ug/L			12/02/21 00:46	1
4-Chlorotoluene	ND		1.0		ug/L			12/02/21 00:46	1
4-Isopropyltoluene	ND		1.0		ug/L			12/02/21 00:46	1
4-Methyl-2-pentanone	ND		5.0		ug/L			12/02/21 00:46	1
Acetone	ND		10		ug/L			12/02/21 00:46	1
Benzene	ND		1.0		ug/L			12/02/21 00:46	1
Bromobenzene	ND		1.0		ug/L			12/02/21 00:46	1
Bromochloromethane	ND		1.0		ug/L			12/02/21 00:46	1
Bromodichloromethane	ND		1.0		ug/L			12/02/21 00:46	1
Bromoform	ND		1.0		ug/L			12/02/21 00:46	1
Bromomethane	ND		2.0		ug/L			12/02/21 00:46	1
Carbon disulfide	ND		2.0		ug/L			12/02/21 00:46	1
Carbon tetrachloride	ND		1.0		ug/L			12/02/21 00:46	1
Chlorobenzene	ND		1.0		ug/L			12/02/21 00:46	1
Chloroethane	ND		2.0		ug/L			12/02/21 00:46	1
Chloroform	ND		1.0		ug/L			12/02/21 00:46	1
Chloromethane	ND		2.0		ug/L			12/02/21 00:46	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			12/02/21 00:46	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			12/02/21 00:46	1
Dibromochloromethane	ND		1.0		ug/L			12/02/21 00:46	1
Dibromomethane	ND		1.0		ug/L			12/02/21 00:46	1
Dichlorodifluoromethane	ND		2.0		ug/L			12/02/21 00:46	1
Ethylbenzene	ND		1.0		ug/L			12/02/21 00:46	1
Hexachlorobutadiene	ND		1.0		ug/L			12/02/21 00:46	1
Isopropylbenzene	ND		1.0		ug/L			12/02/21 00:46	1
Methylene Chloride	ND		5.0		ug/L			12/02/21 00:46	1
Naphthalene	ND		1.0		ug/L			12/02/21 00:46	1
n-Butylbenzene	ND		1.0		ug/L			12/02/21 00:46	1
N-Propylbenzene	ND		1.0		ug/L			12/02/21 00:46	1
sec-Butylbenzene	ND		1.0		ug/L			12/02/21 00:46	1
Styrene	ND		1.0		ug/L			12/02/21 00:46	1
tert-Butylbenzene	ND		1.0		ug/L			12/02/21 00:46	1
Tetrachloroethene	ND		1.0		ug/L			12/02/21 00:46	1
Toluene	ND		1.0		ug/L			12/02/21 00:46	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			12/02/21 00:46	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			12/02/21 00:46	1
Trichloroethene	ND		1.0		ug/L			12/02/21 00:46	1
Trichlorofluoromethane	ND		2.0		ug/L			12/02/21 00:46	1
Vinyl chloride	ND		1.0		ug/L			12/02/21 00:46	1
Xylenes (total)	ND		2.0		ug/L			12/02/21 00:46	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*12/02/21 00:46*	*1*

Client Sample ID: FB4
Date Collected: 11/19/21 12:05
Date Received: 11/22/21 09:35

Lab Sample ID: 280-156011-2
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 127*		*12/02/21 00:46*	*1*
4-Bromofluorobenzene (Surr)	*105*		*78 - 120*		*12/02/21 00:46*	*1*
Dibromofluoromethane (Surr)	*96*		*77 - 120*		*12/02/21 00:46*	*1*
Toluene-d8 (Surr)	*98*		*80 - 125*		*12/02/21 00:46*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		11/30/21 14:02	12/02/21 02:12	1
1,2-Dibromoethane	ND		0.050		ug/L		11/30/21 14:02	12/02/21 02:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*109*		*70 - 130*	*11/30/21 14:02*	*12/02/21 02:12*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		500		ug/L		11/29/21 08:00	11/30/21 04:06	1
Iron	ND		30		ug/L		11/29/21 08:00	11/30/21 04:06	1
Magnesium	ND		200		ug/L		11/29/21 08:00	11/30/21 04:06	1
Manganese	ND		3.0		ug/L		11/29/21 08:00	11/30/21 04:06	1
Potassium	ND		500		ug/L		11/29/21 08:00	11/30/21 04:06	1
Sodium	ND		1000		ug/L		11/29/21 08:00	11/30/21 04:06	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	**0.00**				meq/L			12/15/21 11:18	1
Total Cations	**0.00**				meq/L			12/15/21 11:18	1
Percent Difference	**NC**				%			12/15/21 11:18	1
Calcium	**0.00**				mg/L			12/15/21 11:18	1
Magnesium	**0.00**				mg/L			12/15/21 11:18	1
Potassium	**0.00**				mg/L			12/15/21 11:18	1
Sodium	**0.00**				mg/L			12/15/21 11:18	1
Ammonia as N	**0.00**				mg/L			12/15/21 11:18	1
Chloride	**0.00**				mg/L			12/15/21 11:18	1
Sulfate	**0.00**				mg/L			12/15/21 11:18	1
Bicarbonate Alkalinity	**0.00**				mg/L			12/15/21 11:18	1
Alkalinity	**0.00**				mg/L			12/15/21 11:18	1
Nitrate/Nitrite	**0.00**				mg/L			12/15/21 11:18	1
Anion/Cation Balance	**NC**				%			12/15/21 11:18	1
Calculated TDS	**0.00**				mg/L			12/15/21 11:18	1
TDS Ratio	**NC**				NONE			12/15/21 11:18	1
Total Dissolved Solids	**12**				mg/L			12/15/21 11:18	1
Iron	**0.00**				mg/L			12/15/21 11:18	1
Calcium	**0.00**				meq/L			12/15/21 11:18	1
Magnesium	**0.00**				meq/L			12/15/21 11:18	1
Potassium	**0.00**				meq/L			12/15/21 11:18	1
Sodium	**0.00**				meq/L			12/15/21 11:18	1
Ammonia as N	**0.00**				meq/L			12/15/21 11:18	1
Chloride	**0.00**				meq/L			12/15/21 11:18	1
Sulfate	**0.00**				meq/L			12/15/21 11:18	1
Alkalinity	**0.00**				mg/L			12/15/21 11:18	1
Bicarbonate Alkalinity	**0.00**				meq/L			12/15/21 11:18	1

Client Sample ID: FB4

Lab Sample ID: 280-156011-2

Date Collected: 11/19/21 12:05

Matrix: Water

Date Received: 11/22/21 09:35

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate/Nitrite	**0.00**				meq/L			12/15/21 11:18	1
Iron	**0.00**				meq/L			12/15/21 11:18	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			11/30/21 12:08	1
Sulfate	ND		1.0		mg/L			11/30/21 12:08	1
Ammonia as N	ND		0.030		mg/L			12/09/21 10:41	1
Nitrate/Nitrite	ND		0.050		mg/L			12/02/21 18:46	1
Total Organic Carbon - Average	ND		1.0		mg/L			12/09/21 04:34	1
Bicarbonate Alkalinity	ND		10		mg/L			12/02/21 14:50	1
Total Dissolved Solids	**12**		10		mg/L			11/24/21 09:13	1

Client Sample ID: MW-19A

Lab Sample ID: 280-156011-3

Date Collected: 11/19/21 12:45

Matrix: Water

Date Received: 11/22/21 09:35

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			12/02/21 04:04	1
1,1,1-Trichloroethane	ND		1.0		ug/L			12/02/21 04:04	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			12/02/21 04:04	1
1,1,2-Trichloroethane	ND		1.0		ug/L			12/02/21 04:04	1
1,1-Dichloroethane	ND		1.0		ug/L			12/02/21 04:04	1
1,1-Dichloroethene	ND		1.0		ug/L			12/02/21 04:04	1
1,1-Dichloropropene	ND		1.0		ug/L			12/02/21 04:04	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			12/02/21 04:04	1
1,2,3-Trichloropropane	ND		1.0		ug/L			12/02/21 04:04	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			12/02/21 04:04	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			12/02/21 04:04	1
1,2-Dichlorobenzene	ND		1.0		ug/L			12/02/21 04:04	1
1,2-Dichloroethane	ND		1.0		ug/L			12/02/21 04:04	1
1,2-Dichloropropane	ND		1.0		ug/L			12/02/21 04:04	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			12/02/21 04:04	1
1,3-Dichlorobenzene	ND		1.0		ug/L			12/02/21 04:04	1
1,3-Dichloropropane	ND		1.0		ug/L			12/02/21 04:04	1
1,4-Dichlorobenzene	ND		1.0		ug/L			12/02/21 04:04	1
2,2-Dichloropropane	ND		5.0		ug/L			12/02/21 04:04	1
2-Butanone (MEK)	ND		6.0		ug/L			12/02/21 04:04	1
2-Chlorotoluene	ND		1.0		ug/L			12/02/21 04:04	1
2-Hexanone	ND		5.0		ug/L			12/02/21 04:04	1
4-Chlorotoluene	ND		1.0		ug/L			12/02/21 04:04	1
4-Isopropyltoluene	ND		1.0		ug/L			12/02/21 04:04	1
4-Methyl-2-pentanone	ND		5.0		ug/L			12/02/21 04:04	1
Acetone	ND		10		ug/L			12/02/21 04:04	1
Benzene	ND		1.0		ug/L			12/02/21 04:04	1
Bromobenzene	ND		1.0		ug/L			12/02/21 04:04	1
Bromochloromethane	ND		1.0		ug/L			12/02/21 04:04	1
Bromodichloromethane	ND		1.0		ug/L			12/02/21 04:04	1
Bromoform	ND		1.0		ug/L			12/02/21 04:04	1
Bromomethane	ND		2.0		ug/L			12/02/21 04:04	1
Carbon disulfide	ND		2.0		ug/L			12/02/21 04:04	1

Client Sample ID: MW-19A

Date Collected: 11/19/21 12:45
Date Received: 11/22/21 09:35

Lab Sample ID: 280-156011-3

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	ND		1.0		ug/L			12/02/21 04:04	1
Chlorobenzene	ND		1.0		ug/L			12/02/21 04:04	1
Chloroethane	ND		2.0		ug/L			12/02/21 04:04	1
Chloroform	ND		1.0		ug/L			12/02/21 04:04	1
Chloromethane	ND		2.0		ug/L			12/02/21 04:04	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			12/02/21 04:04	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			12/02/21 04:04	1
Dibromochloromethane	ND		1.0		ug/L			12/02/21 04:04	1
Dibromomethane	ND		1.0		ug/L			12/02/21 04:04	1
Dichlorodifluoromethane	ND		2.0		ug/L			12/02/21 04:04	1
Ethylbenzene	ND		1.0		ug/L			12/02/21 04:04	1
Hexachlorobutadiene	ND		1.0		ug/L			12/02/21 04:04	1
Isopropylbenzene	ND		1.0		ug/L			12/02/21 04:04	1
Methylene Chloride	ND		5.0		ug/L			12/02/21 04:04	1
Naphthalene	ND		1.0		ug/L			12/02/21 04:04	1
n-Butylbenzene	ND		1.0		ug/L			12/02/21 04:04	1
N-Propylbenzene	ND		1.0		ug/L			12/02/21 04:04	1
sec-Butylbenzene	ND		1.0		ug/L			12/02/21 04:04	1
Styrene	ND		1.0		ug/L			12/02/21 04:04	1
tert-Butylbenzene	ND		1.0		ug/L			12/02/21 04:04	1
Tetrachloroethene	ND		1.0		ug/L			12/02/21 04:04	1
Toluene	ND		1.0		ug/L			12/02/21 04:04	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			12/02/21 04:04	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			12/02/21 04:04	1
Trichloroethene	ND		1.0		ug/L			12/02/21 04:04	1
Trichlorofluoromethane	ND		2.0		ug/L			12/02/21 04:04	1
Vinyl chloride	ND		1.0		ug/L			12/02/21 04:04	1
Xylenes (total)	ND		2.0		ug/L			12/02/21 04:04	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*12/02/21 04:04*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 127*		*12/02/21 04:04*	*1*
4-Bromofluorobenzene (Surr)	*108*		*78 - 120*		*12/02/21 04:04*	*1*
Dibromofluoromethane (Surr)	*97*		*77 - 120*		*12/02/21 04:04*	*1*
Toluene-d8 (Surr)	*99*		*80 - 125*		*12/02/21 04:04*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		11/30/21 14:02	12/02/21 02:36	1
1,2-Dibromoethane	ND		0.050		ug/L		11/30/21 14:02	12/02/21 02:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*113*		*70 - 130*	*11/30/21 14:02*	*12/02/21 02:36*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**31000**		500		ug/L		11/29/21 08:00	11/30/21 04:10	1
Iron	**200**		30		ug/L		11/29/21 08:00	11/30/21 04:10	1
Magnesium	**10000**		200		ug/L		11/29/21 08:00	11/30/21 04:10	1

Client Sample ID: MW-19A

Date Collected: 11/19/21 12:45
Date Received: 11/22/21 09:35

Lab Sample ID: 280-156011-3

Matrix: Water

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	120		3.0		ug/L		11/29/21 08:00	11/30/21 04:10	1
Potassium	970		500		ug/L		11/29/21 08:00	11/30/21 04:10	1
Sodium	11000		1000		ug/L		11/29/21 08:00	11/30/21 04:10	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	3.2				meq/L			12/15/21 11:18	1
Total Cations	2.9				meq/L			12/15/21 11:18	1
Percent Difference	-4.9				%			12/15/21 11:18	1
Calcium	31				mg/L			12/15/21 11:18	1
Magnesium	10				mg/L			12/15/21 11:18	1
Potassium	0.97				mg/L			12/15/21 11:18	1
Sodium	11				mg/L			12/15/21 11:18	1
Ammonia as N	0.11				mg/L			12/15/21 11:18	1
Chloride	18				mg/L			12/15/21 11:18	1
Sulfate	3.9				mg/L			12/15/21 11:18	1
Bicarbonate Alkalinity	130				mg/L			12/15/21 11:18	1
Alkalinity	130				mg/L			12/15/21 11:18	1
Nitrate/Nitrite	0.00				mg/L			12/15/21 11:18	1
Anion/Cation Balance	-4.9				%			12/15/21 11:18	1
Calculated TDS	150				mg/L			12/15/21 11:18	1
TDS Ratio	1.2				NONE			12/15/21 11:18	1
Total Dissolved Solids	180				mg/L			12/15/21 11:18	1
Iron	0.20				mg/L			12/15/21 11:18	1
Calcium	1.5				meq/L			12/15/21 11:18	1
Magnesium	0.82				meq/L			12/15/21 11:18	1
Potassium	0.025				meq/L			12/15/21 11:18	1
Sodium	0.48				meq/L			12/15/21 11:18	1
Ammonia as N	0.0079				meq/L			12/15/21 11:18	1
Chloride	0.51				meq/L			12/15/21 11:18	1
Sulfate	0.081				meq/L			12/15/21 11:18	1
Alkalinity	130				mg/L			12/15/21 11:18	1
Bicarbonate Alkalinity	2.6				meq/L			12/15/21 11:18	1
Nitrate/Nitrite	0.00				meq/L			12/15/21 11:18	1
Iron	0.011				meq/L			12/15/21 11:18	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18		0.50		mg/L			11/30/21 12:26	1
Sulfate	3.9		1.0		mg/L			11/30/21 12:26	1
Ammonia as N	0.11		0.030		mg/L			12/10/21 10:52	1
Nitrate/Nitrite	ND		0.050		mg/L			12/02/21 19:00	1
Total Organic Carbon - Average	ND		1.0		mg/L			12/09/21 05:19	1
Bicarbonate Alkalinity	130		10		mg/L			12/02/21 14:56	1
Total Dissolved Solids	180		10		mg/L			11/24/21 09:13	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.90				SU			11/19/21 13:45	1
Field Conductivity	298				umhos/cm			11/19/21 13:45	1
Field Temperature	12.4				Degrees C			11/19/21 13:45	1
Field Dissolved Oxygen	0.59				mg/L			11/19/21 13:45	1

Client Sample ID: MW-19A

Lab Sample ID: 280-156011-3

Date Collected: 11/19/21 12:45

Matrix: Water

Date Received: 11/22/21 09:35

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field EH/ORP	-104.3				millivolts			11/19/21 13:45	1

Client Sample ID: DUP4

Lab Sample ID: 280-156011-4

Date Collected: 11/19/21 12:50

Matrix: Water

Date Received: 11/22/21 09:35

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			12/02/21 04:27	1
1,1,1-Trichloroethane	ND		1.0		ug/L			12/02/21 04:27	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			12/02/21 04:27	1
1,1,2-Trichloroethane	ND		1.0		ug/L			12/02/21 04:27	1
1,1-Dichloroethane	ND		1.0		ug/L			12/02/21 04:27	1
1,1-Dichloroethene	ND		1.0		ug/L			12/02/21 04:27	1
1,1-Dichloropropene	ND		1.0		ug/L			12/02/21 04:27	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			12/02/21 04:27	1
1,2,3-Trichloropropane	ND		1.0		ug/L			12/02/21 04:27	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			12/02/21 04:27	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			12/02/21 04:27	1
1,2-Dichlorobenzene	ND		1.0		ug/L			12/02/21 04:27	1
1,2-Dichloroethane	ND		1.0		ug/L			12/02/21 04:27	1
1,2-Dichloropropane	ND		1.0		ug/L			12/02/21 04:27	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			12/02/21 04:27	1
1,3-Dichlorobenzene	ND		1.0		ug/L			12/02/21 04:27	1
1,3-Dichloropropane	ND		1.0		ug/L			12/02/21 04:27	1
1,4-Dichlorobenzene	ND		1.0		ug/L			12/02/21 04:27	1
2,2-Dichloropropane	ND		5.0		ug/L			12/02/21 04:27	1
2-Butanone (MEK)	ND		6.0		ug/L			12/02/21 04:27	1
2-Chlorotoluene	ND		1.0		ug/L			12/02/21 04:27	1
2-Hexanone	ND		5.0		ug/L			12/02/21 04:27	1
4-Chlorotoluene	ND		1.0		ug/L			12/02/21 04:27	1
4-Isopropyltoluene	ND		1.0		ug/L			12/02/21 04:27	1
4-Methyl-2-pentanone	ND		5.0		ug/L			12/02/21 04:27	1
Acetone	ND		10		ug/L			12/02/21 04:27	1
Benzene	ND		1.0		ug/L			12/02/21 04:27	1
Bromobenzene	ND		1.0		ug/L			12/02/21 04:27	1
Bromochloromethane	ND		1.0		ug/L			12/02/21 04:27	1
Bromodichloromethane	ND		1.0		ug/L			12/02/21 04:27	1
Bromoform	ND		1.0		ug/L			12/02/21 04:27	1
Bromomethane	ND		2.0		ug/L			12/02/21 04:27	1
Carbon disulfide	ND		2.0		ug/L			12/02/21 04:27	1
Carbon tetrachloride	ND		1.0		ug/L			12/02/21 04:27	1
Chlorobenzene	ND		1.0		ug/L			12/02/21 04:27	1
Chloroethane	ND		2.0		ug/L			12/02/21 04:27	1
Chloroform	ND		1.0		ug/L			12/02/21 04:27	1
Chloromethane	ND		2.0		ug/L			12/02/21 04:27	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			12/02/21 04:27	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			12/02/21 04:27	1
Dibromochloromethane	ND		1.0		ug/L			12/02/21 04:27	1
Dibromomethane	ND		1.0		ug/L			12/02/21 04:27	1

Client Sample ID: DUP4
Date Collected: 11/19/21 12:50
Date Received: 11/22/21 09:35

Lab Sample ID: 280-156011-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		2.0		ug/L			12/02/21 04:27	1
Ethylbenzene	ND		1.0		ug/L			12/02/21 04:27	1
Hexachlorobutadiene	ND		1.0		ug/L			12/02/21 04:27	1
Isopropylbenzene	ND		1.0		ug/L			12/02/21 04:27	1
Methylene Chloride	ND		5.0		ug/L			12/02/21 04:27	1
Naphthalene	ND		1.0		ug/L			12/02/21 04:27	1
n-Butylbenzene	ND		1.0		ug/L			12/02/21 04:27	1
N-Propylbenzene	ND		1.0		ug/L			12/02/21 04:27	1
sec-Butylbenzene	ND		1.0		ug/L			12/02/21 04:27	1
Styrene	ND		1.0		ug/L			12/02/21 04:27	1
tert-Butylbenzene	ND		1.0		ug/L			12/02/21 04:27	1
Tetrachloroethene	ND		1.0		ug/L			12/02/21 04:27	1
Toluene	ND		1.0		ug/L			12/02/21 04:27	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			12/02/21 04:27	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			12/02/21 04:27	1
Trichloroethene	ND		1.0		ug/L			12/02/21 04:27	1
Trichlorofluoromethane	ND		2.0		ug/L			12/02/21 04:27	1
Vinyl chloride	ND		1.0		ug/L			12/02/21 04:27	1
Xylenes (total)	ND		2.0		ug/L			12/02/21 04:27	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*12/02/21 04:27*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 127*		*12/02/21 04:27*	*1*
4-Bromofluorobenzene (Surr)	*105*		*78 - 120*		*12/02/21 04:27*	*1*
Dibromofluoromethane (Surr)	*99*		*77 - 120*		*12/02/21 04:27*	*1*
Toluene-d8 (Surr)	*100*		*80 - 125*		*12/02/21 04:27*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		11/30/21 14:02	12/02/21 03:00	1
1,2-Dibromoethane	ND		0.050		ug/L		11/30/21 14:02	12/02/21 03:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*110*		*70 - 130*	*11/30/21 14:02*	*12/02/21 03:00*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**31000**		500		ug/L		11/29/21 08:00	11/30/21 04:14	1
Iron	**220**		30		ug/L		11/29/21 08:00	11/30/21 04:14	1
Magnesium	**10000**		200		ug/L		11/29/21 08:00	11/30/21 04:14	1
Manganese	**120**		3.0		ug/L		11/29/21 08:00	11/30/21 04:14	1
Potassium	**970**		500		ug/L		11/29/21 08:00	11/30/21 04:14	1
Sodium	**11000**		1000		ug/L		11/29/21 08:00	11/30/21 04:14	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	**3.2**				meq/L			12/15/21 11:18	1
Total Cations	**2.1**				meq/L			12/15/21 11:18	1
Percent Difference	**-19**				%			12/15/21 11:18	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - GW

Job ID: 280-156011-1

Client Sample ID: DUP4

Date Collected: 11/19/21 12:50
Date Received: 11/22/21 09:35

Lab Sample ID: 280-156011-4

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	31				mg/L			12/15/21 11:18	1
Magnesium	1.0				mg/L			12/15/21 11:18	1
Potassium	0.97				mg/L			12/15/21 11:18	1
Sodium	11				mg/L			12/15/21 11:18	1
Ammonia as N	0.077				mg/L			12/15/21 11:18	1
Chloride	18				mg/L			12/15/21 11:18	1
Sulfate	4.0				mg/L			12/15/21 11:18	1
Bicarbonate Alkalinity	130				mg/L			12/15/21 11:18	1
Alkalinity	130				mg/L			12/15/21 11:18	1
Nitrate/Nitrite	0.00				mg/L			12/15/21 11:18	1
Anion/Cation Balance	-19				%			12/15/21 11:18	1
Calculated TDS	140				mg/L			12/15/21 11:18	1
TDS Ratio	1.4				NONE			12/15/21 11:18	1
Total Dissolved Solids	200				mg/L			12/15/21 11:18	1
Iron	0.22				mg/L			12/15/21 11:18	1
Calcium	1.5				meq/L			12/15/21 11:18	1
Magnesium	0.082				meq/L			12/15/21 11:18	1
Potassium	0.025				meq/L			12/15/21 11:18	1
Sodium	0.48				meq/L			12/15/21 11:18	1
Ammonia as N	0.0055				meq/L			12/15/21 11:18	1
Chloride	0.51				meq/L			12/15/21 11:18	1
Sulfate	0.083				meq/L			12/15/21 11:18	1
Alkalinity	130				mg/L			12/15/21 11:18	1
Bicarbonate Alkalinity	2.6				meq/L			12/15/21 11:18	1
Nitrate/Nitrite	0.00				meq/L			12/15/21 11:18	1
Iron	0.012				meq/L			12/15/21 11:18	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18		0.50		mg/L			11/30/21 12:45	1
Sulfate	4.0		1.0		mg/L			11/30/21 12:45	1
Ammonia as N	0.077		0.030		mg/L			12/09/21 10:45	1
Nitrate/Nitrite	ND		0.050		mg/L			12/02/21 19:02	1
Total Organic Carbon - Average	ND		1.0		mg/L			12/09/21 05:34	1
Bicarbonate Alkalinity	130		10		mg/L			12/02/21 14:38	1
Total Dissolved Solids	200		10		mg/L			11/24/21 09:13	1

Surrogate Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - GW

Job ID: 280-156011-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-127)	(78-120)	(77-120)	(80-125)
280-156011-1	TB3	101	107	99	98
280-156011-2	FB4	99	105	96	98
280-156011-3	MW-19A	100	108	97	99
280-156011-4	DUP4	103	105	99	100
LCS 280-559317/4	Lab Control Sample	97	106	100	102
LCSD 280-559317/5	Lab Control Sample Dup	95	105	99	100
MB 280-559317/9	Method Blank	99	105	99	100

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		12DBP1
Lab Sample ID	Client Sample ID	(70-130)
280-156011-1	TB3	112
280-156011-2	FB4	109
280-156011-3	MW-19A	113
280-156011-4	DUP4	110
LCS 280-559134/2-A	Lab Control Sample	113
LCSD 280-559134/3-A	Lab Control Sample Dup	113
MB 280-559134/1-A	Method Blank	109

Surrogate Legend

12DBP = 1,2-Dibromopropane

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 280-559317/9
Matrix: Water
Analysis Batch: 559317

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			12/01/21 22:55	1
1,1,1-Trichloroethane	ND		1.0		ug/L			12/01/21 22:55	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			12/01/21 22:55	1
1,1,2-Trichloroethane	ND		1.0		ug/L			12/01/21 22:55	1
1,1-Dichloroethane	ND		1.0		ug/L			12/01/21 22:55	1
1,1-Dichloroethene	ND		1.0		ug/L			12/01/21 22:55	1
1,1-Dichloropropene	ND		1.0		ug/L			12/01/21 22:55	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			12/01/21 22:55	1
1,2,3-Trichloropropane	ND		1.0		ug/L			12/01/21 22:55	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			12/01/21 22:55	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			12/01/21 22:55	1
1,2-Dichlorobenzene	ND		1.0		ug/L			12/01/21 22:55	1
1,2-Dichloroethane	ND		1.0		ug/L			12/01/21 22:55	1
1,2-Dichloropropane	ND		1.0		ug/L			12/01/21 22:55	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			12/01/21 22:55	1
1,3-Dichlorobenzene	ND		1.0		ug/L			12/01/21 22:55	1
1,3-Dichloropropane	ND		1.0		ug/L			12/01/21 22:55	1
1,4-Dichlorobenzene	ND		1.0		ug/L			12/01/21 22:55	1
2,2-Dichloropropane	ND		5.0		ug/L			12/01/21 22:55	1
2-Butanone (MEK)	ND		6.0		ug/L			12/01/21 22:55	1
2-Chlorotoluene	ND		1.0		ug/L			12/01/21 22:55	1
2-Hexanone	ND		5.0		ug/L			12/01/21 22:55	1
4-Chlorotoluene	ND		1.0		ug/L			12/01/21 22:55	1
4-Isopropyltoluene	ND		1.0		ug/L			12/01/21 22:55	1
4-Methyl-2-pentanone	ND		5.0		ug/L			12/01/21 22:55	1
Acetone	ND		10		ug/L			12/01/21 22:55	1
Benzene	ND		1.0		ug/L			12/01/21 22:55	1
Bromobenzene	ND		1.0		ug/L			12/01/21 22:55	1
Bromochloromethane	ND		1.0		ug/L			12/01/21 22:55	1
Bromodichloromethane	ND		1.0		ug/L			12/01/21 22:55	1
Bromoform	ND		1.0		ug/L			12/01/21 22:55	1
Bromomethane	ND		2.0		ug/L			12/01/21 22:55	1
Carbon disulfide	ND		2.0		ug/L			12/01/21 22:55	1
Carbon tetrachloride	ND		1.0		ug/L			12/01/21 22:55	1
Chlorobenzene	ND		1.0		ug/L			12/01/21 22:55	1
Chloroethane	ND		2.0		ug/L			12/01/21 22:55	1
Chloroform	ND		1.0		ug/L			12/01/21 22:55	1
Chloromethane	ND		2.0		ug/L			12/01/21 22:55	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			12/01/21 22:55	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			12/01/21 22:55	1
Dibromochloromethane	ND		1.0		ug/L			12/01/21 22:55	1
Dibromomethane	ND		1.0		ug/L			12/01/21 22:55	1
Dichlorodifluoromethane	ND		2.0		ug/L			12/01/21 22:55	1
Ethylbenzene	ND		1.0		ug/L			12/01/21 22:55	1
Hexachlorobutadiene	ND		1.0		ug/L			12/01/21 22:55	1
Isopropylbenzene	ND		1.0		ug/L			12/01/21 22:55	1
Methylene Chloride	ND		5.0		ug/L			12/01/21 22:55	1
Naphthalene	ND		1.0		ug/L			12/01/21 22:55	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 280-559317/9
Matrix: Water
Analysis Batch: 559317

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		1.0		ug/L			12/01/21 22:55	1
N-Propylbenzene	ND		1.0		ug/L			12/01/21 22:55	1
sec-Butylbenzene	ND		1.0		ug/L			12/01/21 22:55	1
Styrene	ND		1.0		ug/L			12/01/21 22:55	1
tert-Butylbenzene	ND		1.0		ug/L			12/01/21 22:55	1
Tetrachloroethene	ND		1.0		ug/L			12/01/21 22:55	1
Toluene	ND		1.0		ug/L			12/01/21 22:55	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			12/01/21 22:55	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			12/01/21 22:55	1
Trichloroethene	ND		1.0		ug/L			12/01/21 22:55	1
Trichlorofluoromethane	ND		2.0		ug/L			12/01/21 22:55	1
Vinyl chloride	ND		1.0		ug/L			12/01/21 22:55	1
Xylenes (total)	ND		2.0		ug/L			12/01/21 22:55	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*12/01/21 22:55*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 127*		*12/01/21 22:55*	*1*
4-Bromofluorobenzene (Surr)	*105*		*78 - 120*		*12/01/21 22:55*	*1*
Dibromofluoromethane (Surr)	*99*		*77 - 120*		*12/01/21 22:55*	*1*
Toluene-d8 (Surr)	*100*		*80 - 125*		*12/01/21 22:55*	*1*

Lab Sample ID: LCS 280-559317/4
Matrix: Water
Analysis Batch: 559317

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	23.2		ug/L		93	65 - 135
1,1,1-Trichloroethane	25.0	25.4		ug/L		102	65 - 135
1,1,2,2-Tetrachloroethane	25.0	22.3		ug/L		89	58 - 135
1,1,2-Trichloroethane	25.0	23.8		ug/L		95	64 - 135
1,1-Dichloroethane	25.0	25.9		ug/L		103	65 - 135
1,1-Dichloroethene	25.0	26.9		ug/L		108	65 - 136
1,1-Dichloropropene	25.0	26.8		ug/L		107	65 - 135
1,2,3-Trichlorobenzene	25.0	17.2		ug/L		69	60 - 135
1,2,3-Trichloropropane	25.0	22.5		ug/L		90	65 - 135
1,2,4-Trichlorobenzene	25.0	20.2		ug/L		81	58 - 135
1,2,4-Trimethylbenzene	25.0	25.3		ug/L		101	65 - 135
1,2-Dichlorobenzene	25.0	23.0		ug/L		92	65 - 135
1,2-Dichloroethane	25.0	22.8		ug/L		91	65 - 135
1,2-Dichloropropane	25.0	25.4		ug/L		102	64 - 135
1,3,5-Trimethylbenzene	25.0	24.6		ug/L		98	65 - 135
1,3-Dichlorobenzene	25.0	23.3		ug/L		93	65 - 135
1,3-Dichloropropane	25.0	22.0		ug/L		88	64 - 135
1,4-Dichlorobenzene	25.0	23.5		ug/L		94	65 - 135
2,2-Dichloropropane	25.0	26.1		ug/L		104	65 - 135
2-Butanone (MEK)	100	93.7		ug/L		94	44 - 177

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-559317/4
Matrix: Water
Analysis Batch: 559317

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chlorotoluene	25.0	25.8		ug/L		103	65 - 135
2-Hexanone	100	84.1		ug/L		84	57 - 139
4-Chlorotoluene	25.0	25.1		ug/L		100	65 - 135
4-Isopropyltoluene	25.0	25.2		ug/L		101	65 - 135
4-Methyl-2-pentanone	100	91.3		ug/L		91	60 - 150
Acetone	100	92.8		ug/L		93	39 - 156
Benzene	25.0	24.9		ug/L		99	65 - 135
Bromobenzene	25.0	24.6		ug/L		98	65 - 135
Bromochloromethane	25.0	24.7		ug/L		99	65 - 135
Bromodichloromethane	25.0	24.8		ug/L		99	65 - 135
Bromoform	25.0	16.7		ug/L		67	62 - 135
Bromomethane	25.0	26.1		ug/L		104	45 - 135
Carbon disulfide	25.0	23.7		ug/L		95	55 - 143
Carbon tetrachloride	25.0	22.3		ug/L		89	65 - 135
Chlorobenzene	25.0	23.0		ug/L		92	65 - 135
Chloroethane	25.0	29.5		ug/L		118	46 - 136
Chloroform	25.0	24.6		ug/L		99	65 - 135
Chloromethane	25.0	27.3		ug/L		109	34 - 145
cis-1,2-Dichloroethene	25.0	24.2		ug/L		97	65 - 135
cis-1,3-Dichloropropene	25.0	23.4		ug/L		94	65 - 135
Dibromochloromethane	25.0	19.3		ug/L		77	65 - 135
Dibromomethane	25.0	23.3		ug/L		93	65 - 135
Dichlorodifluoromethane	25.0	26.0		ug/L		104	43 - 142
Ethylbenzene	25.0	24.5		ug/L		98	65 - 135
Hexachlorobutadiene	25.0	20.9		ug/L		84	65 - 135
Isopropylbenzene	25.0	27.2		ug/L		109	65 - 135
Methylene Chloride	25.0	24.2		ug/L		97	54 - 141
Naphthalene	25.0	16.9		ug/L		68	42 - 135
n-Butylbenzene	25.0	24.8		ug/L		99	64 - 135
N-Propylbenzene	25.0	26.8		ug/L		107	65 - 135
sec-Butylbenzene	25.0	25.8		ug/L		103	64 - 135
Styrene	25.0	23.7		ug/L		95	65 - 135
tert-Butylbenzene	25.0	25.9		ug/L		104	65 - 135
Tetrachloroethene	25.0	24.6		ug/L		98	65 - 135
Toluene	25.0	25.2		ug/L		101	65 - 135
trans-1,2-Dichloroethene	25.0	25.4		ug/L		102	65 - 135
trans-1,3-Dichloropropene	25.0	22.3		ug/L		89	65 - 135
Trichloroethene	25.0	25.1		ug/L		100	65 - 135
Trichlorofluoromethane	25.0	28.3		ug/L		113	53 - 137
Vinyl chloride	25.0	28.2		ug/L		113	40 - 137

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 127*
4-Bromofluorobenzene (Surr)	*106*		*78 - 120*
Dibromofluoromethane (Surr)	*100*		*77 - 120*
Toluene-d8 (Surr)	*102*		*80 - 125*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 280-559317/5
Matrix: Water
Analysis Batch: 559317

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane			25.0	23.5		ug/L		94	65 - 135	1	20
1,1,1-Trichloroethane			25.0	25.7		ug/L		103	65 - 135	1	20
1,1,2,2-Tetrachloroethane			25.0	22.0		ug/L		88	58 - 135	1	20
1,1,2-Trichloroethane			25.0	22.6		ug/L		90	64 - 135	5	27
1,1-Dichloroethane			25.0	25.3		ug/L		101	65 - 135	2	21
1,1-Dichloroethene			25.0	26.8		ug/L		107	65 - 136	0	20
1,1-Dichloropropene			25.0	26.7		ug/L		107	65 - 135	1	21
1,2,3-Trichlorobenzene			25.0	17.6		ug/L		70	60 - 135	2	36
1,2,3-Trichloropropane			25.0	21.6		ug/L		87	65 - 135	4	23
1,2,4-Trichlorobenzene			25.0	20.1		ug/L		80	58 - 135	0	25
1,2,4-Trimethylbenzene			25.0	25.1		ug/L		100	65 - 135	1	20
1,2-Dichlorobenzene			25.0	22.8		ug/L		91	65 - 135	1	20
1,2-Dichloroethane			25.0	22.3		ug/L		89	65 - 135	2	20
1,2-Dichloropropane			25.0	24.4		ug/L		98	64 - 135	4	20
1,3,5-Trimethylbenzene			25.0	24.3		ug/L		97	65 - 135	1	20
1,3-Dichlorobenzene			25.0	23.1		ug/L		93	65 - 135	1	20
1,3-Dichloropropane			25.0	22.4		ug/L		90	64 - 135	2	20
1,4-Dichlorobenzene			25.0	23.1		ug/L		92	65 - 135	2	23
2,2-Dichloropropane			25.0	27.1		ug/L		108	65 - 135	4	20
2-Butanone (MEK)			100	91.2		ug/L		91	44 - 177	3	32
2-Chlorotoluene			25.0	24.9		ug/L		100	65 - 135	3	20
2-Hexanone			100	84.5		ug/L		85	57 - 139	0	25
4-Chlorotoluene			25.0	25.0		ug/L		100	65 - 135	1	20
4-Isopropyltoluene			25.0	25.3		ug/L		101	65 - 135	0	20
4-Methyl-2-pentanone			100	87.5		ug/L		88	60 - 150	4	22
Acetone			100	90.0		ug/L		90	39 - 156	3	23
Benzene			25.0	24.7		ug/L		99	65 - 135	1	20
Bromobenzene			25.0	24.0		ug/L		96	65 - 135	2	26
Bromochloromethane			25.0	24.2		ug/L		97	65 - 135	2	29
Bromodichloromethane			25.0	23.9		ug/L		96	65 - 135	4	20
Bromoform			25.0	17.2		ug/L		69	62 - 135	3	27
Bromomethane			25.0	24.7		ug/L		99	45 - 135	6	33
Carbon disulfide			25.0	23.6		ug/L		94	55 - 143	1	20
Carbon tetrachloride			25.0	22.3		ug/L		89	65 - 135	0	21
Chlorobenzene			25.0	23.2		ug/L		93	65 - 135	1	20
Chloroethane			25.0	28.0		ug/L		112	46 - 136	5	25
Chloroform			25.0	24.4		ug/L		98	65 - 135	1	20
Chloromethane			25.0	27.7		ug/L		111	34 - 145	2	24
cis-1,2-Dichloroethene			25.0	23.9		ug/L		96	65 - 135	1	20
cis-1,3-Dichloropropene			25.0	24.5		ug/L		98	65 - 135	4	26
Dibromochloromethane			25.0	19.8		ug/L		79	65 - 135	2	20
Dibromomethane			25.0	22.5		ug/L		90	65 - 135	3	26
Dichlorodifluoromethane			25.0	25.5		ug/L		102	43 - 142	2	30
Ethylbenzene			25.0	24.6		ug/L		98	65 - 135	1	20
Hexachlorobutadiene			25.0	22.0		ug/L		88	65 - 135	5	25
Isopropylbenzene			25.0	27.0		ug/L		108	65 - 135	1	20
Methylene Chloride			25.0	24.5		ug/L		98	54 - 141	1	26
Naphthalene			25.0	17.9		ug/L		72	42 - 135	6	23

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 280-559317/5
Matrix: Water
Analysis Batch: 559317

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
n-Butylbenzene			25.0	24.8		ug/L		99	64 - 135	0	21
N-Propylbenzene			25.0	25.6		ug/L		102	65 - 135	5	20
sec-Butylbenzene			25.0	26.2		ug/L		105	64 - 135	2	21
Styrene			25.0	23.9		ug/L		95	65 - 135	1	26
tert-Butylbenzene			25.0	25.9		ug/L		103	65 - 135	0	21
Tetrachloroethene			25.0	25.1		ug/L		100	65 - 135	2	20
Toluene			25.0	24.3		ug/L		97	65 - 135	4	20
trans-1,2-Dichloroethene			25.0	25.0		ug/L		100	65 - 135	2	24
trans-1,3-Dichloropropene			25.0	22.2		ug/L		89	65 - 135	1	26
Trichloroethene			25.0	25.1		ug/L		100	65 - 135	0	20
Trichlorofluoromethane			25.0	28.2		ug/L		113	53 - 137	0	27
Vinyl chloride			25.0	27.8		ug/L		111	40 - 137	1	24

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 127*
4-Bromofluorobenzene (Surr)	*105*		*78 - 120*
Dibromofluoromethane (Surr)	*99*		*77 - 120*
Toluene-d8 (Surr)	*100*		*80 - 125*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Lab Sample ID: MB 280-559134/1-A
Matrix: Water
Analysis Batch: 559266

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 559134

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		11/30/21 14:02	12/01/21 18:58	1
1,2-Dibromoethane	ND		0.050		ug/L		11/30/21 14:02	12/01/21 18:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*109*		*70 - 130*	*11/30/21 14:02*	*12/01/21 18:58*	*1*

Lab Sample ID: LCS 280-559134/2-A
Matrix: Water
Analysis Batch: 559266

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 559134

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane			0.250	0.245		ug/L		98	60 - 140
1,2-Dibromoethane			0.250	0.256		ug/L		102	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dibromopropane	*113*		*70 - 130*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC) (Continued)

Lab Sample ID: LCSD 280-559134/3-A
Matrix: Water
Analysis Batch: 559266

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 559134

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.250	0.249		ug/L		100	60 - 140	2	10
1,2-Dibromoethane			0.250	0.240		ug/L		96	60 - 140	7	10

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dibromopropane	*113*		*70 - 130*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 280-558903/1-A
Matrix: Water
Analysis Batch: 559066

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 558903

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		500		ug/L		11/29/21 08:00	11/30/21 02:23	1
Iron	ND		30		ug/L		11/29/21 08:00	11/30/21 02:23	1
Magnesium	ND		200		ug/L		11/29/21 08:00	11/30/21 02:23	1
Manganese	ND		3.0		ug/L		11/29/21 08:00	11/30/21 02:23	1
Potassium	ND		500		ug/L		11/29/21 08:00	11/30/21 02:23	1
Sodium	ND		1000		ug/L		11/29/21 08:00	11/30/21 02:23	1

Lab Sample ID: LCS 280-558903/2-A
Matrix: Water
Analysis Batch: 559066

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 558903

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Calcium			50000	51000		ug/L		102	90 - 111		
Iron			10000	10300		ug/L		103	89 - 115		
Magnesium			50000	50500		ug/L		101	90 - 113		
Manganese			1000	1040		ug/L		104	90 - 110		
Potassium			50000	51500		ug/L		103	89 - 114		
Sodium			50000	51300		ug/L		103	90 - 115		

Lab Sample ID: 280-155957-B-2-B MS
Matrix: Water
Analysis Batch: 559066

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 558903

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Calcium	29000		50000	78700		ug/L		99	48 - 153		
Iron	ND		10000	10200		ug/L		102	52 - 155		
Magnesium	11000		50000	61400		ug/L		101	62 - 146		
Manganese	ND		1000	1030		ug/L		103	79 - 121		
Potassium	ND		50000	51300		ug/L		102	76 - 132		
Sodium	10000		50000	64600		ug/L		108	70 - 203		

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 280-155957-B-2-C MSD
Matrix: Water
Analysis Batch: 559066

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 558903

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium	29000		50000	81000		ug/L		104	48 - 153	3	20
Iron	ND		10000	10400		ug/L		104	52 - 155	2	20
Magnesium	11000		50000	62800		ug/L		103	62 - 146	2	20
Manganese	ND		1000	1030		ug/L		103	79 - 121	1	20
Potassium	ND		50000	51200		ug/L		102	76 - 132	0	20
Sodium	10000		50000	63600		ug/L		106	70 - 203	2	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 480-606967/4
Matrix: Water
Analysis Batch: 606967

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			11/30/21 07:10	1
Sulfate	ND		1.0		mg/L			11/30/21 07:10	1

Lab Sample ID: LCS 480-606967/3
Matrix: Water
Analysis Batch: 606967

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	49.3		mg/L		99	90 - 110
Sulfate	50.0	49.1		mg/L		98	90 - 110

Lab Sample ID: 280-155958-E-2 MS
Matrix: Water
Analysis Batch: 606967

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	ND		50.0	48.8		mg/L		98	81 - 120
Sulfate	ND		50.0	48.4		mg/L		97	80 - 120

Lab Sample ID: 280-155958-E-2 MSD
Matrix: Water
Analysis Batch: 606967

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	ND		50.0	49.1		mg/L		98	81 - 120	1	15
Sulfate	ND		50.0	48.9		mg/L		98	80 - 120	1	15

Lab Sample ID: 410-63989-A-1 MS
Matrix: Water
Analysis Batch: 606967

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	13		50.0	61.3		mg/L		96	81 - 120
Sulfate	8.5		50.0	56.6		mg/L		96	80 - 120

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-560210/20
Matrix: Water
Analysis Batch: 560210

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.030		mg/L			12/09/21 10:29	1

Lab Sample ID: LCS 280-560210/18
Matrix: Water
Analysis Batch: 560210

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia as N			2.50	2.48		mg/L		99	90 - 110		

Lab Sample ID: LCSD 280-560210/19
Matrix: Water
Analysis Batch: 560210

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N			2.50	2.49		mg/L		100	90 - 110	0	10

Lab Sample ID: 280-155883-B-15 MS
Matrix: Water
Analysis Batch: 560210

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia as N	0.055		1.00	0.971		mg/L		92	90 - 110		

Lab Sample ID: 280-155883-B-15 MSD
Matrix: Water
Analysis Batch: 560210

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N	0.055		1.00	0.997		mg/L		94	90 - 110	3	10

Lab Sample ID: MB 280-560343/20
Matrix: Water
Analysis Batch: 560343

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.030		mg/L			12/10/21 10:50	1

Lab Sample ID: LCS 280-560343/18
Matrix: Water
Analysis Batch: 560343

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia as N			2.50	2.43		mg/L		97	90 - 110		

Lab Sample ID: LCSD 280-560343/19
Matrix: Water
Analysis Batch: 560343

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N			2.50	2.45		mg/L		98	90 - 110	1	10

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: 280-156011-3 MS
Matrix: Water
Analysis Batch: 560343

Client Sample ID: MW-19A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia as N	0.11		1.00	1.05		mg/L		94	90 - 110		

Lab Sample ID: 280-156011-3 MSD
Matrix: Water
Analysis Batch: 560343

Client Sample ID: MW-19A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N	0.11		1.00	1.03		mg/L		91	90 - 110	3	10

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-559452/60
Matrix: Water
Analysis Batch: 559452

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate/Nitrite	ND		0.050		mg/L			12/02/21 18:38	1

Lab Sample ID: LCS 280-559452/59
Matrix: Water
Analysis Batch: 559452

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate/Nitrite			5.00	4.92		mg/L		98	90 - 110		

Lab Sample ID: 280-155883-B-17 MS
Matrix: Water
Analysis Batch: 559452

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate/Nitrite	ND		4.00	4.05		mg/L		101	90 - 110		

Lab Sample ID: 280-155883-B-17 MSD
Matrix: Water
Analysis Batch: 559452

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate/Nitrite	ND		4.00	3.90		mg/L		97	90 - 110	4	10

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 280-560085/35
Matrix: Water
Analysis Batch: 560085

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Average	ND		1.0		mg/L			12/08/21 21:35	1

Method: 9060 - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: MB 280-560085/4
Matrix: Water
Analysis Batch: 560085

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Average	ND		1.0		mg/L			12/08/21 13:15	1

Lab Sample ID: LCS 280-560085/34
Matrix: Water
Analysis Batch: 560085

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Average	25.0	25.9		mg/L		103	88 - 112

Lab Sample ID: 280-156013-D-2 MS
Matrix: Water
Analysis Batch: 560085

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Average	3.2		25.0	28.4		mg/L		101	88 - 112

Lab Sample ID: 280-156013-D-2 MSD
Matrix: Water
Analysis Batch: 560085

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Average	3.2		25.0	28.5		mg/L		101	88 - 112	0	15

Method: SM 1030E (meq) - Cation Anion Balance

Lab Sample ID: MB 280-560755/1
Matrix: Water
Analysis Batch: 560755

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	0.000				meq/L			12/15/21 11:01	1
Magnesium	0.000				meq/L			12/15/21 11:01	1
Potassium	0.000				meq/L			12/15/21 11:01	1
Sodium	0.000				meq/L			12/15/21 11:01	1
Ammonia as N	0.000				meq/L			12/15/21 11:01	1
Chloride	0.000				meq/L			12/15/21 11:01	1
Sulfate	0.000				meq/L			12/15/21 11:01	1
Alkalinity	0.000				mg/L			12/15/21 11:01	1
Bicarbonate Alkalinity	0.000				meq/L			12/15/21 11:01	1
Nitrate/Nitrite	0.000				meq/L			12/15/21 11:01	1
Iron	0.000				meq/L			12/15/21 11:01	1

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-559468/5
Matrix: Water
Analysis Batch: 559468

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity	ND		10		mg/L			12/02/21 14:32	1

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: 280-156011-4 DU
Matrix: Water
Analysis Batch: 559468

Client Sample ID: DUP4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Bicarbonate Alkalinity	130			132		mg/L				3	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 280-558626/1
Matrix: Water
Analysis Batch: 558626

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10		mg/L			11/24/21 08:13	1

Lab Sample ID: LCS 280-558626/2
Matrix: Water
Analysis Batch: 558626

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			503	509		mg/L		101	88 - 114		

Lab Sample ID: 280-156009-A-2 DU
Matrix: Water
Analysis Batch: 558626

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	110			124	F3	mg/L				12	10

GC/MS VOA

Analysis Batch: 559317

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-156011-1	TB3	Total/NA	Water	8260B	
280-156011-2	FB4	Total/NA	Water	8260B	
280-156011-3	MW-19A	Total/NA	Water	8260B	
280-156011-4	DUP4	Total/NA	Water	8260B	
MB 280-559317/9	Method Blank	Total/NA	Water	8260B	
LCS 280-559317/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-559317/5	Lab Control Sample Dup	Total/NA	Water	8260B	

GC Semi VOA

Prep Batch: 559134

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-156011-1	TB3	Total/NA	Water	8011	
280-156011-2	FB4	Total/NA	Water	8011	
280-156011-3	MW-19A	Total/NA	Water	8011	
280-156011-4	DUP4	Total/NA	Water	8011	
MB 280-559134/1-A	Method Blank	Total/NA	Water	8011	
LCS 280-559134/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 280-559134/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 559266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-156011-1	TB3	Total/NA	Water	8011	559134
280-156011-2	FB4	Total/NA	Water	8011	559134
280-156011-3	MW-19A	Total/NA	Water	8011	559134
280-156011-4	DUP4	Total/NA	Water	8011	559134
MB 280-559134/1-A	Method Blank	Total/NA	Water	8011	559134
LCS 280-559134/2-A	Lab Control Sample	Total/NA	Water	8011	559134
LCSD 280-559134/3-A	Lab Control Sample Dup	Total/NA	Water	8011	559134

Metals

Prep Batch: 558903

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-156011-2	FB4	Dissolved	Water	3005A	
280-156011-3	MW-19A	Dissolved	Water	3005A	
280-156011-4	DUP4	Dissolved	Water	3005A	
MB 280-558903/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-558903/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-155957-B-2-B MS	Matrix Spike	Dissolved	Water	3005A	
280-155957-B-2-C MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	

Analysis Batch: 559066

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-156011-2	FB4	Dissolved	Water	6010B	558903
280-156011-3	MW-19A	Dissolved	Water	6010B	558903
280-156011-4	DUP4	Dissolved	Water	6010B	558903
MB 280-558903/1-A	Method Blank	Total Recoverable	Water	6010B	558903
LCS 280-558903/2-A	Lab Control Sample	Total Recoverable	Water	6010B	558903
280-155957-B-2-B MS	Matrix Spike	Dissolved	Water	6010B	558903
280-155957-B-2-C MSD	Matrix Spike Duplicate	Dissolved	Water	6010B	558903

General Chemistry

Analysis Batch: 558626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-156011-2	FB4	Total/NA	Water	SM 2540C	
280-156011-3	MW-19A	Total/NA	Water	SM 2540C	
280-156011-4	DUP4	Total/NA	Water	SM 2540C	
MB 280-558626/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-558626/2	Lab Control Sample	Total/NA	Water	SM 2540C	
280-156009-A-2 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 559452

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-156011-2	FB4	Total/NA	Water	353.2	
280-156011-3	MW-19A	Total/NA	Water	353.2	
280-156011-4	DUP4	Total/NA	Water	353.2	
MB 280-559452/60	Method Blank	Total/NA	Water	353.2	
LCS 280-559452/59	Lab Control Sample	Total/NA	Water	353.2	
280-155883-B-17 MS	Matrix Spike	Total/NA	Water	353.2	
280-155883-B-17 MSD	Matrix Spike Duplicate	Total/NA	Water	353.2	

Analysis Batch: 559468

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-156011-2	FB4	Total/NA	Water	SM 2320B	
280-156011-3	MW-19A	Total/NA	Water	SM 2320B	
280-156011-4	DUP4	Total/NA	Water	SM 2320B	
MB 280-559468/5	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-559468/4	Lab Control Sample	Total/NA	Water	SM 2320B	
280-156011-4 DU	DUP4	Total/NA	Water	SM 2320B	

Analysis Batch: 560085

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-156011-2	FB4	Total/NA	Water	9060	
280-156011-3	MW-19A	Total/NA	Water	9060	
280-156011-4	DUP4	Total/NA	Water	9060	
MB 280-560085/35	Method Blank	Total/NA	Water	9060	
MB 280-560085/4	Method Blank	Total/NA	Water	9060	
LCS 280-560085/34	Lab Control Sample	Total/NA	Water	9060	
280-156013-D-2 MS	Matrix Spike	Total/NA	Water	9060	
280-156013-D-2 MSD	Matrix Spike Duplicate	Total/NA	Water	9060	

Analysis Batch: 560210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-156011-2	FB4	Total/NA	Water	350.1	
280-156011-4	DUP4	Total/NA	Water	350.1	
MB 280-560210/20	Method Blank	Total/NA	Water	350.1	
LCS 280-560210/18	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-560210/19	Lab Control Sample Dup	Total/NA	Water	350.1	
280-155883-B-15 MS	Matrix Spike	Total/NA	Water	350.1	
280-155883-B-15 MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	

Analysis Batch: 560343

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-156011-3	MW-19A	Total/NA	Water	350.1	
MB 280-560343/20	Method Blank	Total/NA	Water	350.1	

General Chemistry (Continued)

Analysis Batch: 560343 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 280-560343/18	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-560343/19	Lab Control Sample Dup	Total/NA	Water	350.1	
280-156011-3 MS	MW-19A	Total/NA	Water	350.1	
280-156011-3 MSD	MW-19A	Total/NA	Water	350.1	

Analysis Batch: 560755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-156011-2	FB4	Total/NA	Water	SM 1030E	
280-156011-2	FB4	Total/NA	Water	SM 1030E (meq)	
280-156011-3	MW-19A	Total/NA	Water	SM 1030E	
280-156011-3	MW-19A	Total/NA	Water	SM 1030E (meq)	
280-156011-4	DUP4	Total/NA	Water	SM 1030E	
280-156011-4	DUP4	Total/NA	Water	SM 1030E (meq)	
MB 280-560755/1	Method Blank	Total/NA	Water	SM 1030E (meq)	

Analysis Batch: 606967

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-156011-2	FB4	Total/NA	Water	300.0	
280-156011-3	MW-19A	Total/NA	Water	300.0	
280-156011-4	DUP4	Total/NA	Water	300.0	
MB 480-606967/4	Method Blank	Total/NA	Water	300.0	
LCS 480-606967/3	Lab Control Sample	Total/NA	Water	300.0	
280-155958-E-2 MS	Matrix Spike	Total/NA	Water	300.0	
280-155958-E-2 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
410-63989-A-1 MS	Matrix Spike	Total/NA	Water	300.0	

Field Service / Mobile Lab

Analysis Batch: 558592

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-156011-3	MW-19A	Total/NA	Water	Field Sampling	

Lab Chronicle

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - GW

Job ID: 280-156011-1

Client Sample ID: TB3

Date Collected: 11/19/21 07:00
Date Received: 11/22/21 09:35

Lab Sample ID: 280-156011-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	559317	12/02/21 00:01	AJP	TAL DEN
Total/NA	Prep	8011			34.4 mL	35 mL	559134	11/30/21 14:02	KSA	TAL DEN
Total/NA	Analysis	8011		1			559266	12/02/21 01:48	KSA	TAL DEN

Client Sample ID: FB4

Date Collected: 11/19/21 12:05
Date Received: 11/22/21 09:35

Lab Sample ID: 280-156011-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	559317	12/02/21 00:46	AJP	TAL DEN
Total/NA	Prep	8011			35.4 mL	35 mL	559134	11/30/21 14:02	KSA	TAL DEN
Total/NA	Analysis	8011		1			559266	12/02/21 02:12	KSA	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	558903	11/29/21 08:00	CJB	TAL DEN
Dissolved	Analysis	6010B		1			559066	11/30/21 04:06	LMT	TAL DEN
Total/NA	Analysis	300.0		1			606967	11/30/21 12:08	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	560210	12/09/21 10:41	RKD	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	559452	12/02/21 18:46	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	560085	12/09/21 04:34	RAF	TAL DEN
Total/NA	Analysis	SM 1030E		1			560755	12/15/21 11:18	SAH	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			560755	12/15/21 11:18	SAH	TAL DEN
Total/NA	Analysis	SM 2320B		1			559468	12/02/21 14:50	SPG	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	558626	11/24/21 09:13	ABW	TAL DEN

Client Sample ID: MW-19A

Date Collected: 11/19/21 12:45
Date Received: 11/22/21 09:35

Lab Sample ID: 280-156011-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	559317	12/02/21 04:04	AJP	TAL DEN
Total/NA	Prep	8011			35.5 mL	35 mL	559134	11/30/21 14:02	KSA	TAL DEN
Total/NA	Analysis	8011		1			559266	12/02/21 02:36	KSA	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	558903	11/29/21 08:00	CJB	TAL DEN
Dissolved	Analysis	6010B		1			559066	11/30/21 04:10	LMT	TAL DEN
Total/NA	Analysis	300.0		1			606967	11/30/21 12:26	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	560343	12/10/21 10:52	RKD	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	559452	12/02/21 19:00	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	560085	12/09/21 05:19	RAF	TAL DEN
Total/NA	Analysis	SM 1030E		1			560755	12/15/21 11:18	SAH	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			560755	12/15/21 11:18	SAH	TAL DEN
Total/NA	Analysis	SM 2320B		1			559468	12/02/21 14:56	SPG	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	558626	11/24/21 09:13	ABW	TAL DEN
Total/NA	Analysis	Field Sampling		1			558592	11/19/21 13:45	PP	TAL DEN

Lab Chronicle

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - GW

Job ID: 280-156011-1

Client Sample ID: DUP4

Date Collected: 11/19/21 12:50
Date Received: 11/22/21 09:35

Lab Sample ID: 280-156011-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	559317	12/02/21 04:27	AJP	TAL DEN
Total/NA	Prep	8011			35.5 mL	35 mL	559134	11/30/21 14:02	KSA	TAL DEN
Total/NA	Analysis	8011		1			559266	12/02/21 03:00	KSA	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	558903	11/29/21 08:00	CJB	TAL DEN
Dissolved	Analysis	6010B		1			559066	11/30/21 04:14	LMT	TAL DEN
Total/NA	Analysis	300.0		1			606967	11/30/21 12:45	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	560210	12/09/21 10:45	RKD	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	559452	12/02/21 19:02	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	560085	12/09/21 05:34	RAF	TAL DEN
Total/NA	Analysis	SM 1030E		1			560755	12/15/21 11:18	SAH	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			560755	12/15/21 11:18	SAH	TAL DEN
Total/NA	Analysis	SM 2320B		1			559468	12/02/21 14:38	SPG	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	558626	11/24/21 09:13	ABW	TAL DEN

Laboratory References:

TAL BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
TAL DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Eurofins TestAmerica, Denver
4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Fax (303) 431-7171

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: I. Hultquist	Lab PM: Sara, Betsy A	Carrier Tracking No(s):	COC No: 280-16508-865.1
Client Contact:	Phone: 503 716 6320	E-Mail: Betsy.Sara@Eurofinset.com		Page: Page 1 of 1
Company: Waste Management				Job #:
Address: 13469 SW Highway 18	Due Date Requested:			
City: McMinnville	TAT Requested (days):			
State, Zip: OR, 97128				
Phone:	PO #:			
Email:	WO #:			
Project Name: 1003|Riverbend Landfill SCS Engineers Event Desc: Semiannual Detection Wells - Apr Oct	Project #: 28002786			
Site: Oregon	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	TDS/Alk	Dissolved Metals	Ammonia/TOC/NO3+NO2	8260B	8011	Cation/Anion Balance	Chloride/Sulfate (TA Buffalo)	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	N	D	S	A	R		N	X	
TB3	11-19-21	0700	G	W						X	X			6	
FB4	11-19-21	1205	G	W	X		X	X	X	X	X	X	X	10	
MW-19A	11-19-21	1245	G	W	X		X	X	X	X	X	X	X	10	
DUP4	11-19-21	1250	G	W	X		X	X	X	X	X	X	X	10	

280-156011 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time:	Company	Received by	Date/Time:	Company
[signature]	11-19-21 @ 1630	SCS	[signature]	11/22/2021 0935	

Custody Seals Intact: Δ Yes Δ No

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 0.2/1.8 [illegible] CF110

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** MW-19A
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	(NW)	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)	CLOUDY	RAIN	?	**TEMPERATURE:**	(F) 50.2 °C					

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
11/19/21	11:52	32.00	.	22.07	.	9.93	X 1	1.61
/ /	:	.	.	.	.		X 3	4.83

Gal/ft = (dia./2)^2 x 0.163 | 1" = 0.041 | (2") = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	√
VOA Glass	~~11/18/21~~ JH	12:45	F	3	(40 ml)	HCl	(YES)	(NO)		✓
VOA Glass	~~11/18/21~~	12:45	F	3	(40 ml)	$Na_2S_2O_3$	(YES)	(NO)		✓
Amber Glass	/ / JH	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	~~11/18/21~~ JH	12:45	F	2	(250) 500 1L	(None)	(YES)	(NO)	NA	✓
Yellow Glass	~~11/18/21~~ JH	12:45	F	1	250, (500), 1L	(H_2SO_4)	(YES)	(NO)		✓
Red Total Poly	JH /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	~~11/18/21~~ JH	12:45	F	1	250, (500), 1L	(HNO_3)	(YES)	(YES)		✓
White Poly	JH /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

Collected on 11/19/2021

White no acid, Yellow H2SO4, Red HNO3 | 10 | Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: 11:53 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O_2 (mg/l)	Water Quality
0	F(1154)	0.00	6.97	95.2	309	14.5	22.27	5.43	clear/colorless
1	F(1209)	1.65	7.91	-93.6	299	12.5	22.63	0.46	clear/colorless
2	F(1224)	3.30	7.93	-101.0	299	12.5	22.68	0.43	clear/colorless
3	F(1239)	4.95	7.89	-101.3	298	12.4	22.78	0.60	clear/colorless
4	F(1241)	5.10	7.90	-102.9	297	12.4	22.79	0.59	clear/colorless
5	F(1243)	5.25	7.90	-104.3	298	12.4	22.79	0.59	clear/colorless
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Standard purge method (10/5/2 psi) ~ 300 ml/min

SAMPLER: J. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** FB4

SITE ADDRESS: McMinnville , Oregon **BLIND ID:**

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?			**TEMPERATURE:**	°F 50.0 °C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		[Water Column x Gal/ft] Volume (gal)
/ /	:	.	.	.	.	.	X 1	.
/ /	:	.	.		.		X 3	.

Gal/ft = (dia./2)² x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other = Transfer

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	[√ if used] √
VOA Glass	11/19/21	12:05	G	3	40 ml	HCl	YES	NO		✓
VOA Glass	11/19/21	12:05	G	3	40 ml	$Na_2S_2O_3$	YES	NO		✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/19/21	12:05	G	2	250, 500, 1L	None	YES	NO	NA	✓
Yellow Glass	11/19/21	12:05	G	1	250, 500, 1L	H_2SO_4	YES	NO		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	11/19/21	12:05	G	1	250, 500, 1L	HNO_3	YES	YES		✓
White Poly	/ /	:			250, 500, 1L	None	YES	YES		
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0		0.00	.			.	.	.	
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Collected near MW-19A using Lab Supplied DI water

SAMPLER: T. Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** DUP4
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	(NW)	LIGHT	MEDIUM	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:** (50.0) °C		

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
/ /	:	.	.	.	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	[√ if used] √
VOA Glass	11/19/21	12:50	F	3	(40 ml)	HCl	(YES)	(NO)	✓
VOA Glass	11/19/21	12:50	F	3	(40 ml)	$Na_2S_2O_3$	(YES)	(NO)	✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO	
White Poly	11/19/21	12:50	F	2	(250) 500, 1L	None	(YES)	(NO)	NA ✓
Yellow Glass	11/19/21	12:50	F	1	250, (500), 1L	H_2SO_4	(YES)	(NO)	✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO	
Red Diss. Poly	11/19/21	12:50	F	1	250, (500), 1L	HNO_3	(YES)	(YES)	✓
White Poly	/ /	:			250, 500, 1L	None	YES	YES	
Clear Poly	/ /	:			100, 250, 500	$Na_2S_2O_3$	YES	NO	

White no acid, Yellow H2SO4, Red HNO3 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX)
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	F(1250)	0.00	.	.	.	.	.	.	✓
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Collected at MW-19A

SAMPLER: T. Holtquist (PRINTED NAME) (SIGNATURE)



280-156011 Waybill


ORIGIN ID:BNOA
SHIP DATE: 19NOV21
ACTWGT: 60.65 LB
CAD: /SSFE2220
DIMS: 24x13x13 IN
TO EUROFINS
SAMPLE RECEIVING
4955 YARROW ST
350
ARVADA CO 80002
(US)
(303) 736-0100
INV:
PO:
REF:
DEPT:
FedEx
Express
SATURDAY 12:00P
PRIORITY OVERNIGHT
TRK# 0667 8165 7539 5230
XO LAAA
80002
CO-US DEN

Eurofins TestAmerica, Denver
4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0100 Fax: 303-431-7171

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Sara, Betsy A	Carrier Tracking No(s):	COC No: 280-595102.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Betsy.Sara@Eurofinset.com	State of Origin: Oregon	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Oregon		Job #: 280-156011-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 12/13/2021			
City: Amherst	TAT Requested (days):			
State, Zip: NY, 14228-2298				
Phone: 716-691-2600(Tel) 716-691-7991(Fax)	PO #:			
Email:	WO #:			
Project Name: 1003|Riverbend Landfill SCS Engineers	Project #: 28002786			
Site: 1003|Riverbend Landfill	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300.0_28D/ 300.0, Sulfate and Chloride (TA Buffalo)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
FB4 (280-156011-2)	11/19/21	12:05 Pacific		Water			X	1	
MW-19A (280-156011-3)	11/19/21	12:45 Pacific		Water			X	1	
DUP4 (280-156011-4)	11/19/21	12:50 Pacific		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 11/23/21 1355	Company	Received by:	Date/Time: 11-24-21 1000	Company TAB
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.6 ICE

Ver: 06/08/2021

3/15/2022

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-156011-1

Login Number: 156011

List Source: Eurofins Denver

List Number: 1

Creator: Rystrom, Joshua R

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	
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: 280-156011-1

Login Number: 156011
List Number: 2
Creator: Yeager, Brian A

List Source: Eurofins Buffalo
List Creation: 11/29/21 10:07 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	2.6 ice ir gun #1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

Fall 2021

Leachate Pond and Leachate Pond LDS Liquids

Laboratory Analytical Report

eurofins | Environment Testing America



ANALYTICAL REPORT

Eurofins Denver
4955 Yarrow Street
Arvada, CO 80002
Tel: (303)736-0100

Laboratory Job ID: 280-155912-1
Client Project/Site: 1003|Riverbend Landfill - Leachate Lagoon
Sampling Event: Semiannual Leachate Lagoon - Apr Nov

For:
Waste Management
7227 NE 55th Avenue
Portland, Oregon 97218

Attn: Mr. William V Hickey, PMP

Authorized for release by:
3/15/2022 2:54:09 PM
Janice Collins, Project Management Assistant I
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Designee for

Betsy Sara, Project Manager II
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Betsy.Sara@Eurofinset.com

LINKS

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Have a Question? Ask The Expert

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Waste Management
Job ID: 280-155912-1
Project/Site: 1003|Riverbend Landfill - Leachate Lagoon

Qualifiers

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
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

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.
F1	MS and/or MSD recovery exceeds control limits.
F3	Duplicate RPD exceeds the control limit
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 280-155912-1

Laboratory: Eurofins Denver

Narrative

CASE NARRATIVE

Client: Waste Management

Project: 1003|Riverbend Landfill - Leachate Lagoon

Report Number: 280-155912-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

This report may include reporting limits (RLs) less than Eurofins TestAmerica's standard reporting limit. The reported sample results and associated reporting limits are being used specifically to meet the needs of this project. Note that data are not normally reported to these levels without qualification because they are inherently less reliable and potentially less defensible than required by the latest industry standards.

Sample Receiving

The samples were received on 11/19/2021; the samples arrived in good condition and on ice. The temperature of the cooler at receipt was 0.6 C.

Holding Times

The analysis for pH should be performed in the field immediately following sampling, and therefore the laboratory pH result was flagged with an "HF" flag.

All other holding times were met.

Method Blanks

All Method Blanks met method criteria.

Laboratory Control Samples (LCS)

All Laboratory Control Sample recoveries were within control limits.

Matrix Spike (MS) and Matrix Spike Duplicate (MSD)

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) for Method 8260B, however, an LCS/LCSD pair was analyzed to demonstrate method precision and accuracy.

The percent recoveries and/or relative percent difference of the MS/MSD performed on a sample from another client were outside control limits for Chloride Method 300.0 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 Matrix Spikes and Matrix Spike Duplicates performed on samples from other clients exhibited recoveries outside control limits for Total Kjeldahl Nitrogen (TKN) Method 351.2 and Chemical Oxygen Demand (COD) Method 410.4. 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.

All other MS and MSD results were within established control limits.

Job ID: 280-155912-1 (Continued)

Laboratory: Eurofins Denver (Continued)

Sample Duplicate

The RPD for Total Dissolved Solids (TDS) Method 2540C performed on a sample from another client was outside control limits. Because all other QC and calibration criteria were met no corrective action was needed.

Organics

The prepreserved hydrochloric acid preserved vials for Method 8260B analysis for the samples LPOND LDS and LEACH-POND- exhibited pH values greater than 2. This is non-compliant with Method 8260B which requires samples to be preserved with hydrochloric acid to a pH of less than 2. Because these samples were leachate samples, a buffering effect was suspected.

Metals

The Method 6020 Continuing Calibration Verification (CCV) sample was above the control limits for Total Beryllium. Because the data are considered biased high and Total Beryllium was not detected in the associated samples above the reporting limit, corrective action was deemed unnecessary.

General Comments

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.

Detection Summary

Client: Waste Management
Job ID: 280-155912-1
Project/Site: 1003|Riverbend Landfill - Leachate Lagoon

Client Sample ID: TB2 — Lab Sample ID: 280-155912-1

No Detections.

Client Sample ID: LPOND LDS — Lab Sample ID: 280-155912-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	5300		100		ug/L	1		6010B	Total Recoverable
Silicon	16000		100		ug/L	1		6010B	Total Recoverable
Calcium	33000		500		ug/L	1		6010B	Dissolved
Iron	5900		30		ug/L	1		6010B	Dissolved
Magnesium	44000		200		ug/L	1		6010B	Dissolved
Manganese	1100		3.0		ug/L	1		6010B	Dissolved
Potassium	140000		500		ug/L	1		6010B	Dissolved
Sodium	690000		1000		ug/L	1		6010B	Dissolved
Antimony	6.3		0.60		ug/L	1		6020	Total Recoverable
Arsenic	17		1.0		ug/L	1		6020	Total Recoverable
Barium	130		1.5		ug/L	5		6020	Total Recoverable
Chromium	59		2.0		ug/L	1		6020	Total Recoverable
Cobalt	24		0.20		ug/L	1		6020	Total Recoverable
Copper	38		1.0		ug/L	1		6020	Total Recoverable
Lead	1.6		0.50		ug/L	1		6020	Total Recoverable
Nickel	72		1.5		ug/L	5		6020	Total Recoverable
Vanadium	42		3.0		ug/L	1		6020	Total Recoverable
Chloride	900		10		mg/L	10		300.0	Total/NA
Sulfate	120		5.0		mg/L	1		300.0	Total/NA
Ammonia as N	110		1.1		mg/L	50		350.1	Total/NA
Total Kjeldahl Nitrogen	120		34		mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	5.2		0.10		mg/L	1		353.2	Total/NA
Chemical Oxygen Demand (COD)	400		87		mg/L	10		410.4	Total/NA
pH adj. to 25 deg C	7.4	HF	0.1		SU	1		9040B	Total/NA
Specific Conductance	4800		2.0		umhos/cm	1		9050A	Total/NA
Total Organic Carbon - Average	130		1.7		mg/L	5		9060	Total/NA
Total Anions	50				meq/L	1		SM 1030E	Total/NA
Total Cations	47				meq/L	1		SM 1030E	Total/NA
Percent Difference	-3.3				%	1		SM 1030E	Total/NA
Calcium	33				mg/L	1		SM 1030E	Total/NA
Magnesium	44				mg/L	1		SM 1030E	Total/NA
Potassium	140				mg/L	1		SM 1030E	Total/NA
Sodium	690				mg/L	1		SM 1030E	Total/NA
Ammonia as N	110				mg/L	1		SM 1030E	Total/NA
Chloride	900				mg/L	1		SM 1030E	Total/NA
Sulfate	120				mg/L	1		SM 1030E	Total/NA
Carbonate Alkalinity	0.00				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	1100				mg/L	1		SM 1030E	Total/NA
Total Alkalinity	1100				mg/L	1		SM 1030E	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: LPOND LDS (Continued) — Lab Sample ID: 280-155912-2

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Nitrate/Nitrite	5.2				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	-3.3				%	1		SM 1030E	Total/NA
Calculated TDS	2600				mg/L	1		SM 1030E	Total/NA
TDS Ratio	0.85				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	2200				mg/L	1		SM 1030E	Total/NA
Iron	5.9				mg/L	1		SM 1030E	Total/NA
Calcium	1.6				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	3.6				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	3.6				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	30				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.32				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia	7.9				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	25				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	2.5				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate Nitrite as N	0.37				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	22				meq/L	1		SM 1030E (meq)	Total/NA
Carbonate Alkalinity as CaCO3	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity as CaCO3	22				meq/L	1		SM 1030E (meq)	Total/NA
Total Alkalinity	1100		10		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity	1100		10		mg/L	1		SM 2320B	Total/NA
Hardness, as CaCO3	260		3.0		mg/L	2		SM 2340C	Total/NA
Total Dissolved Solids	2700		19		mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	4.0		4.0		mg/L	1		SM 2540D	Total/NA
Field pH	7.23				SU	1		Field Sampling	Total/NA
Field Conductivity	5118				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	8.53				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	7.49				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	213.5				millivolts	1		Field Sampling	Total/NA

Client Sample ID: LEACH-POND- — Lab Sample ID: 280-155912-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	14		10		ug/L	1		8260B	Total/NA
Boron	10000		100		ug/L	1		6010B	Total Recoverable
Silicon	18000		100		ug/L	1		6010B	Total Recoverable
Zinc	30		26		ug/L	1		6010B	Total Recoverable
Calcium	62000		500		ug/L	1		6010B	Dissolved
Iron	2300		30		ug/L	1		6010B	Dissolved
Magnesium	90000		200		ug/L	1		6010B	Dissolved
Manganese	320		3.0		ug/L	1		6010B	Dissolved
Potassium	400000		500		ug/L	1		6010B	Dissolved
Sodium	1600000		1000		ug/L	1		6010B	Dissolved
Antimony	26		0.60		ug/L	1		6020	Total Recoverable
Arsenic	160		1.0		ug/L	1		6020	Total Recoverable
Barium	260		1.5		ug/L	5		6020	Total Recoverable
Chromium	140		2.0		ug/L	1		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: LEACH-POND- (Continued)

Lab Sample ID: 280-155912-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	33		0.20		ug/L	1		6020	Total Recoverable
Copper	1.2		1.0		ug/L	1		6020	Total Recoverable
Lead	2.1		0.50		ug/L	1		6020	Total Recoverable
Nickel	94		1.5		ug/L	5		6020	Total Recoverable
Vanadium	100		3.0		ug/L	1		6020	Total Recoverable
Chloride	1700		20		mg/L	20		300.0	Total/NA
Sulfate	120		5.0		mg/L	1		300.0	Total/NA
Ammonia as N	160		1.1		mg/L	50		350.1	Total/NA
Total Kjeldahl Nitrogen	200		34		mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	120		0.48		mg/L	25		353.2	Total/NA
Chemical Oxygen Demand (COD)	1200		87		mg/L	10		410.4	Total/NA
pH adj. to 25 deg C	8.0	HF	0.1		SU	1		9040B	Total/NA
Specific Conductance	10000		2.0		umhos/cm	1		9050A	Total/NA
Total Organic Carbon - Average	310		3.5		mg/L	10		9060	Total/NA
Total Anions	93				meq/L	1		SM 1030E	Total/NA
Total Cations	100				meq/L	1		SM 1030E	Total/NA
Percent Difference	4.6				%	1		SM 1030E	Total/NA
Calcium	62				mg/L	1		SM 1030E	Total/NA
Magnesium	90				mg/L	1		SM 1030E	Total/NA
Potassium	400				mg/L	1		SM 1030E	Total/NA
Sodium	1600				mg/L	1		SM 1030E	Total/NA
Ammonia as N	160				mg/L	1		SM 1030E	Total/NA
Chloride	1700				mg/L	1		SM 1030E	Total/NA
Sulfate	120				mg/L	1		SM 1030E	Total/NA
Carbonate Alkalinity	0.00				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	1700				mg/L	1		SM 1030E	Total/NA
Total Alkalinity	1700				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	120				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	4.6				%	1		SM 1030E	Total/NA
Calculated TDS	5200				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.1				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	5700				mg/L	1		SM 1030E	Total/NA
Iron	2.3				mg/L	1		SM 1030E	Total/NA
Calcium	3.1				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	7.4				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	10				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	70				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.12				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia	11				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	48				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	2.5				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate Nitrite as N	8.6				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	34				meq/L	1		SM 1030E (meq)	Total/NA
Carbonate Alkalinity as CaCO3	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity as CaCO3	34				meq/L	1		SM 1030E (meq)	Total/NA
Total Alkalinity	1700		10		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity	1700		10		mg/L	1		SM 2320B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Waste Management
Job ID: 280-155912-1
Project/Site: 1003|Riverbend Landfill - Leachate Lagoon

Client Sample ID: LEACH-POND- (Continued)
Lab Sample ID: 280-155912-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Hardness, as CaCO3	550		3.0		mg/L	2		SM 2340C	Total/NA
Total Dissolved Solids	5700		47		mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	23		4.0		mg/L	1		SM 2540D	Total/NA
Field pH	9.00				SU	1		Field Sampling	Total/NA
Field Conductivity	9574.0				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	7.10				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	7.90				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	188.1				millivolts	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Waste Management
Job ID: 280-155912-1
Project/Site: 1003|Riverbend Landfill - Leachate Lagoon

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-155912-1	TB2	Water	11/18/21 07:00	11/19/21 10:25
280-155912-2	LPOND LDS	Water	11/18/21 11:00	11/19/21 10:25
280-155912-3	LEACH-POND-	Water	11/18/21 11:30	11/19/21 10:25

Method Summary

Client: Waste Management
Job ID: 280-155912-1
Project/Site: 1003|Riverbend Landfill - Leachate Lagoon

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL DEN
6010B	Metals (ICP)	SW846	TAL DEN
6020	Metals (ICP/MS)	SW846	TAL DEN
7470A	Mercury (CVAA)	SW846	TAL DEN
300.0	Anions, Ion Chromatography	MCAWW	TAL DEN
350.1	Nitrogen, Ammonia	MCAWW	TAL DEN
351.2	Nitrogen, Total Kjeldahl	MCAWW	TAL DEN
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	TAL DEN
410.4	COD	MCAWW	TAL DEN
9040B	pH	SW846	TAL DEN
9050A	Specific Conductance	SW846	TAL DEN
9060	Organic Carbon, Total (TOC)	SW846	TAL DEN
SM 1030E	Cation Anion Balance	SM	TAL DEN
SM 1030E (meq)	Cation Anion Balance	SM	TAL DEN
SM 2320B	Alkalinity	SM	TAL DEN
SM 2340C	Hardness, Total (mg/l as CaC03)	SM	TAL DEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL DEN
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL DEN
Field Sampling	Field Sampling	EPA	TAL DEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL DEN
351.2	Nitrogen, Total Kjeldahl	MCAWW	TAL DEN
5030B	Purge and Trap	SW846	TAL DEN
7470A	Preparation, Mercury	SW846	TAL DEN

Protocol 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.

Laboratory References:

TAL DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Leachate Lagoon

Job ID: 280-155912-1

Client Sample ID: TB2
Date Collected: 11/18/21 07:00
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155912-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			12/02/21 22:50	1
1,1,1-Trichloroethane	ND		1.0		ug/L			12/02/21 22:50	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			12/02/21 22:50	1
1,1,2-Trichloroethane	ND		1.0		ug/L			12/02/21 22:50	1
1,1-Dichloroethane	ND		1.0		ug/L			12/02/21 22:50	1
1,1-Dichloroethene	ND		1.0		ug/L			12/02/21 22:50	1
1,1-Dichloropropene	ND		1.0		ug/L			12/02/21 22:50	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			12/02/21 22:50	1
1,2,3-Trichloropropane	ND		1.0		ug/L			12/02/21 22:50	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			12/02/21 22:50	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			12/02/21 22:50	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			12/02/21 22:50	1
1,2-Dibromoethane	ND		1.0		ug/L			12/02/21 22:50	1
1,2-Dichlorobenzene	ND		1.0		ug/L			12/02/21 22:50	1
1,2-Dichloroethane	ND		1.0		ug/L			12/02/21 22:50	1
1,2-Dichloropropane	ND		1.0		ug/L			12/02/21 22:50	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			12/02/21 22:50	1
1,3-Dichlorobenzene	ND		1.0		ug/L			12/02/21 22:50	1
1,3-Dichloropropane	ND		1.0		ug/L			12/02/21 22:50	1
1,4-Dichlorobenzene	ND		1.0		ug/L			12/02/21 22:50	1
2,2-Dichloropropane	ND		5.0		ug/L			12/02/21 22:50	1
2-Butanone (MEK)	ND		6.0		ug/L			12/02/21 22:50	1
2-Chlorotoluene	ND		1.0		ug/L			12/02/21 22:50	1
2-Hexanone	ND		5.0		ug/L			12/02/21 22:50	1
4-Chlorotoluene	ND		1.0		ug/L			12/02/21 22:50	1
4-Isopropyltoluene	ND		1.0		ug/L			12/02/21 22:50	1
4-Methyl-2-pentanone	ND		5.0		ug/L			12/02/21 22:50	1
Acetone	ND		10		ug/L			12/02/21 22:50	1
Benzene	ND		1.0		ug/L			12/02/21 22:50	1
Bromobenzene	ND		1.0		ug/L			12/02/21 22:50	1
Bromochloromethane	ND		1.0		ug/L			12/02/21 22:50	1
Bromodichloromethane	ND		1.0		ug/L			12/02/21 22:50	1
Bromoform	ND		1.0		ug/L			12/02/21 22:50	1
Bromomethane	ND		2.0		ug/L			12/02/21 22:50	1
Carbon disulfide	ND		2.0		ug/L			12/02/21 22:50	1
Carbon tetrachloride	ND		1.0		ug/L			12/02/21 22:50	1
Chlorobenzene	ND		1.0		ug/L			12/02/21 22:50	1
Chloroethane	ND		2.0		ug/L			12/02/21 22:50	1
Chloroform	ND		1.0		ug/L			12/02/21 22:50	1
Chloromethane	ND		2.0		ug/L			12/02/21 22:50	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			12/02/21 22:50	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			12/02/21 22:50	1
Dibromochloromethane	ND		1.0		ug/L			12/02/21 22:50	1
Dibromomethane	ND		1.0		ug/L			12/02/21 22:50	1
Dichlorodifluoromethane	ND		2.0		ug/L			12/02/21 22:50	1
Ethylbenzene	ND		1.0		ug/L			12/02/21 22:50	1
Hexachlorobutadiene	ND		1.0		ug/L			12/02/21 22:50	1
Isopropylbenzene	ND		1.0		ug/L			12/02/21 22:50	1
Methylene Chloride	ND		5.0		ug/L			12/02/21 22:50	1

Client Sample ID: TB2
Lab Sample ID: 280-155912-1
Date Collected: 11/18/21 07:00
Matrix: Water
Date Received: 11/19/21 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0		ug/L			12/02/21 22:50	1
n-Butylbenzene	ND		1.0		ug/L			12/02/21 22:50	1
N-Propylbenzene	ND		1.0		ug/L			12/02/21 22:50	1
sec-Butylbenzene	ND		1.0		ug/L			12/02/21 22:50	1
Styrene	ND		1.0		ug/L			12/02/21 22:50	1
tert-Butylbenzene	ND		1.0		ug/L			12/02/21 22:50	1
Tetrachloroethene	ND		1.0		ug/L			12/02/21 22:50	1
Toluene	ND		1.0		ug/L			12/02/21 22:50	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			12/02/21 22:50	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			12/02/21 22:50	1
Trichloroethene	ND		1.0		ug/L			12/02/21 22:50	1
Trichlorofluoromethane	ND		2.0		ug/L			12/02/21 22:50	1
Vinyl chloride	ND		1.0		ug/L			12/02/21 22:50	1
Xylenes (total)	ND		2.0		ug/L			12/02/21 22:50	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*12/02/21 22:50*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 127*		*12/02/21 22:50*	*1*
4-Bromofluorobenzene (Surr)	*99*		*78 - 120*		*12/02/21 22:50*	*1*
Dibromofluoromethane (Surr)	*106*		*77 - 120*		*12/02/21 22:50*	*1*
Toluene-d8 (Surr)	*98*		*80 - 125*		*12/02/21 22:50*	*1*

Client Sample ID: LPOND LDS
Lab Sample ID: 280-155912-2
Date Collected: 11/18/21 11:00
Matrix: Water
Date Received: 11/19/21 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			12/02/21 01:49	1
1,1,1-Trichloroethane	ND		1.0		ug/L			12/02/21 01:49	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			12/02/21 01:49	1
1,1,2-Trichloroethane	ND		1.0		ug/L			12/02/21 01:49	1
1,1-Dichloroethane	ND		1.0		ug/L			12/02/21 01:49	1
1,1-Dichloroethene	ND		1.0		ug/L			12/02/21 01:49	1
1,1-Dichloropropene	ND		1.0		ug/L			12/02/21 01:49	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			12/02/21 01:49	1
1,2,3-Trichloropropane	ND		1.0		ug/L			12/02/21 01:49	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			12/02/21 01:49	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			12/02/21 01:49	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			12/02/21 01:49	1
1,2-Dibromoethane	ND		1.0		ug/L			12/02/21 01:49	1
1,2-Dichlorobenzene	ND		1.0		ug/L			12/02/21 01:49	1
1,2-Dichloroethane	ND		1.0		ug/L			12/02/21 01:49	1
1,2-Dichloropropane	ND		1.0		ug/L			12/02/21 01:49	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			12/02/21 01:49	1
1,3-Dichlorobenzene	ND		1.0		ug/L			12/02/21 01:49	1
1,3-Dichloropropane	ND		1.0		ug/L			12/02/21 01:49	1
1,4-Dichlorobenzene	ND		1.0		ug/L			12/02/21 01:49	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Leachate Lagoon

Job ID: 280-155912-1

Client Sample ID: LPOND LDS
Date Collected: 11/18/21 11:00
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155912-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,2-Dichloropropane	ND		5.0		ug/L			12/02/21 01:49	1
2-Butanone (MEK)	ND		6.0		ug/L			12/02/21 01:49	1
2-Chlorotoluene	ND		1.0		ug/L			12/02/21 01:49	1
2-Hexanone	ND		5.0		ug/L			12/02/21 01:49	1
4-Chlorotoluene	ND		1.0		ug/L			12/02/21 01:49	1
4-Isopropyltoluene	ND		1.0		ug/L			12/02/21 01:49	1
4-Methyl-2-pentanone	ND		5.0		ug/L			12/02/21 01:49	1
Acetone	ND		10		ug/L			12/02/21 01:49	1
Benzene	ND		1.0		ug/L			12/02/21 01:49	1
Bromobenzene	ND		1.0		ug/L			12/02/21 01:49	1
Bromochloromethane	ND		1.0		ug/L			12/02/21 01:49	1
Bromodichloromethane	ND		1.0		ug/L			12/02/21 01:49	1
Bromoform	ND		1.0		ug/L			12/02/21 01:49	1
Bromomethane	ND		2.0		ug/L			12/02/21 01:49	1
Carbon disulfide	ND		2.0		ug/L			12/02/21 01:49	1
Carbon tetrachloride	ND		1.0		ug/L			12/02/21 01:49	1
Chlorobenzene	ND		1.0		ug/L			12/02/21 01:49	1
Chloroethane	ND		2.0		ug/L			12/02/21 01:49	1
Chloroform	ND		1.0		ug/L			12/02/21 01:49	1
Chloromethane	ND		2.0		ug/L			12/02/21 01:49	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			12/02/21 01:49	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			12/02/21 01:49	1
Dibromochloromethane	ND		1.0		ug/L			12/02/21 01:49	1
Dibromomethane	ND		1.0		ug/L			12/02/21 01:49	1
Dichlorodifluoromethane	ND		2.0		ug/L			12/02/21 01:49	1
Ethylbenzene	ND		1.0		ug/L			12/02/21 01:49	1
Hexachlorobutadiene	ND		1.0		ug/L			12/02/21 01:49	1
Isopropylbenzene	ND		1.0		ug/L			12/02/21 01:49	1
Methylene Chloride	ND		5.0		ug/L			12/02/21 01:49	1
Naphthalene	ND		1.0		ug/L			12/02/21 01:49	1
n-Butylbenzene	ND		1.0		ug/L			12/02/21 01:49	1
N-Propylbenzene	ND		1.0		ug/L			12/02/21 01:49	1
sec-Butylbenzene	ND		1.0		ug/L			12/02/21 01:49	1
Styrene	ND		1.0		ug/L			12/02/21 01:49	1
tert-Butylbenzene	ND		1.0		ug/L			12/02/21 01:49	1
Tetrachloroethene	ND		1.0		ug/L			12/02/21 01:49	1
Toluene	ND		1.0		ug/L			12/02/21 01:49	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			12/02/21 01:49	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			12/02/21 01:49	1
Trichloroethene	ND		1.0		ug/L			12/02/21 01:49	1
Trichlorofluoromethane	ND		2.0		ug/L			12/02/21 01:49	1
Vinyl chloride	ND		1.0		ug/L			12/02/21 01:49	1
Xylenes (total)	ND		2.0		ug/L			12/02/21 01:49	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrahydrofuran	*8.0*		*ug/L*		*4.25*	*109-99-9*		*12/02/21 01:49*	*1*
Tentatively Identified Compound	*None*		*ug/L*					*12/02/21 01:49*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 127*		*12/02/21 01:49*	*1*

Client Sample ID: LPOND LDS
Lab Sample ID: 280-155912-2

Date Collected: 11/18/21 11:00
Matrix: Water
Date Received: 11/19/21 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*78 - 120*		*12/02/21 01:49*	*1*
Dibromofluoromethane (Surr)	*108*		*77 - 120*		*12/02/21 01:49*	*1*
Toluene-d8 (Surr)	*98*		*80 - 125*		*12/02/21 01:49*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**5300**		100		ug/L		11/26/21 06:09	11/26/21 20:11	1
Molybdenum	ND		20		ug/L		11/26/21 06:09	11/26/21 20:11	1
Silicon	**16000**		100		ug/L		11/26/21 06:09	11/26/21 20:11	1
Silver	ND		3.0		ug/L		11/26/21 06:09	11/26/21 20:11	1
Zinc	ND		26		ug/L		11/26/21 06:09	11/26/21 20:11	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**33000**		500		ug/L		11/23/21 15:30	11/24/21 05:47	1
Iron	**5900**		30		ug/L		11/23/21 15:30	11/24/21 05:47	1
Magnesium	**44000**		200		ug/L		11/23/21 15:30	11/24/21 05:47	1
Manganese	**1100**		3.0		ug/L		11/23/21 15:30	11/24/21 05:47	1
Potassium	**140000**		500		ug/L		11/23/21 15:30	11/24/21 05:47	1
Sodium	**690000**		1000		ug/L		11/23/21 15:30	11/24/21 05:47	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**6.3**		0.60		ug/L		11/23/21 15:40	11/30/21 01:05	1
Arsenic	**17**		1.0		ug/L		11/23/21 15:40	11/30/21 01:05	1
Barium	**130**		1.5		ug/L		11/23/21 15:40	11/30/21 17:15	5
Beryllium	ND		0.40		ug/L		11/23/21 15:40	11/30/21 01:05	1
Cadmium	ND		0.30		ug/L		11/23/21 15:40	11/30/21 01:05	1
Chromium	**59**		2.0		ug/L		11/23/21 15:40	11/30/21 01:05	1
Cobalt	**24**		0.20		ug/L		11/23/21 15:40	11/30/21 01:05	1
Copper	**38**		1.0		ug/L		11/23/21 15:40	11/30/21 01:05	1
Lead	**1.6**		0.50		ug/L		11/23/21 15:40	11/30/21 01:05	1
Nickel	**72**		1.5		ug/L		11/23/21 15:40	11/30/21 17:15	5
Selenium	ND		1.0		ug/L		11/23/21 15:40	11/30/21 01:05	1
Thallium	ND		0.20		ug/L		11/23/21 15:40	11/30/21 01:05	1
Vanadium	**42**		3.0		ug/L		11/23/21 15:40	11/30/21 01:05	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20		ug/L		12/03/21 15:00	12/03/21 21:32	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	**50**				meq/L			12/08/21 17:48	1
Total Cations	**47**				meq/L			12/08/21 17:48	1
Percent Difference	**-3.3**				%			12/08/21 17:48	1
Calcium	**33**				mg/L			12/08/21 17:48	1
Magnesium	**44**				mg/L			12/08/21 17:48	1
Potassium	**140**				mg/L			12/08/21 17:48	1
Sodium	**690**				mg/L			12/08/21 17:48	1

Client Sample ID: LPOND LDS
Lab Sample ID: 280-155912-2

Date Collected: 11/18/21 11:00
Matrix: Water
Date Received: 11/19/21 10:25

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	110				mg/L			12/08/21 17:48	1
Chloride	900				mg/L			12/08/21 17:48	1
Sulfate	120				mg/L			12/08/21 17:48	1
Carbonate Alkalinity	0.00				mg/L			12/08/21 17:48	1
Bicarbonate Alkalinity	1100				mg/L			12/08/21 17:48	1
Total Alkalinity	1100				mg/L			12/08/21 17:48	1
Nitrate/Nitrite	5.2				mg/L			12/08/21 17:48	1
Anion/Cation Balance	-3.3				%			12/08/21 17:48	1
Calculated TDS	2600				mg/L			12/08/21 17:48	1
TDS Ratio	0.85				NONE			12/08/21 17:48	1
Total Dissolved Solids	2200				mg/L			12/08/21 17:48	1
Iron	5.9				mg/L			12/08/21 17:48	1
Calcium	1.6				meq/L			12/08/21 17:48	1
Magnesium	3.6				meq/L			12/08/21 17:48	1
Potassium	3.6				meq/L			12/08/21 17:48	1
Sodium	30				meq/L			12/08/21 17:48	1
Iron	0.32				meq/L			12/08/21 17:48	1
Ammonia	7.9				meq/L			12/08/21 17:48	1
Chloride	25				meq/L			12/08/21 17:48	1
Sulfate	2.5				meq/L			12/08/21 17:48	1
Nitrate Nitrite as N	0.37				meq/L			12/08/21 17:48	1
Alkalinity	22				meq/L			12/08/21 17:48	1
Carbonate Alkalinity as CaCO3	0.00				meq/L			12/08/21 17:48	1
Bicarbonate Alkalinity as CaCO3	22				meq/L			12/08/21 17:48	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	900		10		mg/L			12/03/21 13:01	10
Sulfate	120		5.0		mg/L			12/03/21 12:46	1
Ammonia as N	110		1.1		mg/L			12/03/21 15:17	50
Total Kjeldahl Nitrogen	120		34		mg/L		12/05/21 16:30	12/06/21 17:52	1
Nitrate Nitrite as N	5.2		0.10		mg/L			11/30/21 20:10	1
Chemical Oxygen Demand (COD)	400		87		mg/L			11/30/21 10:25	10
Total Organic Carbon - Average	130		1.7		mg/L			12/08/21 21:31	5
Total Alkalinity	1100		10		mg/L			12/01/21 18:23	1
Bicarbonate Alkalinity	1100		10		mg/L			12/01/21 18:23	1
Carbonate Alkalinity	ND		10		mg/L			12/01/21 18:23	1
Hardness, as CaCO3	260		3.0		mg/L			12/08/21 10:46	2
Total Dissolved Solids	2700		19		mg/L			11/24/21 09:13	1
Total Suspended Solids	4.0		4.0		mg/L			11/24/21 16:20	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH adj. to 25 deg C	7.4	HF	0.1		SU			12/03/21 13:42	1
Specific Conductance	4800		2.0		umhos/cm			12/03/21 12:07	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.23				SU			11/18/21 12:00	1
Field Conductivity	5118				umhos/cm			11/18/21 12:00	1
Field Temperature	8.53				Degrees C			11/18/21 12:00	1
Field Dissolved Oxygen	7.49				mg/L			11/18/21 12:00	1
Field EH/ORP	213.5				millivolts			11/18/21 12:00	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Leachate Lagoon

Job ID: 280-155912-1

Client Sample ID: LEACH-POND-
Date Collected: 11/18/21 11:30
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155912-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			12/02/21 02:10	1
1,1,1-Trichloroethane	ND		1.0		ug/L			12/02/21 02:10	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			12/02/21 02:10	1
1,1,2-Trichloroethane	ND		1.0		ug/L			12/02/21 02:10	1
1,1-Dichloroethane	ND		1.0		ug/L			12/02/21 02:10	1
1,1-Dichloroethene	ND		1.0		ug/L			12/02/21 02:10	1
1,1-Dichloropropene	ND		1.0		ug/L			12/02/21 02:10	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			12/02/21 02:10	1
1,2,3-Trichloropropane	ND		1.0		ug/L			12/02/21 02:10	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			12/02/21 02:10	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			12/02/21 02:10	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			12/02/21 02:10	1
1,2-Dibromoethane	ND		1.0		ug/L			12/02/21 02:10	1
1,2-Dichlorobenzene	ND		1.0		ug/L			12/02/21 02:10	1
1,2-Dichloroethane	ND		1.0		ug/L			12/02/21 02:10	1
1,2-Dichloropropane	ND		1.0		ug/L			12/02/21 02:10	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			12/02/21 02:10	1
1,3-Dichlorobenzene	ND		1.0		ug/L			12/02/21 02:10	1
1,3-Dichloropropane	ND		1.0		ug/L			12/02/21 02:10	1
1,4-Dichlorobenzene	ND		1.0		ug/L			12/02/21 02:10	1
2,2-Dichloropropane	ND		5.0		ug/L			12/02/21 02:10	1
2-Butanone (MEK)	ND		6.0		ug/L			12/02/21 02:10	1
2-Chlorotoluene	ND		1.0		ug/L			12/02/21 02:10	1
2-Hexanone	ND		5.0		ug/L			12/02/21 02:10	1
4-Chlorotoluene	ND		1.0		ug/L			12/02/21 02:10	1
4-Isopropyltoluene	ND		1.0		ug/L			12/02/21 02:10	1
4-Methyl-2-pentanone	ND		5.0		ug/L			12/02/21 02:10	1
Acetone	**14**		10		ug/L			12/02/21 02:10	1
Benzene	ND		1.0		ug/L			12/02/21 02:10	1
Bromobenzene	ND		1.0		ug/L			12/02/21 02:10	1
Bromochloromethane	ND		1.0		ug/L			12/02/21 02:10	1
Bromodichloromethane	ND		1.0		ug/L			12/02/21 02:10	1
Bromoform	ND		1.0		ug/L			12/02/21 02:10	1
Bromomethane	ND		2.0		ug/L			12/02/21 02:10	1
Carbon disulfide	ND		2.0		ug/L			12/02/21 02:10	1
Carbon tetrachloride	ND		1.0		ug/L			12/02/21 02:10	1
Chlorobenzene	ND		1.0		ug/L			12/02/21 02:10	1
Chloroethane	ND		2.0		ug/L			12/02/21 02:10	1
Chloroform	ND		1.0		ug/L			12/02/21 02:10	1
Chloromethane	ND		2.0		ug/L			12/02/21 02:10	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			12/02/21 02:10	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			12/02/21 02:10	1
Dibromochloromethane	ND		1.0		ug/L			12/02/21 02:10	1
Dibromomethane	ND		1.0		ug/L			12/02/21 02:10	1
Dichlorodifluoromethane	ND		2.0		ug/L			12/02/21 02:10	1
Ethylbenzene	ND		1.0		ug/L			12/02/21 02:10	1
Hexachlorobutadiene	ND		1.0		ug/L			12/02/21 02:10	1
Isopropylbenzene	ND		1.0		ug/L			12/02/21 02:10	1
Methylene Chloride	ND		5.0		ug/L			12/02/21 02:10	1

Client Sample ID: LEACH-POND-
Lab Sample ID: 280-155912-3
Date Collected: 11/18/21 11:30
Matrix: Water
Date Received: 11/19/21 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0		ug/L			12/02/21 02:10	1
n-Butylbenzene	ND		1.0		ug/L			12/02/21 02:10	1
N-Propylbenzene	ND		1.0		ug/L			12/02/21 02:10	1
sec-Butylbenzene	ND		1.0		ug/L			12/02/21 02:10	1
Styrene	ND		1.0		ug/L			12/02/21 02:10	1
tert-Butylbenzene	ND		1.0		ug/L			12/02/21 02:10	1
Tetrachloroethene	ND		1.0		ug/L			12/02/21 02:10	1
Toluene	ND		1.0		ug/L			12/02/21 02:10	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			12/02/21 02:10	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			12/02/21 02:10	1
Trichloroethene	ND		1.0		ug/L			12/02/21 02:10	1
Trichlorofluoromethane	ND		2.0		ug/L			12/02/21 02:10	1
Vinyl chloride	ND		1.0		ug/L			12/02/21 02:10	1
Xylenes (total)	ND		2.0		ug/L			12/02/21 02:10	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrahydrofuran	*18*		*ug/L*		*4.25*	*109-99-9*		*12/02/21 02:10*	*1*
Tentatively Identified Compound	*None*		*ug/L*					*12/02/21 02:10*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 127*		*12/02/21 02:10*	*1*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*		*12/02/21 02:10*	*1*
Dibromofluoromethane (Surr)	*105*		*77 - 120*		*12/02/21 02:10*	*1*
Toluene-d8 (Surr)	*98*		*80 - 125*		*12/02/21 02:10*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**10000**		100		ug/L		11/26/21 06:09	11/26/21 20:16	1
Molybdenum	ND		20		ug/L		11/26/21 06:09	11/26/21 20:16	1
Silicon	**18000**		100		ug/L		11/26/21 06:09	11/26/21 20:16	1
Silver	ND		3.0		ug/L		11/26/21 06:09	11/26/21 20:16	1
Zinc	**30**		26		ug/L		11/26/21 06:09	11/26/21 20:16	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**62000**		500		ug/L		11/23/21 15:30	11/24/21 05:51	1
Iron	**2300**		30		ug/L		11/23/21 15:30	11/24/21 05:51	1
Magnesium	**90000**		200		ug/L		11/23/21 15:30	11/24/21 05:51	1
Manganese	**320**		3.0		ug/L		11/23/21 15:30	11/24/21 05:51	1
Potassium	**400000**		500		ug/L		11/23/21 15:30	11/24/21 05:51	1
Sodium	**1600000**		1000		ug/L		11/23/21 15:30	11/24/21 05:51	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**26**		0.60		ug/L		11/23/21 15:40	11/30/21 01:08	1
Arsenic	**160**		1.0		ug/L		11/23/21 15:40	11/30/21 01:08	1
Barium	**260**		1.5		ug/L		11/23/21 15:40	11/30/21 17:19	5
Beryllium	ND		0.40		ug/L		11/23/21 15:40	11/30/21 01:08	1
Cadmium	ND		0.30		ug/L		11/23/21 15:40	11/30/21 01:08	1
Chromium	**140**		2.0		ug/L		11/23/21 15:40	11/30/21 01:08	1
Cobalt	**33**		0.20		ug/L		11/23/21 15:40	11/30/21 01:08	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Leachate Lagoon

Job ID: 280-155912-1

Client Sample ID: LEACH-POND-

Date Collected: 11/18/21 11:30
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155912-3

Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	1.2		1.0		ug/L		11/23/21 15:40	11/30/21 01:08	1
Lead	2.1		0.50		ug/L		11/23/21 15:40	11/30/21 01:08	1
Nickel	94		1.5		ug/L		11/23/21 15:40	11/30/21 17:19	5
Selenium	ND		1.0		ug/L		11/23/21 15:40	11/30/21 01:08	1
Thallium	ND		0.20		ug/L		11/23/21 15:40	11/30/21 01:08	1
Vanadium	100		3.0		ug/L		11/23/21 15:40	11/30/21 01:08	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20		ug/L		12/03/21 15:00	12/03/21 21:34	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	93				meq/L			12/13/21 08:55	1
Total Cations	100				meq/L			12/13/21 08:55	1
Percent Difference	4.6				%			12/13/21 08:55	1
Calcium	62				mg/L			12/13/21 08:55	1
Magnesium	90				mg/L			12/13/21 08:55	1
Potassium	400				mg/L			12/13/21 08:55	1
Sodium	1600				mg/L			12/13/21 08:55	1
Ammonia as N	160				mg/L			12/13/21 08:55	1
Chloride	1700				mg/L			12/13/21 08:55	1
Sulfate	120				mg/L			12/13/21 08:55	1
Carbonate Alkalinity	0.00				mg/L			12/13/21 08:55	1
Bicarbonate Alkalinity	1700				mg/L			12/13/21 08:55	1
Total Alkalinity	1700				mg/L			12/13/21 08:55	1
Nitrate/Nitrite	120				mg/L			12/13/21 08:55	1
Anion/Cation Balance	4.6				%			12/13/21 08:55	1
Calculated TDS	5200				mg/L			12/13/21 08:55	1
TDS Ratio	1.1				NONE			12/13/21 08:55	1
Total Dissolved Solids	5700				mg/L			12/13/21 08:55	1
Iron	2.3				mg/L			12/13/21 08:55	1
Calcium	3.1				meq/L			12/13/21 08:55	1
Magnesium	7.4				meq/L			12/13/21 08:55	1
Potassium	10				meq/L			12/13/21 08:55	1
Sodium	70				meq/L			12/13/21 08:55	1
Iron	0.12				meq/L			12/13/21 08:55	1
Ammonia	11				meq/L			12/13/21 08:55	1
Chloride	48				meq/L			12/13/21 08:55	1
Sulfate	2.5				meq/L			12/13/21 08:55	1
Nitrate Nitrite as N	8.6				meq/L			12/13/21 08:55	1
Alkalinity	34				meq/L			12/13/21 08:55	1
Carbonate Alkalinity as CaCO3	0.00				meq/L			12/13/21 08:55	1
Bicarbonate Alkalinity as CaCO3	34				meq/L			12/13/21 08:55	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1700		20		mg/L			12/09/21 22:01	20
Sulfate	120		5.0		mg/L			12/03/21 13:16	1
Ammonia as N	160		1.1		mg/L			12/04/21 10:45	50
Total Kjeldahl Nitrogen	200		34		mg/L		12/05/21 16:30	12/06/21 17:53	1
Nitrate Nitrite as N	120		0.48		mg/L			12/02/21 19:50	25

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Leachate Lagoon

Job ID: 280-155912-1

Client Sample ID: LEACH-POND-
Date Collected: 11/18/21 11:30
Date Received: 11/19/21 10:25

Lab Sample ID: 280-155912-3
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (COD)	1200		87		mg/L			11/28/21 08:48	10
Total Organic Carbon - Average	310		3.5		mg/L			12/08/21 21:50	10
Total Alkalinity	1700		10		mg/L			12/02/21 19:31	1
Bicarbonate Alkalinity	1700		10		mg/L			12/02/21 19:31	1
Carbonate Alkalinity	ND		10		mg/L			12/02/21 19:31	1
Hardness, as CaCO3	550		3.0		mg/L			12/08/21 10:46	2
Total Dissolved Solids	5700		47		mg/L			11/24/21 09:13	1
Total Suspended Solids	23		4.0		mg/L			11/24/21 16:20	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH adj. to 25 deg C	8.0	HF	0.1		SU			12/03/21 13:42	1
Specific Conductance	10000		2.0		umhos/cm			12/03/21 12:07	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	9.00				SU			11/18/21 12:30	1
Field Conductivity	9574.0				umhos/cm			11/18/21 12:30	1
Field Temperature	7.10				Degrees C			11/18/21 12:30	1
Field Dissolved Oxygen	7.90				mg/L			11/18/21 12:30	1
Field EH/ORP	188.1				millivolts			11/18/21 12:30	1

Surrogate Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill - Leachate Lagoon

Job ID: 280-155912-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-127)	(78-120)	(77-120)	(80-125)
280-155912-1	TB2	116	99	106	98
280-155912-2	LPOND LDS	114	90	108	98
280-155912-3	LEACH-POND-	111	97	105	98
LCS 280-559320/4	Lab Control Sample	103	99	99	100
LCS 280-559444/4	Lab Control Sample	108	98	99	98
LCSD 280-559320/5	Lab Control Sample Dup	102	98	99	99
LCSD 280-559444/5	Lab Control Sample Dup	105	98	97	98
MB 280-559320/9	Method Blank	108	96	106	96
MB 280-559444/9	Method Blank	113	99	103	99

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 280-559320/9
Matrix: Water
Analysis Batch: 559320

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			12/01/21 21:48	1
1,1,1-Trichloroethane	ND		1.0		ug/L			12/01/21 21:48	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			12/01/21 21:48	1
1,1,2-Trichloroethane	ND		1.0		ug/L			12/01/21 21:48	1
1,1-Dichloroethane	ND		1.0		ug/L			12/01/21 21:48	1
1,1-Dichloroethene	ND		1.0		ug/L			12/01/21 21:48	1
1,1-Dichloropropene	ND		1.0		ug/L			12/01/21 21:48	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			12/01/21 21:48	1
1,2,3-Trichloropropane	ND		1.0		ug/L			12/01/21 21:48	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			12/01/21 21:48	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			12/01/21 21:48	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			12/01/21 21:48	1
1,2-Dibromoethane	ND		1.0		ug/L			12/01/21 21:48	1
1,2-Dichlorobenzene	ND		1.0		ug/L			12/01/21 21:48	1
1,2-Dichloroethane	ND		1.0		ug/L			12/01/21 21:48	1
1,2-Dichloropropane	ND		1.0		ug/L			12/01/21 21:48	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			12/01/21 21:48	1
1,3-Dichlorobenzene	ND		1.0		ug/L			12/01/21 21:48	1
1,3-Dichloropropane	ND		1.0		ug/L			12/01/21 21:48	1
1,4-Dichlorobenzene	ND		1.0		ug/L			12/01/21 21:48	1
2,2-Dichloropropane	ND		5.0		ug/L			12/01/21 21:48	1
2-Butanone (MEK)	ND		6.0		ug/L			12/01/21 21:48	1
2-Chlorotoluene	ND		1.0		ug/L			12/01/21 21:48	1
2-Hexanone	ND		5.0		ug/L			12/01/21 21:48	1
4-Chlorotoluene	ND		1.0		ug/L			12/01/21 21:48	1
4-Isopropyltoluene	ND		1.0		ug/L			12/01/21 21:48	1
4-Methyl-2-pentanone	ND		5.0		ug/L			12/01/21 21:48	1
Acetone	ND		10		ug/L			12/01/21 21:48	1
Benzene	ND		1.0		ug/L			12/01/21 21:48	1
Bromobenzene	ND		1.0		ug/L			12/01/21 21:48	1
Bromochloromethane	ND		1.0		ug/L			12/01/21 21:48	1
Bromodichloromethane	ND		1.0		ug/L			12/01/21 21:48	1
Bromoform	ND		1.0		ug/L			12/01/21 21:48	1
Bromomethane	ND		2.0		ug/L			12/01/21 21:48	1
Carbon disulfide	ND		2.0		ug/L			12/01/21 21:48	1
Carbon tetrachloride	ND		1.0		ug/L			12/01/21 21:48	1
Chlorobenzene	ND		1.0		ug/L			12/01/21 21:48	1
Chloroethane	ND		2.0		ug/L			12/01/21 21:48	1
Chloroform	ND		1.0		ug/L			12/01/21 21:48	1
Chloromethane	ND		2.0		ug/L			12/01/21 21:48	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			12/01/21 21:48	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			12/01/21 21:48	1
Dibromochloromethane	ND		1.0		ug/L			12/01/21 21:48	1
Dibromomethane	ND		1.0		ug/L			12/01/21 21:48	1
Dichlorodifluoromethane	ND		2.0		ug/L			12/01/21 21:48	1
Ethylbenzene	ND		1.0		ug/L			12/01/21 21:48	1
Hexachlorobutadiene	ND		1.0		ug/L			12/01/21 21:48	1
Isopropylbenzene	ND		1.0		ug/L			12/01/21 21:48	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 280-559320/9
Matrix: Water
Analysis Batch: 559320

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		5.0		ug/L			12/01/21 21:48	1
Naphthalene	ND		1.0		ug/L			12/01/21 21:48	1
n-Butylbenzene	ND		1.0		ug/L			12/01/21 21:48	1
N-Propylbenzene	ND		1.0		ug/L			12/01/21 21:48	1
sec-Butylbenzene	ND		1.0		ug/L			12/01/21 21:48	1
Styrene	ND		1.0		ug/L			12/01/21 21:48	1
tert-Butylbenzene	ND		1.0		ug/L			12/01/21 21:48	1
Tetrachloroethene	ND		1.0		ug/L			12/01/21 21:48	1
Toluene	ND		1.0		ug/L			12/01/21 21:48	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			12/01/21 21:48	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			12/01/21 21:48	1
Trichloroethene	ND		1.0		ug/L			12/01/21 21:48	1
Trichlorofluoromethane	ND		2.0		ug/L			12/01/21 21:48	1
Vinyl chloride	ND		1.0		ug/L			12/01/21 21:48	1
Xylenes (total)	ND		2.0		ug/L			12/01/21 21:48	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*12/01/21 21:48*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 127*		*12/01/21 21:48*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*12/01/21 21:48*	*1*
Dibromofluoromethane (Surr)	*106*		*77 - 120*		*12/01/21 21:48*	*1*
Toluene-d8 (Surr)	*96*		*80 - 125*		*12/01/21 21:48*	*1*

Lab Sample ID: LCS 280-559320/4
Matrix: Water
Analysis Batch: 559320

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	52.3		ug/L		105	65 - 135
1,1,1-Trichloroethane	50.0	53.2		ug/L		106	65 - 135
1,1,2,2-Tetrachloroethane	50.0	57.3		ug/L		115	58 - 135
1,1,2-Trichloroethane	50.0	55.1		ug/L		110	64 - 135
1,1-Dichloroethane	50.0	54.7		ug/L		109	65 - 135
1,1-Dichloroethene	50.0	53.2		ug/L		106	65 - 136
1,1-Dichloropropene	50.0	56.9		ug/L		114	65 - 135
1,2,3-Trichlorobenzene	50.0	46.2		ug/L		92	60 - 135
1,2,3-Trichloropropane	50.0	53.2		ug/L		106	65 - 135
1,2,4-Trichlorobenzene	50.0	46.8		ug/L		94	58 - 135
1,2,4-Trimethylbenzene	50.0	53.8		ug/L		108	65 - 135
1,2-Dibromo-3-Chloropropane	50.0	48.3		ug/L		97	57 - 135
1,2-Dibromoethane	50.0	52.3		ug/L		105	65 - 135
1,2-Dichlorobenzene	50.0	50.8		ug/L		102	65 - 135
1,2-Dichloroethane	50.0	55.7		ug/L		111	65 - 135
1,2-Dichloropropane	50.0	57.2		ug/L		114	64 - 135
1,3,5-Trimethylbenzene	50.0	53.5		ug/L		107	65 - 135
1,3-Dichlorobenzene	50.0	52.3		ug/L		105	65 - 135

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-559320/4
Matrix: Water
Analysis Batch: 559320

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichloropropane	50.0	55.3		ug/L		111	64 - 135
1,4-Dichlorobenzene	50.0	51.2		ug/L		102	65 - 135
2,2-Dichloropropane	50.0	57.0		ug/L		114	65 - 135
2-Butanone (MEK)	200	237		ug/L		118	44 - 177
2-Chlorotoluene	50.0	51.8		ug/L		104	65 - 135
2-Hexanone	200	226		ug/L		113	57 - 139
4-Chlorotoluene	50.0	53.5		ug/L		107	65 - 135
4-Isopropyltoluene	50.0	55.5		ug/L		111	65 - 135
4-Methyl-2-pentanone	200	227		ug/L		113	60 - 150
Acetone	200	221		ug/L		110	39 - 156
Benzene	50.0	52.9		ug/L		106	65 - 135
Bromobenzene	50.0	52.1		ug/L		104	65 - 135
Bromochloromethane	50.0	54.3		ug/L		109	65 - 135
Bromodichloromethane	50.0	53.7		ug/L		107	65 - 135
Bromoform	50.0	54.9		ug/L		110	62 - 135
Bromomethane	50.0	43.5		ug/L		87	45 - 135
Carbon disulfide	50.0	50.4		ug/L		101	55 - 143
Carbon tetrachloride	50.0	54.9		ug/L		110	65 - 135
Chlorobenzene	50.0	52.2		ug/L		104	65 - 135
Chloroethane	50.0	46.8		ug/L		94	46 - 136
Chloroform	50.0	53.0		ug/L		106	65 - 135
Chloromethane	50.0	50.2		ug/L		100	34 - 145
cis-1,2-Dichloroethene	50.0	51.6		ug/L		103	65 - 135
cis-1,3-Dichloropropene	50.0	51.6		ug/L		103	65 - 135
Dibromochloromethane	50.0	53.6		ug/L		107	65 - 135
Dibromomethane	50.0	53.8		ug/L		108	65 - 135
Dichlorodifluoromethane	50.0	55.4		ug/L		111	43 - 142
Ethylbenzene	50.0	52.6		ug/L		105	65 - 135
Hexachlorobutadiene	50.0	51.0		ug/L		102	65 - 135
Isopropylbenzene	50.0	53.6		ug/L		107	65 - 135
Methylene Chloride	50.0	50.5		ug/L		101	54 - 141
Naphthalene	50.0	46.2		ug/L		92	42 - 135
n-Butylbenzene	50.0	58.1		ug/L		116	64 - 135
N-Propylbenzene	50.0	53.9		ug/L		108	65 - 135
sec-Butylbenzene	50.0	54.7		ug/L		109	64 - 135
Styrene	50.0	55.2		ug/L		110	65 - 135
tert-Butylbenzene	50.0	52.3		ug/L		105	65 - 135
Tetrachloroethene	50.0	54.1		ug/L		108	65 - 135
Toluene	50.0	53.2		ug/L		106	65 - 135
trans-1,2-Dichloroethene	50.0	51.7		ug/L		103	65 - 135
trans-1,3-Dichloropropene	50.0	52.9		ug/L		106	65 - 135
Trichloroethene	50.0	51.2		ug/L		102	65 - 135
Trichlorofluoromethane	50.0	57.9		ug/L		116	53 - 137
Vinyl chloride	50.0	51.9		ug/L		104	40 - 137

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 127*
4-Bromofluorobenzene (Surr)	*99*		*78 - 120*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-559320/4
Matrix: Water
Analysis Batch: 559320

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane (Surr)	*99*		*77 - 120*
Toluene-d8 (Surr)	*100*		*80 - 125*

Lab Sample ID: LCSD 280-559320/5
Matrix: Water
Analysis Batch: 559320

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane			50.0	51.9		ug/L		104	65 - 135	1	20
1,1,1-Trichloroethane			50.0	52.8		ug/L		106	65 - 135	1	20
1,1,2,2-Tetrachloroethane			50.0	56.9		ug/L		114	58 - 135	1	20
1,1,2-Trichloroethane			50.0	54.5		ug/L		109	64 - 135	1	27
1,1-Dichloroethane			50.0	55.0		ug/L		110	65 - 135	0	21
1,1-Dichloroethene			50.0	53.0		ug/L		106	65 - 136	0	20
1,1-Dichloropropene			50.0	56.4		ug/L		113	65 - 135	1	21
1,2,3-Trichlorobenzene			50.0	46.8		ug/L		94	60 - 135	1	36
1,2,3-Trichloropropane			50.0	54.8		ug/L		110	65 - 135	3	23
1,2,4-Trichlorobenzene			50.0	47.4		ug/L		95	58 - 135	1	25
1,2,4-Trimethylbenzene			50.0	53.2		ug/L		106	65 - 135	1	20
1,2-Dibromo-3-Chloropropane			50.0	47.5		ug/L		95	57 - 135	2	22
1,2-Dibromoethane			50.0	53.0		ug/L		106	65 - 135	1	27
1,2-Dichlorobenzene			50.0	50.4		ug/L		101	65 - 135	1	20
1,2-Dichloroethane			50.0	56.0		ug/L		112	65 - 135	1	20
1,2-Dichloropropane			50.0	58.1		ug/L		116	64 - 135	2	20
1,3,5-Trimethylbenzene			50.0	52.9		ug/L		106	65 - 135	1	20
1,3-Dichlorobenzene			50.0	52.0		ug/L		104	65 - 135	1	20
1,3-Dichloropropane			50.0	54.9		ug/L		110	64 - 135	1	20
1,4-Dichlorobenzene			50.0	50.8		ug/L		102	65 - 135	1	23
2,2-Dichloropropane			50.0	56.4		ug/L		113	65 - 135	1	20
2-Butanone (MEK)			200	240		ug/L		120	44 - 177	1	32
2-Chlorotoluene			50.0	51.3		ug/L		103	65 - 135	1	20
2-Hexanone			200	230		ug/L		115	57 - 139	2	25
4-Chlorotoluene			50.0	52.3		ug/L		105	65 - 135	2	20
4-Isopropyltoluene			50.0	54.2		ug/L		108	65 - 135	2	20
4-Methyl-2-pentanone			200	232		ug/L		116	60 - 150	2	22
Acetone			200	217		ug/L		109	39 - 156	2	23
Benzene			50.0	53.5		ug/L		107	65 - 135	1	20
Bromobenzene			50.0	51.3		ug/L		103	65 - 135	1	26
Bromochloromethane			50.0	53.7		ug/L		107	65 - 135	1	29
Bromodichloromethane			50.0	54.5		ug/L		109	65 - 135	2	20
Bromoform			50.0	53.2		ug/L		106	62 - 135	3	27
Bromomethane			50.0	43.5		ug/L		87	45 - 135	0	33
Carbon disulfide			50.0	50.1		ug/L		100	55 - 143	1	20
Carbon tetrachloride			50.0	54.1		ug/L		108	65 - 135	1	21
Chlorobenzene			50.0	52.3		ug/L		105	65 - 135	0	20
Chloroethane			50.0	46.5		ug/L		93	46 - 136	1	25
Chloroform			50.0	53.3		ug/L		107	65 - 135	1	20
Chloromethane			50.0	49.4		ug/L		99	34 - 145	2	24

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 280-559320/5
Matrix: Water
Analysis Batch: 559320

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,2-Dichloroethene			50.0	52.1		ug/L		104	65 - 135	1	20
cis-1,3-Dichloropropene			50.0	52.3		ug/L		105	65 - 135	1	26
Dibromochloromethane			50.0	53.2		ug/L		106	65 - 135	1	20
Dibromomethane			50.0	53.8		ug/L		108	65 - 135	0	26
Dichlorodifluoromethane			50.0	50.5		ug/L		101	43 - 142	9	30
Ethylbenzene			50.0	53.3		ug/L		107	65 - 135	1	20
Hexachlorobutadiene			50.0	49.3		ug/L		99	65 - 135	3	25
Isopropylbenzene			50.0	52.3		ug/L		105	65 - 135	3	20
Methylene Chloride			50.0	51.1		ug/L		102	54 - 141	1	26
Naphthalene			50.0	48.0		ug/L		96	42 - 135	4	23
n-Butylbenzene			50.0	57.1		ug/L		114	64 - 135	2	21
N-Propylbenzene			50.0	53.1		ug/L		106	65 - 135	2	20
sec-Butylbenzene			50.0	53.7		ug/L		107	64 - 135	2	21
Styrene			50.0	55.5		ug/L		111	65 - 135	0	26
tert-Butylbenzene			50.0	51.5		ug/L		103	65 - 135	1	21
Tetrachloroethene			50.0	52.9		ug/L		106	65 - 135	2	20
Toluene			50.0	52.8		ug/L		106	65 - 135	1	20
trans-1,2-Dichloroethene			50.0	51.5		ug/L		103	65 - 135	0	24
trans-1,3-Dichloropropene			50.0	54.3		ug/L		109	65 - 135	3	26
Trichloroethene			50.0	50.2		ug/L		100	65 - 135	2	20
Trichlorofluoromethane			50.0	53.8		ug/L		108	53 - 137	7	27
Vinyl chloride			50.0	48.7		ug/L		97	40 - 137	7	24

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 127*
4-Bromofluorobenzene (Surr)	*98*		*78 - 120*
Dibromofluoromethane (Surr)	*99*		*77 - 120*
Toluene-d8 (Surr)	*99*		*80 - 125*

Lab Sample ID: MB 280-559444/9
Matrix: Water
Analysis Batch: 559444

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			12/02/21 20:38	1
1,1,1-Trichloroethane	ND		1.0		ug/L			12/02/21 20:38	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			12/02/21 20:38	1
1,1,2-Trichloroethane	ND		1.0		ug/L			12/02/21 20:38	1
1,1-Dichloroethane	ND		1.0		ug/L			12/02/21 20:38	1
1,1-Dichloroethene	ND		1.0		ug/L			12/02/21 20:38	1
1,1-Dichloropropene	ND		1.0		ug/L			12/02/21 20:38	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			12/02/21 20:38	1
1,2,3-Trichloropropane	ND		1.0		ug/L			12/02/21 20:38	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			12/02/21 20:38	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			12/02/21 20:38	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			12/02/21 20:38	1
1,2-Dibromoethane	ND		1.0		ug/L			12/02/21 20:38	1
1,2-Dichlorobenzene	ND		1.0		ug/L			12/02/21 20:38	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 280-559444/9
Matrix: Water
Analysis Batch: 559444

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		1.0		ug/L			12/02/21 20:38	1
1,2-Dichloropropane	ND		1.0		ug/L			12/02/21 20:38	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			12/02/21 20:38	1
1,3-Dichlorobenzene	ND		1.0		ug/L			12/02/21 20:38	1
1,3-Dichloropropane	ND		1.0		ug/L			12/02/21 20:38	1
1,4-Dichlorobenzene	ND		1.0		ug/L			12/02/21 20:38	1
2,2-Dichloropropane	ND		5.0		ug/L			12/02/21 20:38	1
2-Butanone (MEK)	ND		6.0		ug/L			12/02/21 20:38	1
2-Chlorotoluene	ND		1.0		ug/L			12/02/21 20:38	1
2-Hexanone	ND		5.0		ug/L			12/02/21 20:38	1
4-Chlorotoluene	ND		1.0		ug/L			12/02/21 20:38	1
4-Isopropyltoluene	ND		1.0		ug/L			12/02/21 20:38	1
4-Methyl-2-pentanone	ND		5.0		ug/L			12/02/21 20:38	1
Acetone	ND		10		ug/L			12/02/21 20:38	1
Benzene	ND		1.0		ug/L			12/02/21 20:38	1
Bromobenzene	ND		1.0		ug/L			12/02/21 20:38	1
Bromochloromethane	ND		1.0		ug/L			12/02/21 20:38	1
Bromodichloromethane	ND		1.0		ug/L			12/02/21 20:38	1
Bromoform	ND		1.0		ug/L			12/02/21 20:38	1
Bromomethane	ND		2.0		ug/L			12/02/21 20:38	1
Carbon disulfide	ND		2.0		ug/L			12/02/21 20:38	1
Carbon tetrachloride	ND		1.0		ug/L			12/02/21 20:38	1
Chlorobenzene	ND		1.0		ug/L			12/02/21 20:38	1
Chloroethane	ND		2.0		ug/L			12/02/21 20:38	1
Chloroform	ND		1.0		ug/L			12/02/21 20:38	1
Chloromethane	ND		2.0		ug/L			12/02/21 20:38	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			12/02/21 20:38	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			12/02/21 20:38	1
Dibromochloromethane	ND		1.0		ug/L			12/02/21 20:38	1
Dibromomethane	ND		1.0		ug/L			12/02/21 20:38	1
Dichlorodifluoromethane	ND		2.0		ug/L			12/02/21 20:38	1
Ethylbenzene	ND		1.0		ug/L			12/02/21 20:38	1
Hexachlorobutadiene	ND		1.0		ug/L			12/02/21 20:38	1
Isopropylbenzene	ND		1.0		ug/L			12/02/21 20:38	1
Methylene Chloride	ND		5.0		ug/L			12/02/21 20:38	1
Naphthalene	ND		1.0		ug/L			12/02/21 20:38	1
n-Butylbenzene	ND		1.0		ug/L			12/02/21 20:38	1
N-Propylbenzene	ND		1.0		ug/L			12/02/21 20:38	1
sec-Butylbenzene	ND		1.0		ug/L			12/02/21 20:38	1
Styrene	ND		1.0		ug/L			12/02/21 20:38	1
tert-Butylbenzene	ND		1.0		ug/L			12/02/21 20:38	1
Tetrachloroethene	ND		1.0		ug/L			12/02/21 20:38	1
Toluene	ND		1.0		ug/L			12/02/21 20:38	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			12/02/21 20:38	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			12/02/21 20:38	1
Trichloroethene	ND		1.0		ug/L			12/02/21 20:38	1
Trichlorofluoromethane	ND		2.0		ug/L			12/02/21 20:38	1
Vinyl chloride	ND		1.0		ug/L			12/02/21 20:38	1
Xylenes (total)	ND		2.0		ug/L			12/02/21 20:38	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					12/02/21 20:38	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		70 - 127		12/02/21 20:38	1
4-Bromofluorobenzene (Surr)	99		78 - 120		12/02/21 20:38	1
Dibromofluoromethane (Surr)	103		77 - 120		12/02/21 20:38	1
Toluene-d8 (Surr)	99		80 - 125		12/02/21 20:38	1

Lab Sample ID: LCS 280-559444/4
Matrix: Water
Analysis Batch: 559444

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	51.7		ug/L		103	65 - 135
1,1,1-Trichloroethane	50.0	53.5		ug/L		107	65 - 135
1,1,2,2-Tetrachloroethane	50.0	55.6		ug/L		111	58 - 135
1,1,2-Trichloroethane	50.0	54.1		ug/L		108	64 - 135
1,1-Dichloroethane	50.0	54.9		ug/L		110	65 - 135
1,1-Dichloroethene	50.0	52.2		ug/L		104	65 - 136
1,1-Dichloropropene	50.0	56.7		ug/L		113	65 - 135
1,2,3-Trichlorobenzene	50.0	46.3		ug/L		93	60 - 135
1,2,3-Trichloropropane	50.0	52.6		ug/L		105	65 - 135
1,2,4-Trichlorobenzene	50.0	47.4		ug/L		95	58 - 135
1,2,4-Trimethylbenzene	50.0	52.9		ug/L		106	65 - 135
1,2-Dibromo-3-Chloropropane	50.0	46.5		ug/L		93	57 - 135
1,2-Dibromoethane	50.0	51.9		ug/L		104	65 - 135
1,2-Dichlorobenzene	50.0	49.6		ug/L		99	65 - 135
1,2-Dichloroethane	50.0	57.0		ug/L		114	65 - 135
1,2-Dichloropropane	50.0	57.7		ug/L		115	64 - 135
1,3,5-Trimethylbenzene	50.0	51.9		ug/L		104	65 - 135
1,3-Dichlorobenzene	50.0	50.8		ug/L		102	65 - 135
1,3-Dichloropropane	50.0	54.2		ug/L		108	64 - 135
1,4-Dichlorobenzene	50.0	49.7		ug/L		99	65 - 135
2,2-Dichloropropane	50.0	56.2		ug/L		112	65 - 135
2-Butanone (MEK)	200	241		ug/L		120	44 - 177
2-Chlorotoluene	50.0	50.2		ug/L		100	65 - 135
2-Hexanone	200	235		ug/L		117	57 - 139
4-Chlorotoluene	50.0	51.9		ug/L		104	65 - 135
4-Isopropyltoluene	50.0	54.0		ug/L		108	65 - 135
4-Methyl-2-pentanone	200	238		ug/L		119	60 - 150
Acetone	200	231		ug/L		116	39 - 156
Benzene	50.0	52.5		ug/L		105	65 - 135
Bromobenzene	50.0	50.7		ug/L		101	65 - 135
Bromochloromethane	50.0	52.0		ug/L		104	65 - 135
Bromodichloromethane	50.0	55.3		ug/L		111	65 - 135
Bromoform	50.0	55.0		ug/L		110	62 - 135
Bromomethane	50.0	43.2		ug/L		86	45 - 135
Carbon disulfide	50.0	49.1		ug/L		98	55 - 143
Carbon tetrachloride	50.0	56.2		ug/L		112	65 - 135
Chlorobenzene	50.0	51.3		ug/L		103	65 - 135
Chloroethane	50.0	45.9		ug/L		92	46 - 136

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-559444/4
Matrix: Water
Analysis Batch: 559444

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroform	50.0	53.4		ug/L		107	65 - 135
Chloromethane	50.0	49.0		ug/L		98	34 - 145
cis-1,2-Dichloroethene	50.0	51.5		ug/L		103	65 - 135
cis-1,3-Dichloropropene	50.0	51.2		ug/L		102	65 - 135
Dibromochloromethane	50.0	53.2		ug/L		106	65 - 135
Dibromomethane	50.0	52.8		ug/L		106	65 - 135
Dichlorodifluoromethane	50.0	51.1		ug/L		102	43 - 142
Ethylbenzene	50.0	53.0		ug/L		106	65 - 135
Hexachlorobutadiene	50.0	49.5		ug/L		99	65 - 135
Isopropylbenzene	50.0	52.9		ug/L		106	65 - 135
Methylene Chloride	50.0	49.6		ug/L		99	54 - 141
Naphthalene	50.0	46.3		ug/L		93	42 - 135
n-Butylbenzene	50.0	57.2		ug/L		114	64 - 135
N-Propylbenzene	50.0	52.0		ug/L		104	65 - 135
sec-Butylbenzene	50.0	53.7		ug/L		107	64 - 135
Styrene	50.0	54.6		ug/L		109	65 - 135
tert-Butylbenzene	50.0	51.4		ug/L		103	65 - 135
Tetrachloroethene	50.0	52.9		ug/L		106	65 - 135
Toluene	50.0	52.7		ug/L		105	65 - 135
trans-1,2-Dichloroethene	50.0	50.0		ug/L		100	65 - 135
trans-1,3-Dichloropropene	50.0	53.5		ug/L		107	65 - 135
Trichloroethene	50.0	49.7		ug/L		99	65 - 135
Trichlorofluoromethane	50.0	56.9		ug/L		114	53 - 137
Vinyl chloride	50.0	49.2		ug/L		98	40 - 137

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 127*
4-Bromofluorobenzene (Surr)	*98*		*78 - 120*
Dibromofluoromethane (Surr)	*99*		*77 - 120*
Toluene-d8 (Surr)	*98*		*80 - 125*

Lab Sample ID: LCSD 280-559444/5
Matrix: Water
Analysis Batch: 559444

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	50.0	51.4		ug/L		103	65 - 135	0	20
1,1,1-Trichloroethane	50.0	52.5		ug/L		105	65 - 135	2	20
1,1,2,2-Tetrachloroethane	50.0	55.5		ug/L		111	58 - 135	0	20
1,1,2-Trichloroethane	50.0	52.0		ug/L		104	64 - 135	4	27
1,1-Dichloroethane	50.0	54.2		ug/L		108	65 - 135	1	21
1,1-Dichloroethene	50.0	51.4		ug/L		103	65 - 136	2	20
1,1-Dichloropropene	50.0	55.2		ug/L		110	65 - 135	3	21
1,2,3-Trichlorobenzene	50.0	48.0		ug/L		96	60 - 135	4	36
1,2,3-Trichloropropane	50.0	53.0		ug/L		106	65 - 135	1	23
1,2,4-Trichlorobenzene	50.0	48.9		ug/L		98	58 - 135	3	25
1,2,4-Trimethylbenzene	50.0	54.3		ug/L		109	65 - 135	3	20
1,2-Dibromo-3-Chloropropane	50.0	47.8		ug/L		96	57 - 135	3	22

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 280-559444/5
Matrix: Water
Analysis Batch: 559444

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromoethane	50.0	51.3		ug/L		103	65 - 135	1	27
1,2-Dichlorobenzene	50.0	50.1		ug/L		100	65 - 135	1	20
1,2-Dichloroethane	50.0	56.0		ug/L		112	65 - 135	2	20
1,2-Dichloropropane	50.0	57.3		ug/L		115	64 - 135	1	20
1,3,5-Trimethylbenzene	50.0	53.8		ug/L		108	65 - 135	4	20
1,3-Dichlorobenzene	50.0	51.5		ug/L		103	65 - 135	1	20
1,3-Dichloropropane	50.0	53.8		ug/L		108	64 - 135	1	20
1,4-Dichlorobenzene	50.0	51.0		ug/L		102	65 - 135	3	23
2,2-Dichloropropane	50.0	55.4		ug/L		111	65 - 135	1	20
2-Butanone (MEK)	200	237		ug/L		118	44 - 177	2	32
2-Chlorotoluene	50.0	52.0		ug/L		104	65 - 135	4	20
2-Hexanone	200	224		ug/L		112	57 - 139	4	25
4-Chlorotoluene	50.0	52.2		ug/L		104	65 - 135	1	20
4-Isopropyltoluene	50.0	55.2		ug/L		110	65 - 135	2	20
4-Methyl-2-pentanone	200	225		ug/L		113	60 - 150	5	22
Acetone	200	219		ug/L		110	39 - 156	5	23
Benzene	50.0	52.1		ug/L		104	65 - 135	1	20
Bromobenzene	50.0	51.4		ug/L		103	65 - 135	1	26
Bromochloromethane	50.0	52.0		ug/L		104	65 - 135	0	29
Bromodichloromethane	50.0	53.7		ug/L		107	65 - 135	3	20
Bromoform	50.0	53.0		ug/L		106	62 - 135	4	27
Bromomethane	50.0	42.9		ug/L		86	45 - 135	1	33
Carbon disulfide	50.0	49.0		ug/L		98	55 - 143	0	20
Carbon tetrachloride	50.0	54.8		ug/L		110	65 - 135	2	21
Chlorobenzene	50.0	50.9		ug/L		102	65 - 135	1	20
Chloroethane	50.0	46.2		ug/L		92	46 - 136	1	25
Chloroform	50.0	52.8		ug/L		106	65 - 135	1	20
Chloromethane	50.0	48.4		ug/L		97	34 - 145	1	24
cis-1,2-Dichloroethene	50.0	50.8		ug/L		102	65 - 135	1	20
cis-1,3-Dichloropropene	50.0	50.9		ug/L		102	65 - 135	1	26
Dibromochloromethane	50.0	52.6		ug/L		105	65 - 135	1	20
Dibromomethane	50.0	52.2		ug/L		104	65 - 135	1	26
Dichlorodifluoromethane	50.0	50.6		ug/L		101	43 - 142	1	30
Ethylbenzene	50.0	52.0		ug/L		104	65 - 135	2	20
Hexachlorobutadiene	50.0	49.3		ug/L		99	65 - 135	0	25
Isopropylbenzene	50.0	53.9		ug/L		108	65 - 135	2	20
Methylene Chloride	50.0	49.3		ug/L		99	54 - 141	1	26
Naphthalene	50.0	47.5		ug/L		95	42 - 135	2	23
n-Butylbenzene	50.0	58.7		ug/L		117	64 - 135	3	21
N-Propylbenzene	50.0	53.3		ug/L		107	65 - 135	2	20
sec-Butylbenzene	50.0	54.9		ug/L		110	64 - 135	2	21
Styrene	50.0	54.2		ug/L		108	65 - 135	1	26
tert-Butylbenzene	50.0	53.2		ug/L		106	65 - 135	4	21
Tetrachloroethene	50.0	52.0		ug/L		104	65 - 135	2	20
Toluene	50.0	52.2		ug/L		104	65 - 135	1	20
trans-1,2-Dichloroethene	50.0	49.5		ug/L		99	65 - 135	1	24
trans-1,3-Dichloropropene	50.0	53.0		ug/L		106	65 - 135	1	26
Trichloroethene	50.0	50.7		ug/L		101	65 - 135	2	20
Trichlorofluoromethane	50.0	57.0		ug/L		114	53 - 137	0	27

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 280-559444/5
Matrix: Water
Analysis Batch: 559444

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vinyl chloride			50.0	49.2		ug/L		98	40 - 137	0	24

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 127*
4-Bromofluorobenzene (Surr)	*98*		*78 - 120*
Dibromofluoromethane (Surr)	*97*		*77 - 120*
Toluene-d8 (Surr)	*98*		*80 - 125*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 280-558430/1-A
Matrix: Water
Analysis Batch: 558612

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 558430

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		500		ug/L		11/23/21 15:30	11/24/21 04:43	1
Iron	ND		30		ug/L		11/23/21 15:30	11/24/21 04:43	1
Magnesium	ND		200		ug/L		11/23/21 15:30	11/24/21 04:43	1
Manganese	ND		3.0		ug/L		11/23/21 15:30	11/24/21 04:43	1
Potassium	ND		500		ug/L		11/23/21 15:30	11/24/21 04:43	1
Sodium	ND		1000		ug/L		11/23/21 15:30	11/24/21 04:43	1

Lab Sample ID: LCS 280-558430/2-A
Matrix: Water
Analysis Batch: 558612

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 558430

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Calcium			50000	48600		ug/L		97	90 - 111		
Iron			10000	9840		ug/L		98	89 - 115		
Magnesium			50000	49900		ug/L		100	90 - 113		
Manganese			1000	1000		ug/L		100	90 - 110		
Potassium			50000	50000		ug/L		100	89 - 114		
Sodium			50000	48500		ug/L		97	90 - 115		

Lab Sample ID: MB 280-558659/1-A
Matrix: Water
Analysis Batch: 558877

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 558659

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100		ug/L		11/26/21 06:09	11/26/21 18:15	1
Molybdenum	ND		20		ug/L		11/26/21 06:09	11/26/21 18:15	1
Silicon	ND		100		ug/L		11/26/21 06:09	11/26/21 18:15	1
Silver	ND		3.0		ug/L		11/26/21 06:09	11/26/21 18:15	1
Zinc	ND		26		ug/L		11/26/21 06:09	11/26/21 18:15	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 280-558659/2-A
Matrix: Water
Analysis Batch: 558877

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 558659

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Boron			1000	1020		ug/L		102	86 - 110		
Molybdenum			1000	994		ug/L		99	90 - 110		
Silicon			2000	2000		ug/L		100	90 - 110		
Silver			50.0	51.9		ug/L		104	86 - 115		
Zinc			500	477		ug/L		95	85 - 111		

Lab Sample ID: 280-155961-C-1-B MS
Matrix: Water
Analysis Batch: 558877

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 558659

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Boron	ND		1000	1100		ug/L		102	87 - 113		
Molybdenum	ND		1000	994		ug/L		99	83 - 109		
Silicon	8300		2000	10100	4	ug/L		91	79 - 140		
Silver	ND		50.0	52.1		ug/L		104	75 - 141		
Zinc	ND		500	477		ug/L		95	60 - 137		

Lab Sample ID: 280-155961-C-1-C MSD
Matrix: Water
Analysis Batch: 558877

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 558659

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	ND		1000	1140		ug/L		105	87 - 113	3	20
Molybdenum	ND		1000	1030		ug/L		102	83 - 109	3	20
Silicon	8300		2000	10500	4	ug/L		111	79 - 140	4	20
Silver	ND		50.0	53.5		ug/L		107	75 - 141	3	20
Zinc	ND		500	489		ug/L		98	60 - 137	3	20

Lab Sample ID: 280-155959-B-2-B MS
Matrix: Water
Analysis Batch: 558612

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 558430

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Calcium	130000		50000	172000		ug/L		94	48 - 153		
Iron	350000		10000	359000	4	ug/L		60	52 - 155		
Magnesium	81000		50000	131000		ug/L		100	62 - 146		
Manganese	5600		1000	6480	4	ug/L		91	79 - 121		
Potassium	14000		50000	65500		ug/L		104	76 - 132		
Sodium	52000		50000	106000		ug/L		107	70 - 203		

Lab Sample ID: 280-155959-B-2-C MSD
Matrix: Water
Analysis Batch: 558612

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 558430

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium	130000		50000	174000		ug/L		97	48 - 153	1	20
Iron	350000		10000	362000	4	ug/L		89	52 - 155	1	20
Magnesium	81000		50000	132000		ug/L		102	62 - 146	1	20
Manganese	5600		1000	6530	4	ug/L		97	79 - 121	1	20

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 280-155959-B-2-C MSD
Matrix: Water
Analysis Batch: 558612

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 558430

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Potassium	14000		50000	66300		ug/L		105	76 - 132	1	20
Sodium	52000		50000	107000		ug/L		109	70 - 203	1	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 280-558431/1-A
Matrix: Water
Analysis Batch: 559120

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 558431

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.60		ug/L		11/23/21 15:40	11/29/21 23:27	1
Arsenic	ND		1.0		ug/L		11/23/21 15:40	11/29/21 23:27	1
Barium	ND		1.0		ug/L		11/23/21 15:40	11/29/21 23:27	1
Beryllium	ND	^+	0.40		ug/L		11/23/21 15:40	11/29/21 23:27	1
Cadmium	ND		0.30		ug/L		11/23/21 15:40	11/29/21 23:27	1
Chromium	ND		2.0		ug/L		11/23/21 15:40	11/29/21 23:27	1
Cobalt	ND		0.20		ug/L		11/23/21 15:40	11/29/21 23:27	1
Copper	ND		1.0		ug/L		11/23/21 15:40	11/29/21 23:27	1
Lead	ND		0.50		ug/L		11/23/21 15:40	11/29/21 23:27	1
Nickel	ND		1.0		ug/L		11/23/21 15:40	11/29/21 23:27	1
Selenium	ND		1.0		ug/L		11/23/21 15:40	11/29/21 23:27	1
Thallium	ND		0.20		ug/L		11/23/21 15:40	11/29/21 23:27	1
Vanadium	ND		3.0		ug/L		11/23/21 15:40	11/29/21 23:27	1

Lab Sample ID: LCS 280-558431/2-A
Matrix: Water
Analysis Batch: 559120

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 558431

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	40.0	40.3		ug/L		101	85 - 115
Arsenic	40.0	38.1		ug/L		95	85 - 117
Barium	40.0	40.9		ug/L		102	85 - 118
Beryllium	40.0	39.1	^+	ug/L		98	80 - 125
Cadmium	40.0	39.8		ug/L		99	85 - 115
Chromium	40.0	40.3		ug/L		101	84 - 121
Cobalt	40.0	39.8		ug/L		100	85 - 120
Copper	40.0	40.0		ug/L		100	85 - 119
Lead	40.0	40.0		ug/L		100	85 - 118
Nickel	40.0	40.3		ug/L		101	85 - 119
Selenium	40.0	38.4		ug/L		96	77 - 122
Thallium	40.0	39.9		ug/L		100	85 - 118
Vanadium	40.0	39.8		ug/L		100	85 - 120

Lab Sample ID: 280-155810-C-1-E MS
Matrix: Water
Analysis Batch: 559120

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 558431

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	ND		40.0	40.1		ug/L		100	85 - 115
Arsenic	1.5		40.0	39.7		ug/L		96	85 - 117

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 280-155810-C-1-E MS
Matrix: Water
Analysis Batch: 559120

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 558431

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	8.4		40.0	47.8		ug/L		98	85 - 118
Beryllium	ND	^+	40.0	44.8	^+	ug/L		112	80 - 125
Cadmium	ND		40.0	38.3		ug/L		96	85 - 115
Chromium	ND		40.0	38.7		ug/L		97	84 - 121
Cobalt	2.2		40.0	40.5		ug/L		96	85 - 120
Copper	ND		40.0	37.3		ug/L		93	85 - 119
Lead	ND		40.0	39.1		ug/L		97	85 - 118
Nickel	8.7		40.0	47.6		ug/L		97	85 - 119
Selenium	ND		40.0	40.4		ug/L		101	77 - 122
Thallium	0.21		40.0	37.5		ug/L		93	85 - 118
Vanadium	ND		40.0	40.6		ug/L		102	85 - 120

Lab Sample ID: 280-155810-C-1-F MSD
Matrix: Water
Analysis Batch: 559120

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 558431

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	ND		40.0	40.7		ug/L		102	85 - 115	1	20
Arsenic	1.5		40.0	39.7		ug/L		95	85 - 117	0	20
Barium	8.4		40.0	49.1		ug/L		102	85 - 118	3	20
Beryllium	ND	^+	40.0	42.4	^+	ug/L		106	80 - 125	5	20
Cadmium	ND		40.0	38.0		ug/L		95	85 - 115	1	20
Chromium	ND		40.0	39.2		ug/L		98	84 - 121	1	20
Cobalt	2.2		40.0	40.5		ug/L		96	85 - 120	0	20
Copper	ND		40.0	37.6		ug/L		94	85 - 119	1	20
Lead	ND		40.0	38.2		ug/L		95	85 - 118	2	20
Nickel	8.7		40.0	46.5		ug/L		95	85 - 119	2	20
Selenium	ND		40.0	38.2		ug/L		96	77 - 122	6	20
Thallium	0.21		40.0	38.3		ug/L		95	85 - 118	2	20
Vanadium	ND		40.0	40.8		ug/L		102	85 - 120	0	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 280-559319/1-A
Matrix: Water
Analysis Batch: 559609

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 559319

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20		ug/L		12/03/21 15:00	12/03/21 20:48	1

Lab Sample ID: LCS 280-559319/2-A
Matrix: Water
Analysis Batch: 559609

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 559319

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	4.74		ug/L		95	84 - 120

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCSD 280-559319/3-A
Matrix: Water
Analysis Batch: 559609

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 559319

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury			5.00	4.54		ug/L		91	84 - 120	4	15

Lab Sample ID: 280-156118-A-3-E MS
Matrix: Water
Analysis Batch: 559609

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 559319

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		5.00	4.75		ug/L		94	75 - 125

Lab Sample ID: 280-156118-A-3-F MSD
Matrix: Water
Analysis Batch: 559609

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 559319

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		5.00	4.75		ug/L		94	75 - 125	0	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 280-559379/98
Matrix: Water
Analysis Batch: 559379

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0		mg/L			12/03/21 10:46	1
Sulfate	ND		5.0		mg/L			12/03/21 10:46	1

Lab Sample ID: LCS 280-559379/96
Matrix: Water
Analysis Batch: 559379

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride			100	101		mg/L		101	90 - 110
Sulfate			100	101		mg/L		101	90 - 110

Lab Sample ID: LCSD 280-559379/97
Matrix: Water
Analysis Batch: 559379

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			100	101		mg/L		101	90 - 110	0	10
Sulfate			100	101		mg/L		101	90 - 110	0	10

Lab Sample ID: MRL 280-559379/3
Matrix: Water
Analysis Batch: 559379

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride			5.00	4.49		mg/L		90	50 - 150
Sulfate			5.00	ND		mg/L		85	50 - 150

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 280-155883-A-16 MS
Matrix: Water
Analysis Batch: 559379

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	220	E	50.0	270	E 4	mg/L		98	80 - 120		
Sulfate	18		50.0	73.7		mg/L		112	80 - 120		

Lab Sample ID: 280-155883-A-16 MSD
Matrix: Water
Analysis Batch: 559379

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	220	E	50.0	269	E 4	mg/L		97	80 - 120	0	20
Sulfate	18		50.0	72.4		mg/L		109	80 - 120	2	20

Lab Sample ID: 280-155883-A-16 DU
Matrix: Water
Analysis Batch: 559379

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	220	E	219	E	mg/L		1	15
Sulfate	18		17.6		mg/L		1	15

Lab Sample ID: MB 280-560175/13
Matrix: Water
Analysis Batch: 560175

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0		mg/L			12/09/21 17:38	1

Lab Sample ID: LCS 280-560175/11
Matrix: Water
Analysis Batch: 560175

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	100	94.0		mg/L		94	90 - 110		

Lab Sample ID: LCSD 280-560175/12
Matrix: Water
Analysis Batch: 560175

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	100	94.3		mg/L		94	90 - 110	0	10

Lab Sample ID: MRL 280-560175/10
Matrix: Water
Analysis Batch: 560175

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	5.00	4.01		mg/L		80	50 - 150		

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 280-156602-E-1 MS
Matrix: Water
Analysis Batch: 560175

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	1600	E	50.0	1660	E 4	mg/L		37	80 - 120		

Lab Sample ID: 280-156602-E-1 MSD
Matrix: Water
Analysis Batch: 560175

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1600	E	50.0	1660	E 4	mg/L		37	80 - 120	0	20

Lab Sample ID: 280-156602-E-1 DU
Matrix: Water
Analysis Batch: 560175

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Chloride	1600	E		1640	E	mg/L				0.2	15

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-559569/20
Matrix: Water
Analysis Batch: 559569

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.040		mg/L			12/03/21 13:21	1

Lab Sample ID: MB 280-559569/66
Matrix: Water
Analysis Batch: 559569

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.040		mg/L			12/03/21 15:15	1

Lab Sample ID: LCS 280-559569/18
Matrix: Water
Analysis Batch: 559569

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia as N			2.50	2.44		mg/L		98	90 - 110		

Lab Sample ID: LCS 280-559569/64
Matrix: Water
Analysis Batch: 559569

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia as N			2.50	2.46		mg/L		98	90 - 110		

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: LCSD 280-559569/19
Matrix: Water
Analysis Batch: 559569

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N			2.50	2.46		mg/L		98	90 - 110	1	10

Lab Sample ID: LCSD 280-559569/65
Matrix: Water
Analysis Batch: 559569

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N			2.50	2.46		mg/L		98	90 - 110	0	10

Lab Sample ID: 280-155883-B-10 MS
Matrix: Water
Analysis Batch: 559569

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia as N	0.067		1.00	0.993		mg/L		93	90 - 110		

Lab Sample ID: 280-155883-B-10 MSD
Matrix: Water
Analysis Batch: 559569

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N	0.067		1.00	1.03		mg/L		96	90 - 110	3	10

Lab Sample ID: MB 280-559615/20
Matrix: Water
Analysis Batch: 559615

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.040		mg/L			12/04/21 10:37	1

Lab Sample ID: LCS 280-559615/18
Matrix: Water
Analysis Batch: 559615

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia as N			2.50	2.54		mg/L		101	90 - 110		

Lab Sample ID: LCSD 280-559615/19
Matrix: Water
Analysis Batch: 559615

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N			2.50	2.53		mg/L		101	90 - 110	0	10

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 280-559644/2-A
Matrix: Water
Analysis Batch: 559753

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 559644

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen	ND		1.0		mg/L		12/05/21 16:30	12/06/21 17:50	1

Lab Sample ID: LCS 280-559644/1-A
Matrix: Water
Analysis Batch: 559753

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 559644

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Kjeldahl Nitrogen	6.00	5.90		mg/L		98	90 - 110

Lab Sample ID: 280-155749-B-1-B MS
Matrix: Water
Analysis Batch: 559753

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 559644

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Kjeldahl Nitrogen	ND	F1	3.00	1.71	F1	mg/L		57	90 - 110

Lab Sample ID: 280-155749-B-1-C MSD
Matrix: Water
Analysis Batch: 559753

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 559644

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Kjeldahl Nitrogen	ND	F1	3.00	1.71	F1	mg/L		57	90 - 110	0	25

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-559192/106
Matrix: Water
Analysis Batch: 559192

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	ND		0.10		mg/L			11/30/21 20:14	1

Lab Sample ID: LCS 280-559192/105
Matrix: Water
Analysis Batch: 559192

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate Nitrite as N	5.00	5.20		mg/L		104	90 - 110

Lab Sample ID: 280-155806-B-7 MS
Matrix: Water
Analysis Batch: 559192

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate Nitrite as N	ND		4.00	3.99		mg/L		99	90 - 110

Method: 353.2 - Nitrogen, Nitrate-Nitrite (Continued)

Lab Sample ID: 280-155806-B-7 MSD
Matrix: Water
Analysis Batch: 559192

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate Nitrite as N	ND		4.00	4.14		mg/L		103	90 - 110	3	10

Lab Sample ID: MB 280-559452/60
Matrix: Water
Analysis Batch: 559452

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	ND		0.10		mg/L			12/02/21 18:38	1

Lab Sample ID: LCS 280-559452/59
Matrix: Water
Analysis Batch: 559452

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate Nitrite as N	5.00	4.92		mg/L		98	90 - 110

Lab Sample ID: 280-155961-B-6 MS
Matrix: Water
Analysis Batch: 559452

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate Nitrite as N	ND		4.00	4.26		mg/L		106	90 - 110

Lab Sample ID: 280-155961-B-6 MSD
Matrix: Water
Analysis Batch: 559452

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate Nitrite as N	ND		4.00	4.21		mg/L		105	90 - 110	1	10

Method: 410.4 - COD

Lab Sample ID: MB 280-558861/36
Matrix: Water
Analysis Batch: 558861

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (COD)	ND		20		mg/L			11/28/21 08:48	1

Lab Sample ID: LCS 280-558861/34
Matrix: Water
Analysis Batch: 558861

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand (COD)	100	97.0		mg/L		97	90 - 110

Method: 410.4 - COD (Continued)

Lab Sample ID: LCSD 280-558861/35
Matrix: Water
Analysis Batch: 558861

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chemical Oxygen Demand (COD)			100	92.9		mg/L		93	90 - 110	4	11

Lab Sample ID: 280-155805-B-3 MS
Matrix: Water
Analysis Batch: 558861

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chemical Oxygen Demand (COD)	ND	F1	50.0	64.1	F1	mg/L		128	90 - 110		

Lab Sample ID: 280-155805-B-3 MSD
Matrix: Water
Analysis Batch: 558861

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chemical Oxygen Demand (COD)	ND	F1	50.0	66.2	F1	mg/L		132	90 - 110	3	11

Lab Sample ID: MB 280-559096/5
Matrix: Water
Analysis Batch: 559096

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (COD)	ND		20		mg/L			11/30/21 10:25	1

Lab Sample ID: LCS 280-559096/3
Matrix: Water
Analysis Batch: 559096

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chemical Oxygen Demand (COD)			100	94.6		mg/L		95	90 - 110		

Lab Sample ID: LCSD 280-559096/4
Matrix: Water
Analysis Batch: 559096

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chemical Oxygen Demand (COD)			100	102		mg/L		102	90 - 110	8	11

Lab Sample ID: 280-155701-D-1 MS
Matrix: Water
Analysis Batch: 559096

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chemical Oxygen Demand (COD)	ND		50.0	50.6		mg/L		101	90 - 110		

Lab Sample ID: 280-155701-D-1 MSD
Matrix: Water
Analysis Batch: 559096

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chemical Oxygen Demand (COD)	ND		50.0	49.6		mg/L		99	90 - 110	2	11

Method: 9040B - pH

Lab Sample ID: 280-155808-A-2 DU
Matrix: Water
Analysis Batch: 559549

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH adj. to 25 deg C	8.3			8.3		SU				0	5

Method: 9050A - Specific Conductance

Lab Sample ID: MB 280-559531/5
Matrix: Water
Analysis Batch: 559531

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	ND		2.0		umhos/cm			12/03/21 12:07	1

Lab Sample ID: LCS 280-559531/4
Matrix: Water
Analysis Batch: 559531

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Specific Conductance			1410	1420		umhos/cm		101	90 - 110		

Lab Sample ID: 280-156088-C-1 DU
Matrix: Water
Analysis Batch: 559531

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Specific Conductance	540			539		umhos/cm				0.2	10

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 280-560125/4
Matrix: Water
Analysis Batch: 560125

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Average	ND		1.0		mg/L			12/08/21 17:31	1

Lab Sample ID: LCS 280-560125/3
Matrix: Water
Analysis Batch: 560125

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon - Average			25.0	24.1		mg/L		96	88 - 112		

Lab Sample ID: 280-156049-A-2 MS
Matrix: Water
Analysis Batch: 560125

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon - Average	2.1		25.0	26.6		mg/L		98	88 - 112		

Method: 9060 - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: 280-156049-A-2 MSD
Matrix: Water
Analysis Batch: 560125

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Average	2.1		25.0	26.6		mg/L		98	88 - 112	0	15

Method: SM 1030E (meq) - Cation Anion Balance

Lab Sample ID: MB 280-560056/1
Matrix: Water
Analysis Batch: 560056

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	0.000				meq/L			12/08/21 17:48	1
Magnesium	0.000				meq/L			12/08/21 17:48	1
Potassium	0.000				meq/L			12/08/21 17:48	1
Sodium	0.000				meq/L			12/08/21 17:48	1
Iron	0.000				meq/L			12/08/21 17:48	1
Ammonia	0.000				meq/L			12/08/21 17:48	1
Ammonia as N	0.000				meq/L			12/08/21 17:48	1
Chloride	0.000				meq/L			12/08/21 17:48	1
Sulfate	0.000				meq/L			12/08/21 17:48	1
Nitrate Nitrite as N	0.000				meq/L			12/08/21 17:48	1
Nitrate/Nitrite	0.000				meq/L			12/08/21 17:48	1
Alkalinity	0.000				meq/L			12/08/21 17:48	1
Total Alkalinity	0.000				meq/L			12/08/21 17:48	1
Carbonate Alkalinity	0.000				meq/L			12/08/21 17:48	1
Carbonate Alkalinity as CaCO3	0.000				meq/L			12/08/21 17:48	1
Bicarbonate Alkalinity	0.000				meq/L			12/08/21 17:48	1
Bicarbonate Alkalinity as CaCO3	0.000				meq/L			12/08/21 17:48	1

Lab Sample ID: MB 280-560422/1
Matrix: Water
Analysis Batch: 560422

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	0.000				meq/L			12/13/21 08:55	1
Magnesium	0.000				meq/L			12/13/21 08:55	1
Potassium	0.000				meq/L			12/13/21 08:55	1
Sodium	0.000				meq/L			12/13/21 08:55	1
Iron	0.000				meq/L			12/13/21 08:55	1
Ammonia	0.000				meq/L			12/13/21 08:55	1
Ammonia as N	0.000				meq/L			12/13/21 08:55	1
Chloride	0.000				meq/L			12/13/21 08:55	1
Sulfate	0.000				meq/L			12/13/21 08:55	1
Nitrate Nitrite as N	0.000				meq/L			12/13/21 08:55	1
Nitrate/Nitrite	0.000				meq/L			12/13/21 08:55	1
Alkalinity	0.000				meq/L			12/13/21 08:55	1
Total Alkalinity	0.000				meq/L			12/13/21 08:55	1
Carbonate Alkalinity	0.000				meq/L			12/13/21 08:55	1
Carbonate Alkalinity as CaCO3	0.000				meq/L			12/13/21 08:55	1
Bicarbonate Alkalinity	0.000				meq/L			12/13/21 08:55	1
Bicarbonate Alkalinity as CaCO3	0.000				meq/L			12/13/21 08:55	1

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-559366/31
Matrix: Water
Analysis Batch: 559366

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	ND		10		mg/L			12/01/21 17:56	1
Bicarbonate Alkalinity	ND		10		mg/L			12/01/21 17:56	1
Carbonate Alkalinity	ND		10		mg/L			12/01/21 17:56	1

Lab Sample ID: MB 280-559366/5
Matrix: Water
Analysis Batch: 559366

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	ND		10		mg/L			12/01/21 15:17	1
Bicarbonate Alkalinity	ND		10		mg/L			12/01/21 15:17	1
Carbonate Alkalinity	ND		10		mg/L			12/01/21 15:17	1

Lab Sample ID: LCS 280-559366/30
Matrix: Water
Analysis Batch: 559366

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Alkalinity			200	215		mg/L		108	89 - 109		

Lab Sample ID: 280-155957-A-4 DU
Matrix: Water
Analysis Batch: 559366

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Alkalinity	210			221		mg/L				3	10
Bicarbonate Alkalinity	210			221		mg/L				3	20
Carbonate Alkalinity	ND			ND		mg/L				NC	20

Lab Sample ID: MB 280-559468/31
Matrix: Water
Analysis Batch: 559468

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	ND		10		mg/L			12/02/21 17:23	1
Bicarbonate Alkalinity	ND		10		mg/L			12/02/21 17:23	1
Carbonate Alkalinity	ND		10		mg/L			12/02/21 17:23	1

Lab Sample ID: LCS 280-559468/30
Matrix: Water
Analysis Batch: 559468

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Alkalinity			200	215		mg/L		107	89 - 109		

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: 280-155961-A-7 DU
Matrix: Water
Analysis Batch: 559468

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity	320		317		mg/L		0	10
Bicarbonate Alkalinity	320		317		mg/L		0	20
Carbonate Alkalinity	ND		ND		mg/L		NC	20

Method: SM 2340C - Hardness, Total (mg/l as CaC03)

Lab Sample ID: MB 280-559979/2
Matrix: Water
Analysis Batch: 559979

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness, as CaCO3	ND		3.0		mg/L			12/08/21 10:46	1

Lab Sample ID: LCS 280-559979/1
Matrix: Water
Analysis Batch: 559979

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hardness, as CaCO3	398	401		mg/L		101	90 - 110

Lab Sample ID: 280-156316-C-2 MS
Matrix: Water
Analysis Batch: 559979

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Hardness, as CaCO3	41		398	427		mg/L		97	90 - 110

Lab Sample ID: 280-156316-C-2 MSD
Matrix: Water
Analysis Batch: 559979

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Hardness, as CaCO3	41		398	408		mg/L		92	90 - 110	5	10

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 280-558626/1
Matrix: Water
Analysis Batch: 558626

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10		mg/L			11/24/21 08:13	1

Lab Sample ID: LCS 280-558626/2
Matrix: Water
Analysis Batch: 558626

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	503	509		mg/L		101	88 - 114

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: 280-156009-A-2 DU
Matrix: Water
Analysis Batch: 558626

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	110			124	F3	mg/L				12	10

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 280-558704/1
Matrix: Water
Analysis Batch: 558704

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0		mg/L			11/24/21 16:20	1

Lab Sample ID: LCS 280-558704/2
Matrix: Water
Analysis Batch: 558704

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Suspended Solids			100	97.2		mg/L		97	79 - 114		

Lab Sample ID: 280-155952-D-9 DU
Matrix: Water
Analysis Batch: 558704

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Suspended Solids	ND			ND		mg/L				NC	10

GC/MS VOA

Analysis Batch: 559320

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155912-2	LPOND LDS	Total/NA	Water	8260B	
280-155912-3	LEACH-POND-	Total/NA	Water	8260B	
MB 280-559320/9	Method Blank	Total/NA	Water	8260B	
LCS 280-559320/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-559320/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 559444

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155912-1	TB2	Total/NA	Water	8260B	
MB 280-559444/9	Method Blank	Total/NA	Water	8260B	
LCS 280-559444/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-559444/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Metals

Prep Batch: 558430

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155912-2	LPOND LDS	Dissolved	Water	3005A	
280-155912-3	LEACH-POND-	Dissolved	Water	3005A	
MB 280-558430/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-558430/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-155959-B-2-B MS	Matrix Spike	Dissolved	Water	3005A	
280-155959-B-2-C MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	

Prep Batch: 558431

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155912-2	LPOND LDS	Total Recoverable	Water	3005A	
280-155912-3	LEACH-POND-	Total Recoverable	Water	3005A	
MB 280-558431/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-558431/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-155810-C-1-E MS	Matrix Spike	Total Recoverable	Water	3005A	
280-155810-C-1-F MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Analysis Batch: 558612

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155912-2	LPOND LDS	Dissolved	Water	6010B	558430
280-155912-3	LEACH-POND-	Dissolved	Water	6010B	558430
MB 280-558430/1-A	Method Blank	Total Recoverable	Water	6010B	558430
LCS 280-558430/2-A	Lab Control Sample	Total Recoverable	Water	6010B	558430
280-155959-B-2-B MS	Matrix Spike	Dissolved	Water	6010B	558430
280-155959-B-2-C MSD	Matrix Spike Duplicate	Dissolved	Water	6010B	558430

Prep Batch: 558659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155912-2	LPOND LDS	Total Recoverable	Water	3005A	
280-155912-3	LEACH-POND-	Total Recoverable	Water	3005A	
MB 280-558659/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-558659/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-155961-C-1-B MS	Matrix Spike	Total Recoverable	Water	3005A	
280-155961-C-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Metals

Analysis Batch: 558877

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155912-2	LPOND LDS	Total Recoverable	Water	6010B	558659
280-155912-3	LEACH-POND-	Total Recoverable	Water	6010B	558659
MB 280-558659/1-A	Method Blank	Total Recoverable	Water	6010B	558659
LCS 280-558659/2-A	Lab Control Sample	Total Recoverable	Water	6010B	558659
280-155961-C-1-B MS	Matrix Spike	Total Recoverable	Water	6010B	558659
280-155961-C-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	6010B	558659

Analysis Batch: 559120

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155912-2	LPOND LDS	Total Recoverable	Water	6020	558431
280-155912-3	LEACH-POND-	Total Recoverable	Water	6020	558431
MB 280-558431/1-A	Method Blank	Total Recoverable	Water	6020	558431
LCS 280-558431/2-A	Lab Control Sample	Total Recoverable	Water	6020	558431
280-155810-C-1-E MS	Matrix Spike	Total Recoverable	Water	6020	558431
280-155810-C-1-F MSD	Matrix Spike Duplicate	Total Recoverable	Water	6020	558431

Analysis Batch: 559208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155912-2	LPOND LDS	Total Recoverable	Water	6020	558431
280-155912-3	LEACH-POND-	Total Recoverable	Water	6020	558431

Prep Batch: 559319

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155912-2	LPOND LDS	Total/NA	Water	7470A	
280-155912-3	LEACH-POND-	Total/NA	Water	7470A	
MB 280-559319/1-A	Method Blank	Total/NA	Water	7470A	
LCS 280-559319/2-A	Lab Control Sample	Total/NA	Water	7470A	
LCSD 280-559319/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	
280-156118-A-3-E MS	Matrix Spike	Total/NA	Water	7470A	
280-156118-A-3-F MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Analysis Batch: 559609

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155912-2	LPOND LDS	Total/NA	Water	7470A	559319
280-155912-3	LEACH-POND-	Total/NA	Water	7470A	559319
MB 280-559319/1-A	Method Blank	Total/NA	Water	7470A	559319
LCS 280-559319/2-A	Lab Control Sample	Total/NA	Water	7470A	559319
LCSD 280-559319/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	559319
280-156118-A-3-E MS	Matrix Spike	Total/NA	Water	7470A	559319
280-156118-A-3-F MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	559319

General Chemistry

Analysis Batch: 558626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155912-2	LPOND LDS	Total/NA	Water	SM 2540C	
280-155912-3	LEACH-POND-	Total/NA	Water	SM 2540C	
MB 280-558626/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-558626/2	Lab Control Sample	Total/NA	Water	SM 2540C	
280-156009-A-2 DU	Duplicate	Total/NA	Water	SM 2540C	

General Chemistry

Analysis Batch: 558704

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155912-2	LPOND LDS	Total/NA	Water	SM 2540D	
280-155912-3	LEACH-POND-	Total/NA	Water	SM 2540D	
MB 280-558704/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 280-558704/2	Lab Control Sample	Total/NA	Water	SM 2540D	
280-155952-D-9 DU	Duplicate	Total/NA	Water	SM 2540D	

Analysis Batch: 558861

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155912-3	LEACH-POND-	Total/NA	Water	410.4	
MB 280-558861/36	Method Blank	Total/NA	Water	410.4	
LCS 280-558861/34	Lab Control Sample	Total/NA	Water	410.4	
LCSD 280-558861/35	Lab Control Sample Dup	Total/NA	Water	410.4	
280-155805-B-3 MS	Matrix Spike	Total/NA	Water	410.4	
280-155805-B-3 MSD	Matrix Spike Duplicate	Total/NA	Water	410.4	

Analysis Batch: 559096

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155912-2	LPOND LDS	Total/NA	Water	410.4	
MB 280-559096/5	Method Blank	Total/NA	Water	410.4	
LCS 280-559096/3	Lab Control Sample	Total/NA	Water	410.4	
LCSD 280-559096/4	Lab Control Sample Dup	Total/NA	Water	410.4	
280-155701-D-1 MS	Matrix Spike	Total/NA	Water	410.4	
280-155701-D-1 MSD	Matrix Spike Duplicate	Total/NA	Water	410.4	

Analysis Batch: 559192

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155912-2	LPOND LDS	Total/NA	Water	353.2	
MB 280-559192/106	Method Blank	Total/NA	Water	353.2	
LCS 280-559192/105	Lab Control Sample	Total/NA	Water	353.2	
280-155806-B-7 MS	Matrix Spike	Total/NA	Water	353.2	
280-155806-B-7 MSD	Matrix Spike Duplicate	Total/NA	Water	353.2	

Analysis Batch: 559366

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155912-2	LPOND LDS	Total/NA	Water	SM 2320B	
MB 280-559366/31	Method Blank	Total/NA	Water	SM 2320B	
MB 280-559366/5	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-559366/30	Lab Control Sample	Total/NA	Water	SM 2320B	
280-155957-A-4 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 559379

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155912-2	LPOND LDS	Total/NA	Water	300.0	
280-155912-2	LPOND LDS	Total/NA	Water	300.0	
280-155912-3	LEACH-POND-	Total/NA	Water	300.0	
MB 280-559379/98	Method Blank	Total/NA	Water	300.0	
LCS 280-559379/96	Lab Control Sample	Total/NA	Water	300.0	
LCSD 280-559379/97	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 280-559379/3	Lab Control Sample	Total/NA	Water	300.0	
280-155883-A-16 MS	Matrix Spike	Total/NA	Water	300.0	
280-155883-A-16 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

General Chemistry (Continued)

Analysis Batch: 559379 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155883-A-16 DU	Duplicate	Total/NA	Water	300.0	

Analysis Batch: 559452

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155912-3	LEACH-POND-	Total/NA	Water	353.2	
MB 280-559452/60	Method Blank	Total/NA	Water	353.2	
LCS 280-559452/59	Lab Control Sample	Total/NA	Water	353.2	
280-155961-B-6 MS	Matrix Spike	Total/NA	Water	353.2	
280-155961-B-6 MSD	Matrix Spike Duplicate	Total/NA	Water	353.2	

Analysis Batch: 559468

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155912-3	LEACH-POND-	Total/NA	Water	SM 2320B	
MB 280-559468/31	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-559468/30	Lab Control Sample	Total/NA	Water	SM 2320B	
280-155961-A-7 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 559531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155912-2	LPOND LDS	Total/NA	Water	9050A	
280-155912-3	LEACH-POND-	Total/NA	Water	9050A	
MB 280-559531/5	Method Blank	Total/NA	Water	9050A	
LCS 280-559531/4	Lab Control Sample	Total/NA	Water	9050A	
280-156088-C-1 DU	Duplicate	Total/NA	Water	9050A	

Analysis Batch: 559549

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155912-2	LPOND LDS	Total/NA	Water	9040B	
280-155912-3	LEACH-POND-	Total/NA	Water	9040B	
LCS 280-559549/4	Lab Control Sample	Total/NA	Water	9040B	
280-155808-A-2 DU	Duplicate	Total/NA	Water	9040B	

Analysis Batch: 559569

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155912-2	LPOND LDS	Total/NA	Water	350.1	
MB 280-559569/20	Method Blank	Total/NA	Water	350.1	
MB 280-559569/66	Method Blank	Total/NA	Water	350.1	
LCS 280-559569/18	Lab Control Sample	Total/NA	Water	350.1	
LCS 280-559569/64	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-559569/19	Lab Control Sample Dup	Total/NA	Water	350.1	
LCSD 280-559569/65	Lab Control Sample Dup	Total/NA	Water	350.1	
280-155883-B-10 MS	Matrix Spike	Total/NA	Water	350.1	
280-155883-B-10 MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	

Analysis Batch: 559615

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155912-3	LEACH-POND-	Total/NA	Water	350.1	
MB 280-559615/20	Method Blank	Total/NA	Water	350.1	
LCS 280-559615/18	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-559615/19	Lab Control Sample Dup	Total/NA	Water	350.1	
280-155883-B-6 MS	Matrix Spike	Total/NA	Water	350.1	

General Chemistry (Continued)

Analysis Batch: 559615 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155883-B-6 MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	

Prep Batch: 559644

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155912-2	LPOND LDS	Total/NA	Water	351.2	
280-155912-3	LEACH-POND-	Total/NA	Water	351.2	
MB 280-559644/2-A	Method Blank	Total/NA	Water	351.2	
LCS 280-559644/1-A	Lab Control Sample	Total/NA	Water	351.2	
280-155749-B-1-B MS	Matrix Spike	Total/NA	Water	351.2	
280-155749-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	351.2	

Analysis Batch: 559753

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155912-2	LPOND LDS	Total/NA	Water	351.2	559644
280-155912-3	LEACH-POND-	Total/NA	Water	351.2	559644
MB 280-559644/2-A	Method Blank	Total/NA	Water	351.2	559644
LCS 280-559644/1-A	Lab Control Sample	Total/NA	Water	351.2	559644
280-155749-B-1-B MS	Matrix Spike	Total/NA	Water	351.2	559644
280-155749-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	351.2	559644

Analysis Batch: 559979

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155912-2	LPOND LDS	Total/NA	Water	SM 2340C	
280-155912-3	LEACH-POND-	Total/NA	Water	SM 2340C	
MB 280-559979/2	Method Blank	Total/NA	Water	SM 2340C	
LCS 280-559979/1	Lab Control Sample	Total/NA	Water	SM 2340C	
280-156316-C-2 MS	Matrix Spike	Total/NA	Water	SM 2340C	
280-156316-C-2 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 2340C	

Analysis Batch: 560056

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155912-2	LPOND LDS	Total/NA	Water	SM 1030E	
280-155912-2	LPOND LDS	Total/NA	Water	SM 1030E (meq)	
MB 280-560056/1	Method Blank	Total/NA	Water	SM 1030E (meq)	

Analysis Batch: 560125

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155912-2	LPOND LDS	Total/NA	Water	9060	
280-155912-3	LEACH-POND-	Total/NA	Water	9060	
MB 280-560125/4	Method Blank	Total/NA	Water	9060	
LCS 280-560125/3	Lab Control Sample	Total/NA	Water	9060	
280-156049-A-2 MS	Matrix Spike	Total/NA	Water	9060	
280-156049-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	9060	

Analysis Batch: 560175

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155912-3	LEACH-POND-	Total/NA	Water	300.0	
MB 280-560175/13	Method Blank	Total/NA	Water	300.0	
LCS 280-560175/11	Lab Control Sample	Total/NA	Water	300.0	
LCSD 280-560175/12	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 280-560175/10	Lab Control Sample	Total/NA	Water	300.0	

General Chemistry (Continued)

Analysis Batch: 560175 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-156602-E-1 MS	Matrix Spike	Total/NA	Water	300.0	
280-156602-E-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
280-156602-E-1 DU	Duplicate	Total/NA	Water	300.0	

Analysis Batch: 560422

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155912-3	LEACH-POND-	Total/NA	Water	SM 1030E	
280-155912-3	LEACH-POND-	Total/NA	Water	SM 1030E (meq)	
MB 280-560422/1	Method Blank	Total/NA	Water	SM 1030E (meq)	

Field Service / Mobile Lab

Analysis Batch: 558413

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155912-2	LPOND LDS	Total/NA	Water	Field Sampling	
280-155912-3	LEACH-POND-	Total/NA	Water	Field Sampling	

Client Sample ID: TB2

Lab Sample ID: 280-155912-1

Date Collected: 11/18/21 07:00

Matrix: Water

Date Received: 11/19/21 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	559444	12/02/21 22:50	TAW	TAL DEN

Client Sample ID: LPOND LDS

Lab Sample ID: 280-155912-2

Date Collected: 11/18/21 11:00

Matrix: Water

Date Received: 11/19/21 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	559320	12/02/21 01:49	AJP	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	558430	11/23/21 15:30	CEH	TAL DEN
Dissolved	Analysis	6010B		1			558612	11/24/21 05:47	MAB	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	558659	11/26/21 06:09	CJB	TAL DEN
Total Recoverable	Analysis	6010B		1			558877	11/26/21 20:11	MAB	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	558431	11/23/21 15:40	CEH	TAL DEN
Total Recoverable	Analysis	6020		1			559120	11/30/21 01:05	LMT	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	558431	11/23/21 15:40	CEH	TAL DEN
Total Recoverable	Analysis	6020		5			559208	11/30/21 17:15	LMT	TAL DEN
Total/NA	Prep	7470A			30 mL	50 mL	559319	12/03/21 15:00	NK	TAL DEN
Total/NA	Analysis	7470A		1			559609	12/03/21 21:32	NK	TAL DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	559379	12/03/21 12:46	CJ	TAL DEN
Total/NA	Analysis	300.0		10	10 mL	10 mL	559379	12/03/21 13:01	CJ	TAL DEN
Total/NA	Analysis	350.1		50	10 mL	10 mL	559569	12/03/21 15:17	LRB	TAL DEN
Total/NA	Prep	351.2			0.5 mL	25 mL	559644	12/05/21 16:30	SVC	TAL DEN
Total/NA	Analysis	351.2		1			559753	12/06/21 17:52	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	559192	11/30/21 20:10	SVC	TAL DEN
Total/NA	Analysis	410.4		10	2 mL	2 mL	559096	11/30/21 10:25	RKD	TAL DEN
Total/NA	Analysis	9040B		1			559549	12/03/21 13:42	ECC	TAL DEN
Total/NA	Analysis	9050A		1			559531	12/03/21 12:07	ECC	TAL DEN
Total/NA	Analysis	9060		5	20 mL	20 mL	560125	12/08/21 21:31	LFL	TAL DEN
Total/NA	Analysis	SM 1030E		1			560056	12/08/21 17:48	SAH	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			560056	12/08/21 17:48	SAH	TAL DEN
Total/NA	Analysis	SM 2320B		1			559366	12/01/21 18:23	SPG	TAL DEN
Total/NA	Analysis	SM 2340C		2	25 mL	25 mL	559979	12/08/21 10:46	KEG	TAL DEN
Total/NA	Analysis	SM 2540C		1	25 mL	100 mL	558626	11/24/21 09:13	ABW	TAL DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	558704	11/24/21 16:20	LRB	TAL DEN
Total/NA	Analysis	Field Sampling		1			558413	11/18/21 12:00	PP	TAL DEN

Client Sample ID: LEACH-POND-

Lab Sample ID: 280-155912-3

Date Collected: 11/18/21 11:30

Matrix: Water

Date Received: 11/19/21 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	559320	12/02/21 02:10	AJP	TAL DEN

Lab Chronicle

Client: Waste Management
Job ID: 280-155912-1
Project/Site: 1003|Riverbend Landfill - Leachate Lagoon

Client Sample ID: LEACH-POND-
Lab Sample ID: 280-155912-3

Date Collected: 11/18/21 11:30
Matrix: Water

Date Received: 11/19/21 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			50 mL	50 mL	558430	11/23/21 15:30	CEH	TAL DEN
Dissolved	Analysis	6010B		1			558612	11/24/21 05:51	MAB	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	558659	11/26/21 06:09	CJB	TAL DEN
Total Recoverable	Analysis	6010B		1			558877	11/26/21 20:16	MAB	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	558431	11/23/21 15:40	CEH	TAL DEN
Total Recoverable	Analysis	6020		1			559120	11/30/21 01:08	LMT	TAL DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	558431	11/23/21 15:40	CEH	TAL DEN
Total Recoverable	Analysis	6020		5			559208	11/30/21 17:19	LMT	TAL DEN
Total/NA	Prep	7470A			30 mL	50 mL	559319	12/03/21 15:00	NK	TAL DEN
Total/NA	Analysis	7470A		1			559609	12/03/21 21:34	NK	TAL DEN
Total/NA	Analysis	300.0		20	5 mL	5 mL	560175	12/09/21 22:01	CJ	TAL DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	559379	12/03/21 13:16	CJ	TAL DEN
Total/NA	Analysis	350.1		50	10 mL	10 mL	559615	12/04/21 10:45	LRB	TAL DEN
Total/NA	Prep	351.2			0.5 mL	25 mL	559644	12/05/21 16:30	SVC	TAL DEN
Total/NA	Analysis	351.2		1			559753	12/06/21 17:53	SVC	TAL DEN
Total/NA	Analysis	353.2		25	100 mL	100 mL	559452	12/02/21 19:50	SVC	TAL DEN
Total/NA	Analysis	410.4		10	2 mL	2 mL	558861	11/28/21 08:48	RKD	TAL DEN
Total/NA	Analysis	9040B		1			559549	12/03/21 13:42	ECC	TAL DEN
Total/NA	Analysis	9050A		1			559531	12/03/21 12:07	ECC	TAL DEN
Total/NA	Analysis	9060		10	20 mL	20 mL	560125	12/08/21 21:50	LFL	TAL DEN
Total/NA	Analysis	SM 1030E		1			560422	12/13/21 08:55	SAH	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			560422	12/13/21 08:55	SAH	TAL DEN
Total/NA	Analysis	SM 2320B		1			559468	12/02/21 19:31	SPG	TAL DEN
Total/NA	Analysis	SM 2340C		2	25 mL	25 mL	559979	12/08/21 10:46	KEG	TAL DEN
Total/NA	Analysis	SM 2540C		1	10 mL	100 mL	558626	11/24/21 09:13	ABW	TAL DEN
Total/NA	Analysis	SM 2540D		1	180 mL	250 mL	558704	11/24/21 16:20	LRB	TAL DEN
Total/NA	Analysis	Field Sampling		1			558413	11/18/21 12:30	PP	TAL DEN

Laboratory References:

TAL DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Eurofins TestAmerica, Denver
4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Fax (303) 431-7171

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: I. Hultquist	Lab PM: Sara, Betsy A	Carrier Tracking No(s):	COC No: 280-16516-869.1
Client Contact:	Phone: (503)716-6320	E-Mail: Betsy.Sara@Eurofinset.com		Page: Page 1 of 1
Company: Waste Management				Job #:
Address: 13469 SW Highway 18	Due Date Requested:		Analysis Requested	Preservation Codes:
City: McMinnville	TAT Requested (days):			
State, Zip: OR, 97128				
Phone:	PO #:			
Email:	WO #:			
Project Name:1003|Riverbend Landfill SCS Engineers Event Desc: Semiannual Leachate Lagoon - Apr Nov	Project #: 28002786			
Site: Oregon	SSOW#:			

280-155912 Chain of Custody

A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2SO3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - ph 4-5; Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	TDS/Alks/EC/pH/Cl/SO4	Hardness/Total Metals	Ammonia/COD/TKN/TOC/NOXT	8260B	TSS	Dissolved Metals	Cation/Anion Balance	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	S	A	N	D			
TB2	11-18-21	0700	G	W						X				2	Short Holds: pH
L POND LDS	11-18-21	1100	G	W	X		X	X	X	X	X	X	X	9	
LEACH - POND	11-18-21	1130	G	W	X		X	X	X	X	X	X	X	9	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		11-18-21 1630	SCS		11/19/2021 1025	ETA-RLL
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: -0.4 IR#11 +1.0

Page 55 of 59

3/15/2022

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** LPOND LDS

SITE ADDRESS: McMinnville , Oregon **BLIND ID:**

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY	CLOUDY	RAIN	?	TEMPERATURE:	°F 48.0 °C					

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
/ /	:	.	.	.	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)² x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [N if used]

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	√
VOA Glass	11/18/21	11:00	A	3	40 ml HCl	YES	NO		✓
VOA Glass	/ /	:			40 ml $Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
White Poly	11/18/21	11:00	A	2	250, 500, 1L None	YES	NO	NA	✓
Yellow Glass	11/18/21	11:00	A	2	250, 500, 1L H_2SO_4	YES	NO		
Red Total Poly	11/18/21	11:00	A	1	125, 250, 500 HNO_3	YES	NO		✓
Red Diss. Poly	11/18/21	11:00	A	1	250, 500, 1L HNO_3	YES	YES		✓
White Poly	/ /	:			250, 500, 1L None	YES	YES		
Clear Poly	/ /	:			100, 250, 500 $Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — 9 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8260) (8011) OR [X] WA [ ]
	AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica. T) (NO3) (BOD)
	YELLOW - Glass	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX) NOxt
	RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Th) (V) (Zn) (Hardness)
	RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
	WHITE - Poly	(Orthophosphate)
	Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (C)	DTW	Diss O_2 (mg/l)	Water Quality
0	A(1100)	0.00	7.23	2125	5118	8.53	-	7.19	Clear/Dk Amber
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

for Liquid Level 7.8'

SAMPLER: I Hultquist (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
15490 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6948

PROJECT NAME: Riverbend Landfill **WELL ID:** Leach-Pond
SITE ADDRESS: McMinnville , Oregon **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		**TEMPERATURE:**	48.0 °F / °C	

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
/ /	:	.	.	.	.		X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other = Grab

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	√
VOA Glass	11/18/21	11:30	G	3	40 ml HCl	YES	NO		✓
VOA Glass	/ /	:			40 ml $Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
White Poly	11/18/21	11:30	G	2	250, 500, 1L None	YES	NO	NA	✓
Yellow Glass	11/18/21	11:30	G	2	250, 500, 1L H_2SO_4	YES	NO		✓
Red Total Poly	11/18/21	11:30	G	1	125, 250, 500 HNO_3	YES	NO		✓
Red Diss. Poly	11/18/21	11:30	G	1	250, 500, 1L HNO_3	YES	YES		✓
White Poly	/ /	:			250, 500, 1L None	YES	YES		
Clear Poly	/ /	:			100, 250, 500 $Na_2S_2O_3$	YES	NO		

White no acid, Yellow H2SO4, Red HNO3 — 9 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T) (NO3) (BOD)
YELLOW - Glass	(COD) (TOC) (NH3) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX) Nox
RED TOTAL - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na) (Si) (As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)
WHITE - Poly	(Orthophosphate)
Clear - Poly	(E. Coli) (Coliform) (Fecal Coliform)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O_2 (mg/l)	Water Quality
0	G (1130)	0.00	9.00	188.1	9574	7.10	—	7.90	Clear / Dark Amber
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Collected from Sample port on Truck loading pipe

SAMPLER: J. Holtaquist (PRINTED NAME) (SIGNATURE)


280-155912 Waybill
ORIGIN ID:BNOA
SHIP DATE: 18NOV
ACTWGT: 61.20 LF
CAD: /SSFE2220
DIMS: 25x13x14 IN
TO SAMPLE RCVG
EUROFINS TESTAMERICA
4955 YARROW ST
ARVADA CO 80002
(303) 736-0100
INV:
PO:
REF:
DEPT:
eurofins
Environment Testing
TestAmerica
1760118
FRI - 19 NOV
TRK# 0667 8165 7539 5218
PRIORITY OVER
XA LAAA
CO-US

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-155912-1

Login Number: 155912
List Number: 1
Creator: Pottruff, Reed W

List Source: Eurofins 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	

Oregon Laboratory Certification Documentation

Oregon
Environmental Laboratory
Accreditation Program

NELAP Recognized

TestAmerica Denver

4025

4955 Yarrow St.

Arvada, CO 80002

IS GRANTED APPROVAL BY ORELAP UNDER THE 2016 TNI STANDARDS, TO PERFORM ANALYSES ON ENVIRONMENTAL SAMPLES IN MATRICES AS LISTED BELOW:

Air	Drinking Water	Non-Potable Water	Solids and Chemical Waste	Tissue
	Chemistry	Chemistry	Chemistry	

AND AS RECORDED IN THE LIST OF APPROVED ANALYTES, METHODS, ANALYTICAL TECHNIQUES, AND FIELDS OF TESTING ISSUED CONCURRENTLY WITH THIS CERTIFICATE AND REVISED AS NECESSARY.

ACCREDITED STATUS DEPENDS ON SUCCESSFUL ONGOING PARTICIPATION IN THE PROGRAM AND CONTINUED COMPLIANCE WITH THE STANDARDS.

CUSTOMERS ARE URGED TO VERIFY THE LABORATORY'S CURRENT ACCREDITATION STATUS IN OREGON.

Travis Bartholomew
Oregon State Public Health Laboratory
ORELAP Program Manager
7202 NE Evergreen Parkway, Suite 100
Hillsboro, OR 97124

EFFECTIVE DATE : **9/9/2021**
EXPIRATION DATE : **1/8/2022**
Certificate No : **4025 - 015**

OREGON

Environmental Laboratory Accreditation Program

ORELAP Fields of Accreditation

TestAmerica Denver
4955 Yarrow St.
Arvada, CO 80002

ORELAP ID: 4025
EPA CODE: CO00026
Certificate: 4025 - 015

Issue Date: 9/9/2021 Expiration Date: 1/8/2022

As of 9/9/2021 this list supersedes all previous lists for this certificate number.

Matrix	Reference	Analyte Code	Analyte	Method Code	Description
Drinking Water					
	DV-LC-0012 16			60036035	TestAmerica Denver - PFOA in NPW and SCM by HPLC-MS-MS
		9562	Perfluorodecane Sulfonate (PFDS)		
	DV-LC-0012 DV-LC-0012			60036035	TestAmerica Denver - PFOA in NPW and SCM by HPLC-MS-MS
		7044	Ammonium Perfluorooctanoate (APFO)		
		6911	Perfluorobutane Sulfonate (PFBS)		
		6915	Perfluorobutanoic acid (PFBA)		
		6905	Perfluorodecanoic acid (PFDA)		
		6903	Perfluorododecanoic acid (PFDoA)		
		6908	Perfluoroheptanoic acid (PFHpA)		
		6910	Perfluorohexane sulfonate (PFHxS)		
		6913	Perfluorohexanoic acid (PFHxA)		
		6906	Perfluorononanoic acid (PFNA)		
		6917	Perfluorooctane sulfonamide (PFOSAm)		
		6909	Perfluorooctane sulfonate (PFOS)		
		6912	Perfluorooctanoic acid (PFOA)		
		6914	Perfluoropentanoic acid (PFPeA)		
		6902	Perfluorotetradecanoic acid (PFTDA)		
		9563	Perfluorotridecanoic acid (PFTrDA)		
		6904	Perfluoroundecanoic acid (PFUnA)		
	EPA 524.2			10088605	Volatile Organic Compounds GC/MS Capillary Column
		5105	1,1,1,2-Tetrachloroethane		
		5160	1,1,1-Trichloroethane		
		5110	1,1,2,2-Tetrachloroethane		
		5165	1,1,2-Trichloroethane		
		4630	1,1-Dichloroethane		

OREGON

Environmental Laboratory Accreditation Program

ORELAP Fields of Accreditation

TestAmerica Denver
4955 Yarrow St.
Arvada, CO 80002

ORELAP ID: 4025
EPA CODE: CO00026
Certificate: 4025 - 015

Issue Date: 9/9/2021 Expiration Date: 1/8/2022

As of 9/9/2021 this list supersedes all previous lists for this certificate number.

Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		4640	1,1-Dichloroethylene		
		4670	1,1-Dichloropropene		
		5150	1,2,3-Trichlorobenzene		
		5180	1,2,3-Trichloropropane		
		5155	1,2,4-Trichlorobenzene		
		5210	1,2,4-Trimethylbenzene		
		4570	1,2-Dibromo-3-chloropropane (DBCP)		
		4585	1,2-Dibromoethane (EDB, Ethylene dibromide)		
		4610	1,2-Dichlorobenzene		
		4635	1,2-Dichloroethane (Ethylene dichloride)		
		4655	1,2-Dichloropropane		
		5215	1,3,5-Trimethylbenzene		
		4615	1,3-Dichlorobenzene		
		4660	1,3-Dichloropropane		
		4620	1,4-Dichlorobenzene		
		4665	2,2-Dichloropropane		
		4535	2-Chlorotoluene		
		4540	4-Chlorotoluene		
		4910	4-Isopropyltoluene (p-Cymene)		
		4375	Benzene		
		4385	Bromobenzene		
		4390	Bromochloromethane		
		4395	Bromodichloromethane		
		4400	Bromoform		
		4455	Carbon tetrachloride		
		4475	Chlorobenzene		
		4575	Chlorodibromomethane		
		4485	Chloroethane (Ethyl chloride)		
		4505	Chloroform		
		4705	cis & trans-1,2-Dichloroethene		
		4645	cis-1,2-Dichloroethylene		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		4680	cis-1,3-Dichloropropene		
		4595	Dibromomethane (Methylene bromide)		
		4625	Dichlorodifluoromethane (Freon-12)		
		4765	Ethylbenzene		
		4835	Hexachlorobutadiene		
		4900	Isopropylbenzene (Cumene)		
		4950	Methyl bromide (Bromomethane)		
		4960	Methyl chloride (Chloromethane)		
		5000	Methyl tert-butyl ether (MTBE)		
		4975	Methylene chloride (Dichloromethane)		
		5005	Naphthalene		
		4435	n-Butylbenzene		
		5090	n-Propylbenzene		
		4440	sec-Butylbenzene		
		5100	Styrene		
		4445	tert-Butylbenzene		
		5115	Tetrachloroethylene (Perchloroethylene)		
		5140	Toluene		
		4700	trans-1,2-Dichloroethylene		
		4685	trans-1,3-Dichloropropylene		
		5170	Trichloroethene (Trichloroethylene)		
		5175	Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)		
		5235	Vinyl chloride		
		5260	Xylene (total)		

Non-Potable Water

	AK101 GRO			90015002	Determination of Gasoline Range Organics - Alaska Department of Environmental Conservation
		9408	Gasoline range organics (GRO)		
		4027	Total BTEX		
	AK102 DRO			90015206	Determination of Diesel Range Organics - Alaska Department of Environmental Conservation

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		9369	Diesel range organics (DRO)		
	AK103 RRO			90015400	Determination of Residual Range Organics - Alaska Department of Environmental Conservation
		9499	Motor Oil		
	ASTM D7065-06			30032918	Nonylphenol by GC/MS
		6513	4-Nonylphenol		
		9466	4-Nonylphenol diethoxylate		
		6512	4-tert-Octylphenol		
		9301	Bisphenol A		
		9592	Nonyl phenol monoethoxylate		
	CA HML 939-M			90016765	Determination of Organic Lead Compounds by Graphite Furnace Absorption Spectrometry
		1208	Organic Lead		
	CA Title 22 WET			90017235	CA Waste Extraction Test (WET)
		1407	California Waste Extraction Test		
	DV-LC-0012 16			60036035	TestAmerica Denver - PFOA in NPW and SCM by HPLC-MS-MS
		9490	11-chloreicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)		
		6948	1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)		
		9616	1H, 1H, 2H, 2H-perfluorododecane sulfonic acid (10:2 FTS)		
		6946	1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)		
		6947	1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)		
		6951	4,8-Dioxa-3H-perfluorononanoic acid (DONA)		
		6952	9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9Cl-PF3ONS)		
		4846	N-Ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		4847	N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)		
		6918	Perfluorobutane sulfonic acid (PFBS)		
		6920	Perfluorodecane sulfonic acid (PFDS)		
		6923	Perfluorododecane sulfonic acid (PFDoS)		
		9470	Perfluoroheptane sulfonic acid (PFHpS)		
		6901	Perfluorohexadecanoic acid (PFHxDA)		
		6927	Perfluorohexane sulfonic acid (PFHxS)		
		6929	Perfluorononane sulfonic acid (PFNS)		
		6916	Perfluorooctadecanoic acid (PFODA)		
		6931	Perfluorooctane sulfonic acid (PFOS)		
		6934	Perfluoropentane sulfonic acid (PFPeS)		
	DV-LC-0012 DV-LC-0012			60036035	TestAmerica Denver - PFOA in NPW and SCM by HPLC-MS-MS
		7044	Ammonium Perfluorooctanoate (APFO)		
		6911	Perfluorobutane Sulfonate (PFBS)		
		6915	Perfluorobutanoic acid (PFBA)		
		9562	Perfluorodecane Sulfonate (PFDS)		
		6905	Perfluorodecanoic acid (PFDA)		
		6903	Perfluorododecanoic acid (PFDoA)		
		6908	Perfluoroheptanoic acid (PFHpA)		
		6910	Perfluorohexane sulfonate (PFHxS)		
		6913	Perfluorohexanoic acid (PFHxA)		
		6906	Perfluorononanoic acid (PFNA)		
		6917	Perfluorooctane sulfonamide (PFOSAm)		
		6909	Perfluorooctane sulfonate (PFOS)		
		6912	Perfluorooctanoic acid (PFOA)		
		6914	Perfluoropentanoic acid (PFPeA)		
		6902	Perfluorotetradecanoic acid (PFTDA)		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		9563	Perfluorotridecanoic acid (PFTrDA)		
		6904	Perfluoroundecanoic acid (PFUnA)		
	DV-LC-0020 3			60036013	TestAmerica Denver - Disodium Iminodiacetate (IDA) by LC/MS/MS (modified EPA 8321A)
		6119	Disodium Inimodiacetate		
	EPA 1010			10116606	Pensky-Martens Closed-Cup Method for Determining Ignitability
		1780	Ignitability		
	EPA 1010A			10234807	Pensky-Martens Closed-Cup Method for Determining Ignitability
		1780	Ignitability		
	EPA 1311			10118806	Toxicity Characteristic Leaching Procedure
		1466	Toxicity Characteristic Leaching Procedure (TCLP)		
	EPA 1312			10119003	Synthetic Precipitation Leaching Procedure
		1460	Synthetic Precipitation Leaching Procedure (SPLP)		
	EPA 160.4			10010409	Total Volatile Solids, ignition @ 550 C.
		2070	Volatile suspended solids		
	EPA 1664A (HEM)			10127807	N-Hexane Extractable Material (Oil and Grease) by Extraction and Gravimetry
		1803	n-Hexane Extractable Material (O&G)		
		1860	Oil & Grease		
	EPA 1664A (SGT-HEM)			10261606	Silica Gen Treated N-Hexane Extractable Material (Oil and Grease)
		2050	Total Petroleum Hydrocarbons (TPH)		
	EPA 1664B (SGT-HEM) EPA 1664B (SGT-HEM)			10260628	Silica Gel Treated n-Hexane Extractable Material (Oil & Grease)
		2050	Total Petroleum Hydrocarbons (TPH)		
	EPA 1664B EPA 1664B			10261617	N-Hexane Extractable Material (Oil and Grease) by Extraction and Gravimetry
		1803	n-Hexane Extractable Material (O&G)		
		1860	Oil & Grease		
	EPA 180.1 2			10011800	Turbidity - Nephelometric

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		2055	Turbidity		
	EPA 200.7 4.4			10013806	ICP - metals
		1000	Aluminum		
		1005	Antimony		
		1010	Arsenic		
		1015	Barium		
		1020	Beryllium		
		1025	Boron		
		1030	Cadmium		
		1035	Calcium		
		1040	Chromium		
		1050	Cobalt		
		1055	Copper		
		1760	Hardness (calc.)		
		1070	Iron		
		1075	Lead		
		1080	Lithium		
		1085	Magnesium		
		1090	Manganese		
		1100	Molybdenum		
		1105	Nickel		
		1910	Phosphorus, total		
		1125	Potassium		
		1140	Selenium		
		1990	Silica as SiO2		
		1145	Silicon		
		1150	Silver		
		1155	Sodium		
		1160	Strontium		
		2017	Sulfur		
		1165	Thallium		
		1175	Tin		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		1180	Titanium		
		1185	Vanadium		
		1190	Zinc		
	EPA 200.8 5.4			10014605	Metals by ICP-MS
		1005	Antimony		
		1010	Arsenic		
		1015	Barium		
		1020	Beryllium		
		1030	Cadmium		
		1040	Chromium		
		1050	Cobalt		
		1055	Copper		
		1075	Lead		
		1090	Manganese		
		1100	Molybdenum		
		1105	Nickel		
		1140	Selenium		
		1150	Silver		
		1165	Thallium		
		1170	Thorium		
		1175	Tin		
		1184	Uranium (mass)		
		1185	Vanadium		
		1190	Zinc		
	EPA 245.1 3			10036609	Mercury by Cold Vapor Atomic Absorption
		1095	Mercury		
	EPA 300.0 2.1			10053200	Methods for the Determination of Inorganic Substances in Environmental Samples
		1540	Bromide		
		1575	Chloride		
		1730	Fluoride		
		1810	Nitrate as N		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		1820	Nitrate plus Nitrite as N		
		1840	Nitrite as N		
		1870	Orthophosphate as P		
		2000	Sulfate		
	EPA 3005A			10133207	Acid Digestion of waters for Total Recoverable or Dissolved Metals
		1438	Preconcentration under Acid		
	EPA 3010A			10133605	Acid Digestion of Aqueous samples and Extracts for Total Metals
		1401	Acid Digestion of Aqueous samples and Extracts for Total Metals		
	EPA 3020A			10134404	Acid Digestion of Aqueous samples and Extracts for Total Metals for Analysis by GFAA
		1401	Acid Digestion of Aqueous samples and Extracts for Total Metals		
	EPA 335.1			10060001	Cyanides, amenable to chlorination
		1510	Amenable cyanide		
	EPA 335.4 EPA 335.4			10061402	Methods for the Determination of Inorganic Substances in Environmental Samples
		1645	Total cyanide		
	EPA 350.1 2			10063602	Ammonia Nitrogen - Colorimetric, Auto Phenate
		1515	Ammonia as N		
	EPA 351.2 2			10065404	Total Kjeldahl Nitrogen - Block Digest, Phenate
		1795	Total Kjeldahl Nitrogen (TKN)		
	EPA 351.2 minus EPA 350.1			10238207	Organic Nitrogen by Automated Phenate (Calculated)
		1865	Organic nitrogen		
	EPA 3510C			10138202	Separatory Funnel Liquid-liquid extraction
		1444	Seperatory Funnel Liquid-Liquid Extraction		
	EPA 3520C			10139001	Continuous Liquid-liquid extraction
		1410	Continuous Liquid-Liquid Extraction		
	EPA 353.2 2			10067604	Nitrate/Nitrite Nitrogen - Automated, Cadmium
		1810	Nitrate as N		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		1820	Nitrate plus Nitrite as N		
		1840	Nitrite as N		
		1825	Total nitrate+nitrite		
	EPA 3535			10139205	Solid-Phase Extraction (SPE)
		1448	Solid-Phase Extraction		
	EPA 3535A			10139409	Solid-Phase Extraction (SPE)
		1448	Solid-Phase Extraction		
	EPA 3580A			10143007	Waste Dilution
		1470	Waste Dilution		
	EPA 3620B			10145809	Florisil Cleanup
		1414	Florisil Clean-up		
	EPA 3620C			10146006	Florisil Cleanup
		1414	Florisil Clean-up		
	EPA 365.1 2			10070005	Phosphorous - Colorimetric, Automated persulfate
		1870	Orthophosphate as P		
		1910	Phosphorus, total		
	EPA 3660B			10148400	Sulfur cleanup
		1456	Sulfur Clean-up		
	EPA 3665A			10148808	Sulfuric Acid / permanganate Cleanup
		1458	Sulfuric Acid / Permanganate Clean-Up		
	EPA 410.4 2			10077404	Chemical Oxygen Demand - Colorimetric, Automated.
		1565	Chemical oxygen demand		
	EPA 420.1			10079400	Phenolics - Spectrophotometric, manual.
		1905	Total phenolics		
	EPA 420.4			10080203	Phenolics, Total Recoverable by Semi-Automated Colorimetry
		1905	Total phenolics		
	EPA 5030B			10153409	Purge and trap for aqueous samples
		1406	Aqueous-phase Purge & Trap		
	EPA 5030C			10284603	Purge-and-Trap for Aqueous Samples
		1406	Aqueous-phase Purge & Trap		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
	EPA 524.2 EPA 524.2			10088605	Volatile Organic Compounds GC/MS Capillary Column
		5105	1,1,1,2-Tetrachloroethane		
		5160	1,1,1-Trichloroethane		
		5110	1,1,2,2-Tetrachloroethane		
		5165	1,1,2-Trichloroethane		
		4630	1,1-Dichloroethane		
		4640	1,1-Dichloroethylene		
		4670	1,1-Dichloropropene		
		5150	1,2,3-Trichlorobenzene		
		5180	1,2,3-Trichloropropane		
		5155	1,2,4-Trichlorobenzene		
		5210	1,2,4-Trimethylbenzene		
		4570	1,2-Dibromo-3-chloropropane (DBCP)		
		4585	1,2-Dibromoethane (EDB, Ethylene dibromide)		
		4610	1,2-Dichlorobenzene		
		4655	1,2-Dichloropropane		
		5215	1,3,5-Trimethylbenzene		
		4615	1,3-Dichlorobenzene		
		4660	1,3-Dichloropropane		
		4620	1,4-Dichlorobenzene		
		4665	2,2-Dichloropropane		
		4410	2-Butanone (Methyl ethyl ketone, MEK)		
		4535	2-Chlorotoluene		
		4860	2-Hexanone (MBK)		
		4540	4-Chlorotoluene		
		4910	4-Isopropyltoluene (p-Cymene)		
		4995	4-Methyl-2-pentanone (MIBK)		
		4315	Acetone		
		4375	Benzene		
		4385	Bromobenzene		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		4390	Bromochloromethane		
		4395	Bromodichloromethane		
		4400	Bromoform		
		4450	Carbon disulfide		
		4455	Carbon tetrachloride		
		4475	Chlorobenzene		
		4575	Chlorodibromomethane		
		4485	Chloroethane (Ethyl chloride)		
		4505	Chloroform		
		4645	cis-1,2-Dichloroethylene		
		4680	cis-1,3-Dichloropropene		
		4595	Dibromomethane (Methylene bromide)		
		4625	Dichlorodifluoromethane (Freon-12)		
		4765	Ethylbenzene		
		4835	Hexachlorobutadiene		
		4900	Isopropylbenzene (Cumene)		
		4950	Methyl bromide (Bromomethane)		
		4960	Methyl chloride (Chloromethane)		
		5000	Methyl tert-butyl ether (MTBE)		
		4975	Methylene chloride (Dichloromethane)		
		5005	Naphthalene		
		4435	n-Butylbenzene		
		5090	n-Propylbenzene		
		4440	sec-Butylbenzene		
		5100	Styrene		
		4445	tert-Butylbenzene		
		5115	Tetrachloroethylene (Perchloroethylene)		
		5140	Toluene		
		4700	trans-1,2-Dichloroethylene		
		4685	trans-1,3-Dichloropropylene		
		5170	Trichloroethene (Trichloroethylene)		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		5175	Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)		
		5235	Vinyl chloride		
		5260	Xylene (total)		
	EPA 6010B			10155609	ICP - AES
		1000	Aluminum		
		1005	Antimony		
		1010	Arsenic		
		1015	Barium		
		1020	Beryllium		
		1023	Bismuth		
		1025	Boron		
		1030	Cadmium		
		1035	Calcium		
		1040	Chromium		
		1050	Cobalt		
		1055	Copper		
		1070	Iron		
		1075	Lead		
		1080	Lithium		
		1085	Magnesium		
		1090	Manganese		
		1100	Molybdenum		
		1105	Nickel		
		1910	Phosphorus, total		
		1125	Potassium		
		1140	Selenium		
		1990	Silica as SiO2		
		1145	Silicon		
		1150	Silver		
		1155	Sodium		
		1160	Strontium		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		2017	Sulfur		
		1165	Thallium		
		1175	Tin		
		1180	Titanium		
		1185	Vanadium		
		1190	Zinc		
	EPA 6010C			10155803	ICP - AES
		1000	Aluminum		
		1005	Antimony		
		1010	Arsenic		
		1015	Barium		
		1020	Beryllium		
		1025	Boron		
		1030	Cadmium		
		1035	Calcium		
		1040	Chromium		
		1050	Cobalt		
		1055	Copper		
		1070	Iron		
		1075	Lead		
		1080	Lithium		
		1085	Magnesium		
		1090	Manganese		
		1100	Molybdenum		
		1105	Nickel		
		1910	Phosphorus, total		
		1125	Potassium		
		1140	Selenium		
		1990	Silica as SiO2		
		1145	Silicon		
		1150	Silver		
		1155	Sodium		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		1160	Strontium		
		2017	Sulfur		
		1165	Thallium		
		1175	Tin		
		1180	Titanium		
		1185	Vanadium		
		1190	Zinc		
	EPA 6010D 4			10155916	Metals by ICP - AES
		1023	Bismuth		
	EPA 6010D EPA 6010D			10155916	Metals by ICP - AES
		1000	Aluminum		
		1005	Antimony		
		1010	Arsenic		
		1015	Barium		
		1020	Beryllium		
		1025	Boron		
		1030	Cadmium		
		1035	Calcium		
		1040	Chromium		
		1050	Cobalt		
		1055	Copper		
		1070	Iron		
		1075	Lead		
		1080	Lithium		
		1085	Magnesium		
		1090	Manganese		
		1100	Molybdenum		
		1105	Nickel		
		1910	Phosphorus, total		
		1125	Potassium		
		1140	Selenium		
		1990	Silica as SiO2		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		1145	Silicon		
		1150	Silver		
		1155	Sodium		
		1160	Strontium		
		2017	Sulfur		
		1165	Thallium		
		1175	Tin		
		1180	Titanium		
		1185	Vanadium		
		1190	Zinc		
	EPA 6020			10156000	Inductively Coupled Plasma-Mass Spectrometry
		1000	Aluminum		
		1005	Antimony		
		1010	Arsenic		
		1015	Barium		
		1020	Beryllium		
		1030	Cadmium		
		1040	Chromium		
		1050	Cobalt		
		1055	Copper		
		1075	Lead		
		1090	Manganese		
		1100	Molybdenum		
		1105	Nickel		
		1140	Selenium		
		1150	Silver		
		1160	Strontium		
		1165	Thallium		
		1170	Thorium		
		1175	Tin		
		1184	Uranium (mass)		
		1185	Vanadium		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		1190	Zinc		
	EPA 6020A 1			10156419	Inductively Coupled Plasma -Mass Spectrometry
		1000	Aluminum		
		1005	Antimony		
		1010	Arsenic		
		1015	Barium		
		1020	Beryllium		
		1030	Cadmium		
		1040	Chromium		
		1050	Cobalt		
		1055	Copper		
		1075	Lead		
		1090	Manganese		
		1100	Molybdenum		
		1105	Nickel		
		1140	Selenium		
		1150	Silver		
		1160	Strontium		
		1160	Strontium		
		1165	Thallium		
		1170	Thorium		
		1175	Tin		
		1184	Uranium (mass)		
		1185	Vanadium		
		1190	Zinc		
	EPA 6020B 2			10156420	Inductively Coupled Plasma-Mass Spectrometry
		1000	Aluminum		
		1160	Strontium		
		1183	Tungsten		
	EPA 6020B EPA 6020B			10156420	Inductively Coupled Plasma-Mass Spectrometry
		1005	Antimony		
		1010	Arsenic		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		1015	Barium		
		1020	Beryllium		
		1030	Cadmium		
		1040	Chromium		
		1050	Cobalt		
		1055	Copper		
		1075	Lead		
		1090	Manganese		
		1100	Molybdenum		
		1105	Nickel		
		1140	Selenium		
		1150	Silver		
		1165	Thallium		
		1170	Thorium		
		1175	Tin		
		1184	Uranium (mass)		
		1185	Vanadium		
		1190	Zinc		
	EPA 608			10103603	Organochlorine Pesticides & PCBs by GC/ECD
		7355	4,4'-DDD		
		7360	4,4'-DDE		
		7365	4,4'-DDT		
		7025	Aldrin		
		7110	alpha-BHC (alpha-Hexachlorocyclohexane)		
		8880	Aroclor-1016 (PCB-1016)		
		8885	Aroclor-1221 (PCB-1221)		
		8890	Aroclor-1232 (PCB-1232)		
		8895	Aroclor-1242 (PCB-1242)		
		8900	Aroclor-1248 (PCB-1248)		
		8905	Aroclor-1254 (PCB-1254)		
		8910	Aroclor-1260 (PCB-1260)		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		8912	Aroclor-1262 (PCB-1262)		
		8913	Aroclor-1268 (PCB-1268)		
		7115	beta-BHC (beta-Hexachlorocyclohexane)		
		7250	Chlordane (tech.)		
		7240	cis-chlordane (alpha-Chlordane)		
		7105	delta-BHC		
		7470	Dieldrin		
		7510	Endosulfan I		
		7515	Endosulfan II		
		7520	Endosulfan sulfate		
		7540	Endrin		
		7530	Endrin aldehyde		
		7535	Endrin ketone		
		7120	gamma-BHC (Lindane, gamma-HexachlorocyclohexanE)		
		7245	gamma-Chlordane		
		7685	Heptachlor		
		7690	Heptachlor epoxide		
		7810	Methoxychlor		
		8250	Toxaphene (Chlorinated camphene)		
	EPA 608.3 GC-ECD			10296614	Organochlorine Pesticides and PCBs by GC/ECD
		7355	4,4'-DDD		
		7360	4,4'-DDE		
		7365	4,4'-DDT		
		7025	Aldrin		
		7110	alpha-BHC (alpha-Hexachlorocyclohexane)		
		8880	Aroclor-1016 (PCB-1016)		
		8885	Aroclor-1221 (PCB-1221)		
		8890	Aroclor-1232 (PCB-1232)		
		8895	Aroclor-1242 (PCB-1242)		
		8900	Aroclor-1248 (PCB-1248)		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		8905	Aroclor-1254 (PCB-1254)		
		8910	Aroclor-1260 (PCB-1260)		
		8912	Aroclor-1262 (PCB-1262)		
		8913	Aroclor-1268 (PCB-1268)		
		7115	beta-BHC (beta-Hexachlorocyclohexane)		
		7250	Chlordane (tech.)		
		7240	cis-chlordane (alpha-Chlordane)		
		7105	delta-BHC		
		7470	Dieldrin		
		7510	Endosulfan I		
		7515	Endosulfan II		
		7520	Endosulfan sulfate		
		7540	Endrin		
		7530	Endrin aldehyde		
		7535	Endrin ketone		
		7120	gamma-BHC (Lindane, gamma-HexachlorocyclohexanE)		
		7245	gamma-Chlordane		
		7685	Heptachlor		
		7690	Heptachlor epoxide		
		7810	Methoxychlor		
		8250	Toxaphene (Chlorinated camphene)		
	EPA 614			10105201	Organophosphorous Pesticides by Liquid/Liquid Extraction and GC/NPD
		7075	Azinphos-methyl (Guthion)		
		7410	Diazinon		
		8625	Disulfoton		
		7770	Malathion		
		7825	Methyl parathion (Parathion, methyl)		
		7955	Parathion, ethyl		
	EPA 614 EPA 614			10105201	Organophosphorous Pesticides by Liquid/Liquid Extraction and GC/NPD

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		7390	Demeton		
		7395	Demeton-o		
		7385	Demeton-s		
	EPA 624			10107207	Volatile Organic Compounds by purge and trap GC/MS
		5105	1,1,1,2-Tetrachloroethane		
		5160	1,1,1-Trichloroethane		
		5110	1,1,2,2-Tetrachloroethane		
		5165	1,1,2-Trichloroethane		
		4630	1,1-Dichloroethane		
		4640	1,1-Dichloroethylene		
		5180	1,2,3-Trichloropropane		
		4570	1,2-Dibromo-3-chloropropane (DBCP)		
		4585	1,2-Dibromoethane (EDB, Ethylene dibromide)		
		4610	1,2-Dichlorobenzene		
		4635	1,2-Dichloroethane (Ethylene dichloride)		
		4655	1,2-Dichloropropane		
		4615	1,3-Dichlorobenzene		
		4620	1,4-Dichlorobenzene		
		4735	1,4-Dioxane (1,4- Diethyleneoxide)		
		4410	2-Butanone (Methyl ethyl ketone, MEK)		
		4500	2-Chloroethyl vinyl ether		
		4860	2-Hexanone (MBK)		
		4995	4-Methyl-2-pentanone (MIBK)		
		4315	Acetone		
		4325	Acrolein (Propenal)		
		4340	Acrylonitrile		
		4375	Benzene		
		4395	Bromodichloromethane		
		4400	Bromoform		
		4450	Carbon disulfide		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		4455	Carbon tetrachloride		
		4475	Chlorobenzene		
		4575	Chlorodibromomethane		
		4485	Chloroethane (Ethyl chloride)		
		4505	Chloroform		
		4645	cis-1,2-Dichloroethylene		
		4680	cis-1,3-Dichloropropene		
		4595	Dibromomethane (Methylene bromide)		
		4625	Dichlorodifluoromethane (Freon-12)		
		4765	Ethylbenzene		
		5240	m+p-xylene		
		4950	Methyl bromide (Bromomethane)		
		4960	Methyl chloride (Chloromethane)		
		5000	Methyl tert-butyl ether (MTBE)		
		4975	Methylene chloride (Dichloromethane)		
		5005	Naphthalene		
		4855	n-Hexane		
		5250	o-Xylene		
		5100	Styrene		
		5115	Tetrachloroethylene (Perchloroethylene)		
		5140	Toluene		
		5205	Total trihalomethanes		
		4700	trans-1,2-Dichloroethylene		
		4685	trans-1,3-Dichloropropylene		
		5170	Trichloroethene (Trichloroethylene)		
		5175	Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)		
		5225	Vinyl acetate		
		5235	Vinyl chloride		
		5260	Xylene (total)		
	EPA 624.1			10298121	Purgeables by GC/MS
		5105	1,1,1,2-Tetrachloroethane		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		5160	1,1,1-Trichloroethane		
		5110	1,1,2,2-Tetrachloroethane		
		5165	1,1,2-Trichloroethane		
		4630	1,1-Dichloroethane		
		4640	1,1-Dichloroethylene		
		5180	1,2,3-Trichloropropane		
		4570	1,2-Dibromo-3-chloropropane (DBCP)		
		4585	1,2-Dibromoethane (EDB, Ethylene dibromide)		
		4610	1,2-Dichlorobenzene		
		4635	1,2-Dichloroethane (Ethylene dichloride)		
		4655	1,2-Dichloropropane		
		4615	1,3-Dichlorobenzene		
		4620	1,4-Dichlorobenzene		
		4735	1,4-Dioxane (1,4- Diethyleneoxide)		
		4410	2-Butanone (Methyl ethyl ketone, MEK)		
		4500	2-Chloroethyl vinyl ether		
		4860	2-Hexanone (MBK)		
		4995	4-Methyl-2-pentanone (MIBK)		
		4315	Acetone		
		4325	Acrolein (Propenal)		
		4340	Acrylonitrile		
		4375	Benzene		
		4395	Bromodichloromethane		
		4400	Bromoform		
		4450	Carbon disulfide		
		4455	Carbon tetrachloride		
		4475	Chlorobenzene		
		4575	Chlorodibromomethane		
		4485	Chloroethane (Ethyl chloride)		
		4505	Chloroform		
		4645	cis-1,2-Dichloroethylene		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		4680	cis-1,3-Dichloropropene		
		4595	Dibromomethane (Methylene bromide)		
		4625	Dichlorodifluoromethane (Freon-12)		
		4765	Ethylbenzene		
		5240	m+p-xylene		
		4950	Methyl bromide (Bromomethane)		
		4960	Methyl chloride (Chloromethane)		
		5000	Methyl tert-butyl ether (MTBE)		
		4975	Methylene chloride (Dichloromethane)		
		5005	Naphthalene		
		4855	n-Hexane		
		5250	o-Xylene		
		5100	Styrene		
		5115	Tetrachloroethylene (Perchloroethylene)		
		5140	Toluene		
		5205	Total trihalomethanes		
		4700	trans-1,2-Dichloroethylene		
		4685	trans-1,3-Dichloropropylene		
		5170	Trichloroethene (Trichloroethylene)		
		5175	Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)		
		5225	Vinyl acetate		
		5235	Vinyl chloride		
		5260	Xylene (total)		
	EPA 625			10300002	Base/Neutrals and Acids by GC/MS
		6715	1,2,4,5-Tetrachlorobenzene		
		5155	1,2,4-Trichlorobenzene		
		4610	1,2-Dichlorobenzene		
		6220	1,2-Diphenylhydrazine		
		4615	1,3-Dichlorobenzene		
		4620	1,4-Dichlorobenzene		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		4735	1,4-Dioxane (1,4- Diethyleneoxide)		
		4659	2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl)ether		
		6835	2,4,5-Trichlorophenol		
		6840	2,4,6-Trichlorophenol		
		5880	2,4-Diaminotoluene		
		6000	2,4-Dichlorophenol		
		6130	2,4-Dimethylphenol		
		6175	2,4-Dinitrophenol		
		6185	2,4-Dinitrotoluene (2,4-DNT)		
		6183	2,6-Diaminotoluene		
		6005	2,6-Dichlorophenol		
		6190	2,6-Dinitrotoluene (2,6-DNT)		
		5795	2-Chloronaphthalene		
		5800	2-Chlorophenol		
		6360	2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)		
		6400	2-Methylphenol (o-Cresol)		
		6490	2-Nitrophenol		
		6412	3 & 4 Methylphenol		
		5945	3,3'-Dichlorobenzidine		
		5660	4-Bromophenyl phenyl ether (BDE-3)		
		5700	4-Chloro-3-methylphenol		
		5825	4-Chlorophenyl phenylether		
		6410	4-Methylphenol (p-Cresol)		
		6500	4-Nitrophenol		
		5500	Acenaphthene		
		5505	Acenaphthylene		
		5510	Acetophenone		
		4330	Acrylamide		
		6700	alpha-Terpineol		
		5545	Aniline		
		5555	Anthracene		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		5562	Azobenzene		
		5565	Benzal chloride		
		5595	Benzidine		
		5575	Benzo(a)anthracene		
		5580	Benzo(a)pyrene		
		5590	Benzo(g,h,i)perylene		
		5600	Benzo(k)fluoranthene		
		5585	Benzo[b]fluoranthene		
		5610	Benzoic acid		
		5760	bis(2-Chloroethoxy)methane		
		5765	bis(2-Chloroethyl) ether		
		5670	Butyl benzyl phthalate		
		5680	Carbazole		
		7210	Carbofuran phenol		
		5855	Chrysene		
		6065	Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)		
		5895	Dibenz(a,h) anthracene		
		6070	Diethyl phthalate		
		6135	Dimethyl phthalate		
		5925	Di-n-butyl phthalate		
		6200	Di-n-octyl phthalate		
		6265	Fluoranthene		
		6270	Fluorene		
		6275	Hexachlorobenzene		
		4835	Hexachlorobutadiene		
		6285	Hexachlorocyclopentadiene		
		4840	Hexachloroethane		
		6315	Indeno(1,2,3-cd) pyrene		
		6320	Isophorone		
		5005	Naphthalene		
		5875	n-Decane		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		5015	Nitrobenzene		
		6530	n-Nitrosodimethylamine		
		6545	n-Nitrosodi-n-propylamine		
		6535	n-Nitrosodiphenylamine		
		6580	n-Octadecane		
		6590	Pentachlorobenzene		
		6605	Pentachlorophenol		
		6615	Phenanthrene		
		6625	Phenol		
		6640	Phthalic anhydride		
		6665	Pyrene		
		5095	Pyridine		
		5200	Triethylamine		
	EPA 625.1			10300024	Base/Neutrals and Acids by GC/MS
		6715	1,2,4,5-Tetrachlorobenzene		
		5155	1,2,4-Trichlorobenzene		
		4610	1,2-Dichlorobenzene		
		6220	1,2-Diphenylhydrazine		
		4615	1,3-Dichlorobenzene		
		4620	1,4-Dichlorobenzene		
		4735	1,4-Dioxane (1,4- Diethyleneoxide)		
		4659	2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl)ether		
		6835	2,4,5-Trichlorophenol		
		6840	2,4,6-Trichlorophenol		
		5880	2,4-Diaminotoluene		
		6000	2,4-Dichlorophenol		
		6130	2,4-Dimethylphenol		
		6175	2,4-Dinitrophenol		
		6185	2,4-Dinitrotoluene (2,4-DNT)		
		6183	2,6-Diaminotoluene		
		6005	2,6-Dichlorophenol		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		6190	2,6-Dinitrotoluene (2,6-DNT)		
		5795	2-Chloronaphthalene		
		5800	2-Chlorophenol		
		6360	2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)		
		6400	2-Methylphenol (o-Cresol)		
		6490	2-Nitrophenol		
		6412	3 & 4 Methylphenol		
		5945	3,3'-Dichlorobenzidine		
		5660	4-Bromophenyl phenyl ether (BDE-3)		
		5700	4-Chloro-3-methylphenol		
		5825	4-Chlorophenyl phenylether		
		6410	4-Methylphenol (p-Cresol)		
		6500	4-Nitrophenol		
		5500	Acenaphthene		
		5505	Acenaphthylene		
		5510	Acetophenone		
		4330	Acrylamide		
		6700	alpha-Terpineol		
		5545	Aniline		
		5555	Anthracene		
		5562	Azobenzene		
		5565	Benzal chloride		
		5595	Benzidine		
		5575	Benzo(a)anthracene		
		5580	Benzo(a)pyrene		
		5590	Benzo(g,h,i)perylene		
		5600	Benzo(k)fluoranthene		
		5585	Benzo[b]fluoranthene		
		5610	Benzoic acid		
		5760	bis(2-Chloroethoxy)methane		
		5765	bis(2-Chloroethyl) ether		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		5670	Butyl benzyl phthalate		
		5680	Carbazole		
		7210	Carbofuran phenol		
		5855	Chrysene		
		6065	Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)		
		9354	Dibenz(a, h) acridine		
		5895	Dibenz(a,h) anthracene		
		6070	Diethyl phthalate		
		6135	Dimethyl phthalate		
		5925	Di-n-butyl phthalate		
		6200	Di-n-octyl phthalate		
		6265	Fluoranthene		
		6270	Fluorene		
		6275	Hexachlorobenzene		
		4835	Hexachlorobutadiene		
		6285	Hexachlorocyclopentadiene		
		4840	Hexachloroethane		
		6315	Indeno(1,2,3-cd) pyrene		
		6320	Isophorone		
		5005	Naphthalene		
		5875	n-Decane		
		5015	Nitrobenzene		
		6530	n-Nitrosodimethylamine		
		6545	n-Nitrosodi-n-propylamine		
		6535	n-Nitrosodiphenylamine		
		6580	n-Octadecane		
		6590	Pentachlorobenzene		
		6605	Pentachlorophenol		
		6615	Phenanthrene		
		6625	Phenol		
		6640	Phthalic anhydride		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		6665	Pyrene		
		5095	Pyridine		
		5200	Triethylamine		
	EPA 6860			10304800	Perchlorate in Water, Soils and Solid Wastes Using Ion Chromatography/Electrospray Ionization/Mass Spectrometry
		1895	Perchlorate		
	EPA 7196A			10162400	Chromium Hexavalent colorimetric
		1045	Chromium VI		
	EPA 7470A			10165807	Mercury in Liquid Waste by Cold Vapor Atomic Absorption
		1095	Mercury		
	EPA 8011			10173009	1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by Microextraction and GC/ECD
		5180	1,2,3-Trichloropropane		
		4585	1,2-Dibromoethane (EDB, Ethylene dibromide)		
		4580	Dibromochloropropane		
	EPA 8015B			10173601	Non-halogenated organics using GC/FID
		9369	Diesel range organics (DRO)		
		9408	Gasoline range organics (GRO)		
		9488	Jet Fuel		
		9499	Motor Oil		
	EPA 8015C			10173805	Non-halogenated organics using GC/FID
		9369	Diesel range organics (DRO)		
		9408	Gasoline range organics (GRO)		
		9488	Jet Fuel		
		9499	Motor Oil		
	EPA 8015D			10305609	Nonhalogenated Organics Using GC/FID
		9369	Diesel range organics (DRO)		
		9408	Gasoline range organics (GRO)		
		9488	Jet Fuel		
		9499	Motor Oil		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
	EPA 8081A			10178606	Organochlorine Pesticides by GC/ECD
		8580	2,4'-DDD		
		8585	2,4'-DDE		
		8590	2,4'-DDT		
		7355	4,4'-DDD		
		7360	4,4'-DDE		
		7365	4,4'-DDT		
		7025	Aldrin		
		7110	alpha-BHC (alpha-Hexachlorocyclohexane)		
		7115	beta-BHC (beta-Hexachlorocyclohexane)		
		7250	Chlordane (tech.)		
		7260	Chlorobenzilate		
		7300	Chlorpyrifos		
		7240	cis-chlordane (alpha-Chlordane)		
		7105	delta-BHC		
		7405	Diallate		
		7460	Dicofol		
		7470	Dieldrin		
		7510	Endosulfan I		
		7515	Endosulfan II		
		7520	Endosulfan sulfate		
		7540	Endrin		
		7530	Endrin aldehyde		
		7535	Endrin ketone		
		7120	gamma-BHC (Lindane, gamma-HexachlorocyclohexanE)		
		7245	gamma-Chlordane		
		7685	Heptachlor		
		7690	Heptachlor epoxide		
		6275	Hexachlorobenzene		
		6280	Hexachlorocyclohexanes		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		7725	Isodrin		
		7740	Kepone		
		7810	Methoxychlor		
		7870	Mirex		
		8045	Propachlor (Ramrod)		
		8250	Toxaphene (Chlorinated camphene)		
	EPA 8081B			10178800	Organochlorine Pesticides by GC/ECD
		8580	2,4'-DDD		
		8585	2,4'-DDE		
		8590	2,4'-DDT		
		7355	4,4'-DDD		
		7360	4,4'-DDE		
		7365	4,4'-DDT		
		7025	Aldrin		
		7110	alpha-BHC (alpha-Hexachlorocyclohexane)		
		7115	beta-BHC (beta-Hexachlorocyclohexane)		
		7250	Chlordane (tech.)		
		7260	Chlorobenzilate		
		7300	Chlorpyrifos		
		7240	cis-chlordane (alpha-Chlordane)		
		7105	delta-BHC		
		7405	Diallate		
		7460	Dicofol		
		7470	Dieldrin		
		7510	Endosulfan I		
		7515	Endosulfan II		
		7520	Endosulfan sulfate		
		7540	Endrin		
		7530	Endrin aldehyde		
		7535	Endrin ketone		
		7120	gamma-BHC (Lindane, gamma-		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
			HexachlorocyclohexanE)		
		7245	gamma-Chlordane		
		7685	Heptachlor		
		7690	Heptachlor epoxide		
		6275	Hexachlorobenzene		
		6280	Hexachlorocyclohexanes		
		7725	Isodrin		
		7740	Kepone		
		7810	Methoxychlor		
		7870	Mirex		
		8045	Propachlor (Ramrod)		
		8250	Toxaphene (Chlorinated camphene)		
	EPA 8082			10179007	Polychlorinated Biphenyls (PCBs) by GC/ECD
		8880	Aroclor-1016 (PCB-1016)		
		8885	Aroclor-1221 (PCB-1221)		
		8890	Aroclor-1232 (PCB-1232)		
		8895	Aroclor-1242 (PCB-1242)		
		8900	Aroclor-1248 (PCB-1248)		
		8905	Aroclor-1254 (PCB-1254)		
		8910	Aroclor-1260 (PCB-1260)		
		8912	Aroclor-1262 (PCB-1262)		
		8913	Aroclor-1268 (PCB-1268)		
	EPA 8082A			10179201	Polychlorinated Biphenyls (PCBs) by GC/ECD
		8880	Aroclor-1016 (PCB-1016)		
		8885	Aroclor-1221 (PCB-1221)		
		8890	Aroclor-1232 (PCB-1232)		
		8895	Aroclor-1242 (PCB-1242)		
		8900	Aroclor-1248 (PCB-1248)		
		8905	Aroclor-1254 (PCB-1254)		
		8910	Aroclor-1260 (PCB-1260)		
		8912	Aroclor-1262 (PCB-1262)		
		8913	Aroclor-1268 (PCB-1268)		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		8896	Total Pentachlorobiphenyls		
	EPA 8141A			10182000	Organophosphorous Pesticides by GC/NPD
		7045	Anilazine		
		7065	Atrazine		
		7070	Azinphos-ethyl (Ethyl guthion)		
		7075	Azinphos-methyl (Guthion)		
		7125	Bolstar (Sulprofos)		
		7220	Carbophenothion		
		7300	Chlorpyrifos		
		7315	Coumaphos		
		7390	Demeton		
		7395	Demeton-o		
		7385	Demeton-s		
		7410	Diazinon		
		8610	Dichlorovos (DDVP, Dichlorvos)		
		7475	Dimethoate		
		8625	Disulfoton		
		7550	EPN		
		7570	Ethoprop		
		7580	Famphur		
		7600	Fensulfothion		
		7605	Fenthion		
		7770	Malathion		
		7785	Merphos		
		7825	Methyl parathion (Parathion, methyl)		
		7850	Mevinphos		
		7905	Naled		
		8290	o,o,o-Triethyl phosphorothioate		
		7955	Parathion, ethyl		
		7985	Phorate		
		8000	Phosmet (Imidan)		
		8060	Propazine		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		8110	Ronnel		
		8125	Simazine		
		8155	Sulfotepp		
		8200	Tetrachlorvinphos (Stirophos, Gardona) Z-isomer		
		8235	Thionazin (Zinophos)		
		8245	Tokuthion (Prothiophos)		
		8275	Trichloronate		
	EPA 8141B			10182204	Organophosphorous Pesticides by GC/NPD
		7045	Anilazine		
		7065	Atrazine		
		7070	Azinphos-ethyl (Ethyl guthion)		
		7075	Azinphos-methyl (Guthion)		
		7125	Bolstar (Sulprofos)		
		7220	Carbophenothion		
		7300	Chlorpyrifos		
		7315	Coumaphos		
		7390	Demeton		
		7395	Demeton-o		
		7385	Demeton-s		
		7410	Diazinon		
		8610	Dichlorovos (DDVP, Dichlorvos)		
		7475	Dimethoate		
		8625	Disulfoton		
		7550	EPN		
		7570	Ethoprop		
		7580	Famphur		
		7600	Fensulfothion		
		7605	Fenthion		
		7770	Malathion		
		7785	Merphos		
		7825	Methyl parathion (Parathion, methyl)		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		7850	Mevinphos		
		7905	Naled		
		7955	Parathion, ethyl		
		7985	Phorate		
		8000	Phosmet (Imidan)		
		8110	Ronnel		
		8125	Simazine		
		8155	Sulfotepp		
		8200	Tetrachlorvinphos (Stirophos, Gardona) Z-isomer		
		8235	Thionazin (Zinophos)		
		8245	Tokuthion (Prothiophos)		
		8275	Trichloronate		
	EPA 8151A			10183207	Chlorinated Herbicides by GC/ECD
		8655	2,4,5-T		
		8545	2,4-D		
		8560	2,4-DB		
		8555	Dalapon		
		8595	Dicamba		
		8605	Dichloroprop (Dichlorprop)		
		8620	Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)		
		7775	MCPA		
		7780	MCPP		
		6605	Pentachlorophenol		
		8645	Picloram		
		8650	Silvex (2,4,5-TP)		
	EPA 8260B			10184802	Volatile Organic Compounds by purge and trap GC/MS
		5105	1,1,1,2-Tetrachloroethane		
		5160	1,1,1-Trichloroethane		
		5110	1,1,2,2-Tetrachloroethane		
		5195	1,1,2-Trichloro-1,2,2-trifluoroethane		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
			(Freon 113)		
		5165	1,1,2-Trichloroethane		
		5167	1,1,2-Trichlorofluoroethane		
		5172	1,1,2-Trifluoroethane		
		5171	1,1-Dichloro-1-fluoroethane		
		4630	1,1-Dichloroethane		
		4640	1,1-Dichloroethylene		
		4670	1,1-Dichloropropene		
		5150	1,2,3-Trichlorobenzene		
		5180	1,2,3-Trichloropropane		
		5182	1,2,3-Trimethylbenzene		
		5155	1,2,4-Trichlorobenzene		
		5210	1,2,4-Trimethylbenzene		
		4570	1,2-Dibromo-3-chloropropane (DBCP)		
		4585	1,2-Dibromoethane (EDB, Ethylene dibromide)		
		4695	1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon-114)		
		4697	1,2-Dichloro-1,1,2-trifluoroethane		
		4610	1,2-Dichlorobenzene		
		4635	1,2-Dichloroethane (Ethylene dichloride)		
		4655	1,2-Dichloropropane		
		6800	1,3,5-Trichlorobenzene		
		5215	1,3,5-Trimethylbenzene		
		4615	1,3-Dichlorobenzene		
		4660	1,3-Dichloropropane		
		4675	1,3-Dichloropropene		
		4620	1,4-Dichlorobenzene		
		4735	1,4-Dioxane (1,4- Diethyleneoxide)		
		4919	1-Chloro-1,1-difluoroethane		
		4510	1-Chlorohexane		
		5222	2,2-Dichloro-1,1,1-trifluoroethane		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
			(Freon 123)		
		4665	2,2-Dichloropropane		
		4410	2-Butanone (Methyl ethyl ketone, MEK)		
		4411	2-Chloro-1,1,1-trifluoroethane		
		4500	2-Chloroethyl vinyl ether		
		4535	2-Chlorotoluene		
		4860	2-Hexanone (MBK)		
		5020	2-Nitropropane		
		5045	2-Pentanone		
		4540	4-Chlorotoluene		
		4910	4-Isopropyltoluene (p-Cymene)		
		4995	4-Methyl-2-pentanone (MIBK)		
		4315	Acetone		
		4320	Acetonitrile		
		4325	Acrolein (Propenal)		
		4340	Acrylonitrile		
		4355	Allyl chloride (3-Chloropropene)		
		4375	Benzene		
		4385	Bromobenzene		
		4390	Bromochloromethane		
		4395	Bromodichloromethane		
		4400	Bromoform		
		4450	Carbon disulfide		
		4455	Carbon tetrachloride		
		4475	Chlorobenzene		
		4575	Chlorodibromomethane		
		4577	Chlorodifluoromethane (Freon-22)		
		4485	Chloroethane (Ethyl chloride)		
		4486	Chlorofluoromethane		
		4505	Chloroform		
		4522	Chloropentafluoroethane		
		4525	Chloroprene (2-Chloro-1,3-butadiene)		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		4526	Chlorotrifluoroethene		
		4705	cis & trans-1,2-Dichloroethene		
		4645	cis-1,2-Dichloroethylene		
		4680	cis-1,3-Dichloropropene		
		4600	cis-1,4-Dichloro-2-butene		
		4555	Cyclohexane		
		4560	Cyclohexanone		
		4595	Dibromomethane (Methylene bromide)		
		4625	Dichlorodifluoromethane (Freon-12)		
		4627	Dichlorofluoromethane (Freon 21)		
		4725	Diethyl ether		
		9375	Di-isopropylether (DIPE)		
		4750	Ethanol		
		4755	Ethyl acetate		
		4760	Ethyl acrylate		
		4810	Ethyl methacrylate		
		4765	Ethylbenzene		
		4795	Ethylene oxide		
		4770	Ethyl-t-butylether (ETBE) (2-Ethoxy-2-methylpropane)		
		4771	Fluorobenzene		
		4772	Fluoromethane (Freon 41)		
		4835	Hexachlorobutadiene		
		4870	Iodomethane (Methyl iodide)		
		4875	Isobutyl alcohol (2-Methyl-1-propanol)		
		4895	Isopropyl alcohol (2-Propanol, Isopropanol)		
		4900	Isopropylbenzene (Cumene)		
		5240	m+p-xylene		
		4925	Methacrylonitrile		
		4940	Methyl acetate		
		4950	Methyl bromide (Bromomethane)		
		4960	Methyl chloride (Chloromethane)		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		4990	Methyl methacrylate		
		5000	Methyl tert-butyl ether (MTBE)		
		4965	Methylcyclohexane		
		4975	Methylene chloride (Dichloromethane)		
		5245	m-Xylene		
		5005	Naphthalene		
		4425	n-Butyl alcohol (1-Butanol, n-Butanol)		
		4435	n-Butylbenzene		
		4825	n-Heptane		
		4855	n-Hexane		
		6575	Nonanal		
		5090	n-Propylbenzene		
		5250	o-Xylene		
		5035	Pentachloroethane		
		5080	Propionitrile (Ethyl cyanide)		
		9579	Propylene oxide		
		5255	p-Xylene		
		9607	sec-Butyl Alcohol (2-Butanol)		
		4440	sec-Butylbenzene		
		5100	Styrene		
		4370	T-amylmethylether (TAME)		
		4420	tert-Butyl alcohol		
		4445	tert-Butylbenzene		
		5115	Tetrachloroethylene (Perchloroethylene)		
		5120	Tetrahydrofuran (THF)		
		9574	Tetrahydrothiophene		
		5140	Toluene		
		4027	Total BTEX		
		5205	Total trihalomethanes		
		4700	trans-1,2-Dichloroethylene		
		4685	trans-1,3-Dichloropropylene		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		4605	trans-1,4-Dichloro-2-butene		
		5170	Trichloroethene (Trichloroethylene)		
		5175	Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)		
		5225	Vinyl acetate		
		5235	Vinyl chloride		
		5237	Vinyl Fluoride		
		5260	Xylene (total)		
	EPA 8260B SIM			10184904	Volatile Organic Compounds by purge and trap GC/MS-SIM
		5160	1,1,1-Trichloroethane		
		5110	1,1,2,2-Tetrachloroethane		
		5165	1,1,2-Trichloroethane		
		5180	1,2,3-Trichloropropane		
		4570	1,2-Dibromo-3-chloropropane (DBCP)		
		4585	1,2-Dibromoethane (EDB, Ethylene dibromide)		
		4635	1,2-Dichloroethane (Ethylene dichloride)		
		9318	1,3-Butadiene		
		4675	1,3-Dichloropropene		
		4735	1,4-Dioxane (1,4- Diethyleneoxide)		
		4325	Acrolein (Propenal)		
		4340	Acrylonitrile		
		4375	Benzene		
		4395	Bromodichloromethane		
		4575	Chlorodibromomethane		
		4505	Chloroform		
		4680	cis-1,3-Dichloropropene		
		4835	Hexachlorobutadiene		
		4925	Methacrylonitrile		
		4420	tert-Butyl alcohol		
		4685	trans-1,3-Dichloropropylene		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		5235	Vinyl chloride		
	EPA 8260C			10307003	Volatile Organics: GC/MS (capillary column)
		5105	1,1,1,2-Tetrachloroethane		
		5195	1,1,1-Trichloro-2,2,2-trifluoroethane (Freon 113a)		
		5160	1,1,1-Trichloroethane		
		5110	1,1,2,2-Tetrachloroethane		
		5185	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)		
		5165	1,1,2-Trichloroethane		
		5167	1,1,2-Trichlorofluoroethane		
		5172	1,1,2-Trifluoroethane		
		5171	1,1-Dichloro-1-fluoroethane		
		4630	1,1-Dichloroethane		
		4640	1,1-Dichloroethylene		
		4643	1,1-Dichloropropane		
		4670	1,1-Dichloropropene		
		5150	1,2,3-Trichlorobenzene		
		5180	1,2,3-Trichloropropane		
		5182	1,2,3-Trimethylbenzene		
		5155	1,2,4-Trichlorobenzene		
		5210	1,2,4-Trimethylbenzene		
		4570	1,2-Dibromo-3-chloropropane (DBCP)		
		4585	1,2-Dibromoethane (EDB, Ethylene dibromide)		
		4695	1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon-114)		
		4697	1,2-Dichloro-1,1,2-trifluoroethane		
		4610	1,2-Dichlorobenzene		
		4635	1,2-Dichloroethane (Ethylene dichloride)		
		4655	1,2-Dichloropropane		
		6800	1,3,5-Trichlorobenzene		
		5215	1,3,5-Trimethylbenzene		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		9318	1,3-Butadiene		
		4615	1,3-Dichlorobenzene		
		4660	1,3-Dichloropropane		
		4675	1,3-Dichloropropene		
		4620	1,4-Dichlorobenzene		
		4622	1,4-Difluorobenzene		
		4735	1,4-Dioxane (1,4- Diethyleneoxide)		
		4919	1-Chloro-1,1-difluoroethane		
		4510	1-Chlorohexane		
		5222	2,2-Dichloro-1,1,1-trifluoroethane (Freon 123)		
		4665	2,2-Dichloropropane		
		4410	2-Butanone (Methyl ethyl ketone, MEK)		
		4411	2-Chloro-1,1,1-trifluoroethane		
		4500	2-Chloroethyl vinyl ether		
		4535	2-Chlorotoluene		
		4860	2-Hexanone (MBK)		
		5020	2-Nitropropane		
		5045	2-Pentanone		
		4540	4-Chlorotoluene		
		4910	4-Isopropyltoluene (p-Cymene)		
		4995	4-Methyl-2-pentanone (MIBK)		
		4315	Acetone		
		4320	Acetonitrile		
		4325	Acrolein (Propenal)		
		4340	Acrylonitrile		
		4355	Allyl chloride (3-Chloropropene)		
		4375	Benzene		
		5635	Benzyl chloride		
		4385	Bromobenzene		
		4390	Bromochloromethane		
		4395	Bromodichloromethane		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		4400	Bromoform		
		4403	Butyl acetate		
		4450	Carbon disulfide		
		4455	Carbon tetrachloride		
		4475	Chlorobenzene		
		4575	Chlorodibromomethane		
		4577	Chlorodifluoromethane (Freon-22)		
		4485	Chloroethane (Ethyl chloride)		
		4486	Chlorofluoromethane		
		4505	Chloroform		
		4522	Chloropentafluoroethane		
		4525	Chloroprene (2-Chloro-1,3-butadiene)		
		4526	Chlorotrifluoroethene		
		4705	cis & trans-1,2-Dichloroethene		
		4645	cis-1,2-Dichloroethylene		
		4680	cis-1,3-Dichloropropene		
		4600	cis-1,4-Dichloro-2-butene		
		4555	Cyclohexane		
		4560	Cyclohexanone		
		4595	Dibromomethane (Methylene bromide)		
		4625	Dichlorodifluoromethane (Freon-12)		
		4627	Dichlorofluoromethane (Freon 21)		
		4725	Diethyl ether		
		9375	Di-isopropylether (DIPE)		
		4729	Dimethyl disulfide		
		4750	Ethanol		
		4755	Ethyl acetate		
		4760	Ethyl acrylate		
		4810	Ethyl methacrylate		
		4765	Ethylbenzene		
		4795	Ethylene oxide		
		4770	Ethyl-t-butylether (ETBE) (2-Ethoxy-2-		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
			methylpropane)		
		4771	Fluorobenzene		
		4772	Fluoromethane (Freon 41)		
		4835	Hexachlorobutadiene		
		4870	Iodomethane (Methyl iodide)		
		4875	Isobutyl alcohol (2-Methyl-1-propanol)		
		4895	Isopropyl alcohol (2-Propanol, Isopropanol)		
		4900	Isopropylbenzene (Cumene)		
		5240	m+p-xylene		
		4925	Methacrylonitrile		
		4940	Methyl acetate		
		4950	Methyl bromide (Bromomethane)		
		4960	Methyl chloride (Chloromethane)		
		4990	Methyl methacrylate		
		5000	Methyl tert-butyl ether (MTBE)		
		4965	Methylcyclohexane		
		4975	Methylene chloride (Dichloromethane)		
		5245	m-Xylene		
		5005	Naphthalene		
		4425	n-Butyl alcohol (1-Butanol, n-Butanol)		
		4435	n-Butylbenzene		
		4825	n-Heptane		
		4855	n-Hexane		
		6575	Nonanal		
		5090	n-Propylbenzene		
		5250	o-Xylene		
		5035	Pentachloroethane		
		5080	Propionitrile (Ethyl cyanide)		
		9579	Propylene oxide		
		5255	p-Xylene		
		9607	sec-Butyl Alcohol (2-Butanol)		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		4440	sec-Butylbenzene		
		5100	Styrene		
		4370	T-amylmethylether (TAME)		
		4420	tert-Butyl alcohol		
		4445	tert-Butylbenzene		
		5115	Tetrachloroethylene (Perchloroethylene)		
		5120	Tetrahydrofuran (THF)		
		9574	Tetrahydrothiophene		
		5140	Toluene		
		4027	Total BTEX		
		5205	Total trihalomethanes		
		4700	trans-1,2-Dichloroethylene		
		4685	trans-1,3-Dichloropropylene		
		4605	trans-1,4-Dichloro-2-butene		
		5170	Trichloroethene (Trichloroethylene)		
		5175	Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)		
		5225	Vinyl acetate		
		5235	Vinyl chloride		
		5237	Vinyl Fluoride		
		5260	Xylene (total)		
	EPA 8260C SIM			10307105	Volatile Organic Compounds by GC/MS-SIM
		4570	1,2-Dibromo-3-chloropropane (DBCP)		
		4585	1,2-Dibromoethane (EDB, Ethylene dibromide)		
		4675	1,3-Dichloropropene		
		4735	1,4-Dioxane (1,4- Diethyleneoxide)		
		4325	Acrolein (Propenal)		
		4340	Acrylonitrile		
		4375	Benzene		
		4395	Bromodichloromethane		
		4575	Chlorodibromomethane		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		4505	Chloroform		
		4835	Hexachlorobutadiene		
		4420	tert-Butyl alcohol		
		5235	Vinyl chloride		
	EPA 8260D			10307127	Volatile Organic Compounds By GC/MS
		5105	1,1,1,2-Tetrachloroethane		
		5160	1,1,1-Trichloroethane		
		5110	1,1,2,2-Tetrachloroethane		
		5185	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)		
		5165	1,1,2-Trichloroethane		
		4630	1,1-Dichloroethane		
		4640	1,1-Dichloroethylene		
		4670	1,1-Dichloropropene		
		5150	1,2,3-Trichlorobenzene		
		5180	1,2,3-Trichloropropane		
		5182	1,2,3-Trimethylbenzene		
		5155	1,2,4-Trichlorobenzene		
		5210	1,2,4-Trimethylbenzene		
		4570	1,2-Dibromo-3-chloropropane (DBCP)		
		4585	1,2-Dibromoethane (EDB, Ethylene dibromide)		
		4695	1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon-114)		
		4697	1,2-Dichloro-1,1,2-trifluoroethane		
		4610	1,2-Dichlorobenzene		
		4635	1,2-Dichloroethane (Ethylene dichloride)		
		4655	1,2-Dichloropropane		
		6800	1,3,5-Trichlorobenzene		
		5215	1,3,5-Trimethylbenzene		
		4615	1,3-Dichlorobenzene		
		4660	1,3-Dichloropropane		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		4675	1,3-Dichloropropene		
		4620	1,4-Dichlorobenzene		
		4735	1,4-Dioxane (1,4- Diethyleneoxide)		
		4510	1-Chlorohexane		
		5222	2,2-Dichloro-1,1,1-trifluoroethane (Freon 123)		
		4665	2,2-Dichloropropane		
		4410	2-Butanone (Methyl ethyl ketone, MEK)		
		4411	2-Chloro-1,1,1-trifluoroethane		
		4500	2-Chloroethyl vinyl ether		
		4535	2-Chlorotoluene		
		4860	2-Hexanone (MBK)		
		6385	2-Methylnaphthalene		
		5020	2-Nitropropane		
		5045	2-Pentanone		
		4540	4-Chlorotoluene		
		4910	4-Isopropyltoluene (p-Cymene)		
		4995	4-Methyl-2-pentanone (MIBK)		
		4315	Acetone		
		4320	Acetonitrile		
		4325	Acrolein (Propenal)		
		4340	Acrylonitrile		
		4355	Allyl chloride (3-Chloropropene)		
		4375	Benzene		
		5635	Benzyl chloride		
		4385	Bromobenzene		
		4390	Bromochloromethane		
		4395	Bromodichloromethane		
		4400	Bromoform		
		4450	Carbon disulfide		
		4455	Carbon tetrachloride		
		4475	Chlorobenzene		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		4575	Chlorodibromomethane		
		4485	Chloroethane (Ethyl chloride)		
		4505	Chloroform		
		4525	Chloroprene (2-Chloro-1,3-butadiene)		
		4526	Chlorotrifluoroethene		
		4705	cis & trans-1,2-Dichloroethene		
		4645	cis-1,2-Dichloroethylene		
		4680	cis-1,3-Dichloropropene		
		4600	cis-1,4-Dichloro-2-butene		
		4555	Cyclohexane		
		4560	Cyclohexanone		
		4595	Dibromomethane (Methylene bromide)		
		4625	Dichlorodifluoromethane (Freon-12)		
		4627	Dichlorofluoromethane (Freon 21)		
		4725	Diethyl ether		
		9375	Di-isopropylether (DIPE)		
		4750	Ethanol		
		4755	Ethyl acetate		
		4760	Ethyl acrylate		
		4810	Ethyl methacrylate		
		4765	Ethylbenzene		
		4795	Ethylene oxide		
		4770	Ethyl-t-butylether (ETBE) (2-Ethoxy-2-methylpropane)		
		4771	Fluorobenzene		
		4835	Hexachlorobutadiene		
		4870	Iodomethane (Methyl iodide)		
		4875	Isobutyl alcohol (2-Methyl-1-propanol)		
		4895	Isopropyl alcohol (2-Propanol, Isopropanol)		
		4900	Isopropylbenzene (Cumene)		
		5240	m+p-xylene		
		4925	Methacrylonitrile		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		4940	Methyl acetate		
		4950	Methyl bromide (Bromomethane)		
		4960	Methyl chloride (Chloromethane)		
		4990	Methyl methacrylate		
		5000	Methyl tert-butyl ether (MTBE)		
		4965	Methylcyclohexane		
		4975	Methylene chloride (Dichloromethane)		
		5005	Naphthalene		
		4425	n-Butyl alcohol (1-Butanol, n-Butanol)		
		4435	n-Butylbenzene		
		4825	n-Heptane		
		4855	n-Hexane		
		6575	Nonanal		
		5090	n-Propylbenzene		
		5250	o-Xylene		
		5035	Pentachloroethane		
		5080	Propionitrile (Ethyl cyanide)		
		9579	Propylene oxide		
		9607	sec-Butyl Alcohol (2-Butanol)		
		4440	sec-Butylbenzene		
		5100	Styrene		
		4370	T-amylmethylether (TAME)		
		4420	tert-Butyl alcohol		
		4445	tert-Butylbenzene		
		5115	Tetrachloroethylene (Perchloroethylene)		
		5120	Tetrahydrofuran (THF)		
		9574	Tetrahydrothiophene		
		5140	Toluene		
		4027	Total BTEX		
		5205	Total trihalomethanes		
		4700	trans-1,2-Dichloroethylene		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		4685	trans-1,3-Dichloropropylene		
		4605	trans-1,4-Dichloro-2-butene		
		5170	Trichloroethene (Trichloroethylene)		
		5175	Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)		
		5225	Vinyl acetate		
		5235	Vinyl chloride		
		5260	Xylene (total)		
	EPA 8260D SIM			10307138	Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry Selected Ion Monitoring (GC/MS SIM)
		4570	1,2-Dibromo-3-chloropropane (DBCP)		
		4585	1,2-Dibromoethane (EDB, Ethylene dibromide)		
		4675	1,3-Dichloropropene		
		4735	1,4-Dioxane (1,4- Diethyleneoxide)		
		4325	Acrolein (Propenal)		
		4340	Acrylonitrile		
		4375	Benzene		
		4395	Bromodichloromethane		
		4575	Chlorodibromomethane		
		4505	Chloroform		
		4835	Hexachlorobutadiene		
		4420	tert-Butyl alcohol		
		5235	Vinyl chloride		
	EPA 8270C			10185805	Semivolatile Organic compounds by GC/MS
		6703	1,1'-Biphenyl (BZ-0)		
		6715	1,2,4,5-Tetrachlorobenzene		
		5155	1,2,4-Trichlorobenzene		
		4610	1,2-Dichlorobenzene		
		6220	1,2-Diphenylhydrazine		
		6885	1,3,5-Trinitrobenzene (1,3,5-TNB)		
		4615	1,3-Dichlorobenzene		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		6160	1,3-Dinitrobenzene (1,3-DNB)		
		4679	1,3-phenylenediamine		
		4620	1,4-Dichlorobenzene		
		6165	1,4-Dinitrobenzene		
		4735	1,4-Dioxane (1,4- Diethyleneoxide)		
		6420	1,4-Naphthoquinone		
		6630	1,4-Phenylenediamine		
		5790	1-Chloronaphthalene		
		6380	1-Methylnaphthalene		
		6425	1-Naphthylamine		
		4659	2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl)ether		
		6735	2,3,4,6-Tetrachlorophenol		
		6835	2,4,5-Trichlorophenol		
		6840	2,4,6-Trichlorophenol		
		6000	2,4-Dichlorophenol		
		6130	2,4-Dimethylphenol		
		6175	2,4-Dinitrophenol		
		6185	2,4-Dinitrotoluene (2,4-DNT)		
		6005	2,6-Dichlorophenol		
		6190	2,6-Dinitrotoluene (2,6-DNT)		
		5515	2-Acetylaminofluorene		
		9322	2-Butoxyethanol		
		5795	2-Chloronaphthalene		
		5800	2-Chlorophenol		
		5866	2-Ethoxyethanol (cellosolve)		
		6360	2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)		
		5145	2-Methylaniline (o-Toluidine)		
		6385	2-Methylnaphthalene		
		6400	2-Methylphenol (o-Cresol)		
		6430	2-Naphthylamine		
		6460	2-Nitroaniline		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		6490	2-Nitrophenol		
		5050	2-Picoline (2-Methylpyridine)		
		6412	3 & 4 Methylphenol		
		5945	3,3'-Dichlorobenzidine		
		6120	3,3'-Dimethylbenzidine		
		6398	3,5-Dimethylphenol		
		6355	3-Methylcholanthrene		
		6405	3-Methylphenol (m-Cresol)		
		6465	3-Nitroaniline		
		6365	4,4-Methylenebis(2-chloroaniline)		
		5540	4-Aminobiphenyl		
		5660	4-Bromophenyl phenyl ether (BDE-3)		
		5700	4-Chloro-3-methylphenol		
		5745	4-Chloroaniline		
		5825	4-Chlorophenyl phenylether		
		6105	4-Dimethyl aminoazobenzene		
		6410	4-Methylphenol (p-Cresol)		
		6470	4-Nitroaniline		
		6500	4-Nitrophenol		
		6510	4-Nitroquinoline 1-oxide		
		6570	5-Nitro-o-toluidine		
		6112	6-Methylchrysene		
		6115	7,12-Dimethylbenz(a) anthracene		
		6125	a-a-Dimethylphenethylamine		
		5500	Acenaphthene		
		5505	Acenaphthylene		
		5510	Acetophenone		
		4330	Acrylamide		
		7005	Alachlor		
		4357	alpha-Methylstyrene		
		6700	alpha-Terpineol		
		5545	Aniline		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		5555	Anthracene		
		5560	Aramite		
		7065	Atrazine		
		5562	Azobenzene		
		5570	Benzaldehyde		
		5567	Benzenethiol		
		5595	Benzidine		
		5575	Benzo(a)anthracene		
		5580	Benzo(a)pyrene		
		5605	Benzo(e)pyrene		
		5590	Benzo(g,h,i)perylene		
		5600	Benzo(k)fluoranthene		
		5585	Benzo[b]fluoranthene		
		5610	Benzoic acid		
		5630	Benzyl alcohol		
		5760	bis(2-Chloroethoxy)methane		
		5765	bis(2-Chloroethyl) ether		
		5670	Butyl benzyl phthalate		
		7180	Caprolactam		
		5680	Carbazole		
		7210	Carbofuran phenol		
		7260	Chlorobenzilate		
		5855	Chrysene		
		5862	Cresols, Total		
		6065	Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)		
		7405	Diallate		
		9354	Dibenz(a, h) acridine		
		5900	Dibenz(a, j) acridine		
		5895	Dibenz(a,h) anthracene		
		5890	Dibenzo(a,e) pyrene		
		5905	Dibenzofuran		

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Environmental Laboratory Accreditation Program

ORELAP Fields of Accreditation

TestAmerica Denver
4955 Yarrow St.
Arvada, CO 80002

ORELAP ID: 4025
EPA CODE: CO00026
Certificate: 4025 - 015

Issue Date: 9/9/2021 Expiration Date: 1/8/2022

As of 9/9/2021 this list supersedes all previous lists for this certificate number.

Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		6070	Diethyl phthalate		
		7475	Dimethoate		
		6135	Dimethyl phthalate		
		5925	Di-n-butyl phthalate		
		6200	Di-n-octyl phthalate		
		8620	Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)		
		6205	Diphenylamine		
		8625	Disulfoton		
		4810	Ethyl methacrylate		
		6260	Ethyl methanesulfonate		
		7580	Famphur		
		6265	Fluoranthene		
		6270	Fluorene		
		6275	Hexachlorobenzene		
		4835	Hexachlorobutadiene		
		6285	Hexachlorocyclopentadiene		
		4840	Hexachloroethane		
		6290	Hexachlorophene		
		6295	Hexachloropropene		
		6312	Indene		
		6315	Indeno(1,2,3-cd) pyrene		
		7725	Isodrin		
		6320	Isophorone		
		6325	Isosafrole		
		6345	Methapyrilene		
		6375	Methyl methanesulfonate		
		7825	Methyl parathion (Parathion, methyl)		
		5010	n, n-Dimethyl formamide		
		5005	Naphthalene		
		5875	n-Decane		
		6300	n-Hexadecane		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		5015	Nitrobenzene		
		6525	n-Nitrosodiethylamine		
		6530	n-Nitrosodimethylamine		
		5025	n-Nitroso-di-n-butylamine		
		6545	n-Nitrosodi-n-propylamine		
		6535	n-Nitrosodiphenylamine		
		6550	n-Nitrosomethylethylamine		
		6555	n-Nitrosomorpholine		
		6560	n-Nitrosopiperidine		
		6565	n-Nitrosopyrrolidine		
		8290	o,o,o-Triethyl phosphorothioate		
		5550	o-Anisidine		
		5553	Octachlorostyrene		
		7955	Parathion, ethyl		
		6590	Pentachlorobenzene		
		5035	Pentachloroethane		
		6600	Pentachloronitrobenzene		
		6605	Pentachlorophenol		
		6608	Perylene		
		6610	Phenacetin		
		6615	Phenanthrene		
		6625	Phenol		
		7985	Phorate		
		6635	Phthalic acid		
		6640	Phthalic anhydride		
		6650	Pronamide (Kerb)		
		6665	Pyrene		
		5095	Pyridine		
		6670	Quinoline		
		6685	Safrole		
		8155	Sulfotepp		
		8235	Thionazin (Zinophos)		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		8262	Tributyl phosphate		
		5200	Triethylamine		
		8310	tris-(2,3-Dibromopropyl) phosphate (tris-BP)		
	EPA 8270C SIM			10242407	Semivolatile Organic compounds by GC/MS Selective Ion Monitoring
		6160	1,3-Dinitrobenzene (1,3-DNB)		
		4735	1,4-Dioxane (1,4- Diethyleneoxide)		
		6380	1-Methylnaphthalene		
		6175	2,4-Dinitrophenol		
		6185	2,4-Dinitrotoluene (2,4-DNT)		
		6190	2,6-Dinitrotoluene (2,6-DNT)		
		6385	2-Methylnaphthalene		
		5945	3,3'-Dichlorobenzidine		
		5745	4-Chloroaniline		
		5500	Acenaphthene		
		5505	Acenaphthylene		
		5555	Anthracene		
		5575	Benzo(a)anthracene		
		5580	Benzo(a)pyrene		
		5605	Benzo(e)pyrene		
		5590	Benzo(g,h,i)perylene		
		5600	Benzo(k)fluoranthene		
		5585	Benzo[b]fluoranthene		
		5765	bis(2-Chloroethyl) ether		
		5670	Butyl benzyl phthalate		
		5855	Chrysene		
		6065	Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)		
		5895	Dibenz(a,h) anthracene		
		5905	Dibenzofuran		
		6070	Diethyl phthalate		
		6135	Dimethyl phthalate		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		5925	Di-n-butyl phthalate		
		6200	Di-n-octyl phthalate		
		6265	Fluoranthene		
		6270	Fluorene		
		6275	Hexachlorobenzene		
		6285	Hexachlorocyclopentadiene		
		4840	Hexachloroethane		
		6315	Indeno(1,2,3-cd) pyrene		
		5005	Naphthalene		
		5015	Nitrobenzene		
		6525	n-Nitrosodiethylamine		
		6530	n-Nitrosodimethylamine		
		6545	n-Nitrosodi-n-propylamine		
		6535	n-Nitrosodiphenylamine		
		6605	Pentachlorophenol		
		6615	Phenanthrene		
		6665	Pyrene		
	EPA 8270D			10186002	Semivolatile Organic compounds by GC/MS
		6703	1,1'-Biphenyl (BZ-0)		
		6715	1,2,4,5-Tetrachlorobenzene		
		5155	1,2,4-Trichlorobenzene		
		4610	1,2-Dichlorobenzene		
		6220	1,2-Diphenylhydrazine		
		6885	1,3,5-Trinitrobenzene (1,3,5-TNB)		
		4615	1,3-Dichlorobenzene		
		6160	1,3-Dinitrobenzene (1,3-DNB)		
		4679	1,3-phenylenediamine		
		4620	1,4-Dichlorobenzene		
		6165	1,4-Dinitrobenzene		
		4735	1,4-Dioxane (1,4- Diethyleneoxide)		
		6420	1,4-Naphthoquinone		
		6630	1,4-Phenylenediamine		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		5790	1-Chloronaphthalene		
		6380	1-Methylnaphthalene		
		6425	1-Naphthylamine		
		4659	2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl)ether		
		6735	2,3,4,6-Tetrachlorophenol		
		6835	2,4,5-Trichlorophenol		
		6840	2,4,6-Trichlorophenol		
		6000	2,4-Dichlorophenol		
		6130	2,4-Dimethylphenol		
		6175	2,4-Dinitrophenol		
		6185	2,4-Dinitrotoluene (2,4-DNT)		
		6005	2,6-Dichlorophenol		
		6190	2,6-Dinitrotoluene (2,6-DNT)		
		5515	2-Acetylaminofluorene		
		5795	2-Chloronaphthalene		
		5800	2-Chlorophenol		
		5866	2-Ethoxyethanol (cellosolve)		
		6360	2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)		
		5145	2-Methylaniline (o-Toluidine)		
		6385	2-Methylnaphthalene		
		6400	2-Methylphenol (o-Cresol)		
		6430	2-Naphthylamine		
		6460	2-Nitroaniline		
		6490	2-Nitrophenol		
		5050	2-Picoline (2-Methylpyridine)		
		6412	3 & 4 Methylphenol		
		5945	3,3'-Dichlorobenzidine		
		6120	3,3'-Dimethylbenzidine		
		6398	3,5-Dimethylphenol		
		6355	3-Methylcholanthrene		
		6405	3-Methylphenol (m-Cresol)		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		6465	3-Nitroaniline		
		6365	4,4-Methylenebis(2-chloroaniline)		
		5540	4-Aminobiphenyl		
		5660	4-Bromophenyl phenyl ether (BDE-3)		
		5700	4-Chloro-3-methylphenol		
		5745	4-Chloroaniline		
		5825	4-Chlorophenyl phenylether		
		6105	4-Dimethyl aminoazobenzene		
		6410	4-Methylphenol (p-Cresol)		
		6470	4-Nitroaniline		
		6500	4-Nitrophenol		
		6510	4-Nitroquinoline 1-oxide		
		6570	5-Nitro-o-toluidine		
		6112	6-Methylchrysene		
		6115	7,12-Dimethylbenz(a) anthracene		
		6125	a-a-Dimethylphenethylamine		
		5500	Acenaphthene		
		5505	Acenaphthylene		
		5510	Acetophenone		
		4330	Acrylamide		
		7005	Alachlor		
		4357	alpha-Methylstyrene		
		6700	alpha-Terpineol		
		5545	Aniline		
		5555	Anthracene		
		5560	Aramite		
		7065	Atrazine		
		5562	Azobenzene		
		5570	Benzaldehyde		
		5567	Benzenethiol		
		5595	Benzidine		
		5575	Benzo(a)anthracene		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		5580	Benzo(a)pyrene		
		5605	Benzo(e)pyrene		
		5590	Benzo(g,h,i)perylene		
		5600	Benzo(k)fluoranthene		
		5585	Benzo[b]fluoranthene		
		5610	Benzoic acid		
		5630	Benzyl alcohol		
		5760	bis(2-Chloroethoxy)methane		
		5765	bis(2-Chloroethyl) ether		
		5670	Butyl benzyl phthalate		
		7180	Caprolactam		
		5680	Carbazole		
		7210	Carbofuran phenol		
		7260	Chlorobenzilate		
		5855	Chrysene		
		8906	Coelution - 3-Chlorophenol + 4-Chlorophenol		
		5862	Cresols, Total		
		6065	Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)		
		7405	Diallate		
		9354	Dibenz(a, h) acridine		
		5900	Dibenz(a, j) acridine		
		5895	Dibenz(a,h) anthracene		
		5890	Dibenzo(a,e) pyrene		
		5905	Dibenzofuran		
		6070	Diethyl phthalate		
		7475	Dimethoate		
		6135	Dimethyl phthalate		
		5925	Di-n-butyl phthalate		
		6200	Di-n-octyl phthalate		
		8620	Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		6205	Diphenylamine		
		8625	Disulfoton		
		7510	Endosulfan I		
		4810	Ethyl methacrylate		
		6260	Ethyl methanesulfonate		
		7580	Famphur		
		6265	Fluoranthene		
		6270	Fluorene		
		6275	Hexachlorobenzene		
		4835	Hexachlorobutadiene		
		6285	Hexachlorocyclopentadiene		
		4840	Hexachloroethane		
		6290	Hexachlorophene		
		6295	Hexachloropropene		
		6312	Indene		
		6315	Indeno(1,2,3-cd) pyrene		
		7725	Isodrin		
		6320	Isophorone		
		6325	Isosafrole		
		6345	Methapyrilene		
		6375	Methyl methanesulfonate		
		7825	Methyl parathion (Parathion, methyl)		
		5010	n, n-Dimethyl formamide		
		5005	Naphthalene		
		5875	n-Decane		
		6300	n-Hexadecane		
		5015	Nitrobenzene		
		6525	n-Nitrosodiethylamine		
		6530	n-Nitrosodimethylamine		
		5025	n-Nitroso-di-n-butylamine		
		6545	n-Nitrosodi-n-propylamine		
		6535	n-Nitrosodiphenylamine		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		6550	n-Nitrosomethylethylamine		
		6555	n-Nitrosomorpholine		
		6560	n-Nitrosopiperidine		
		6565	n-Nitrosopyrrolidine		
		8290	o,o,o-Triethyl phosphorothioate		
		5550	o-Anisidine		
		5553	Octachlorostyrene		
		7955	Parathion, ethyl		
		6590	Pentachlorobenzene		
		5035	Pentachloroethane		
		6600	Pentachloronitrobenzene		
		6605	Pentachlorophenol		
		6608	Perylene		
		6610	Phenacetin		
		6615	Phenanthrene		
		6625	Phenol		
		7985	Phorate		
		6635	Phthalic acid		
		6640	Phthalic anhydride		
		6650	Pronamide (Kerb)		
		6665	Pyrene		
		5095	Pyridine		
		6670	Quinoline		
		6685	Safrole		
		8155	Sulfotepp		
		8235	Thionazin (Zinophos)		
		8262	Tributyl phosphate		
		5200	Triethylamine		
		8310	tris-(2,3-Dibromopropyl) phosphate (tris-BP)		
		6575	Nonanal		
	EPA 8270D SIM			10242509	Semivolatile Organic compounds by GC/MS Selective Ion Monitoring

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		6160	1,3-Dinitrobenzene (1,3-DNB)		
		4735	1,4-Dioxane (1,4- Diethyleneoxide)		
		6380	1-Methylnaphthalene		
		6175	2,4-Dinitrophenol		
		6185	2,4-Dinitrotoluene (2,4-DNT)		
		6190	2,6-Dinitrotoluene (2,6-DNT)		
		6385	2-Methylnaphthalene		
		5945	3,3'-Dichlorobenzidine		
		5745	4-Chloroaniline		
		5500	Acenaphthene		
		5505	Acenaphthylene		
		5555	Anthracene		
		5575	Benzo(a)anthracene		
		5580	Benzo(a)pyrene		
		5590	Benzo(g,h,i)perylene		
		5600	Benzo(k)fluoranthene		
		5585	Benzo[b]fluoranthene		
		5765	bis(2-Chloroethyl) ether		
		5670	Butyl benzyl phthalate		
		5855	Chrysene		
		6065	Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)		
		5895	Dibenz(a,h) anthracene		
		5905	Dibenzofuran		
		6070	Diethyl phthalate		
		6135	Dimethyl phthalate		
		5925	Di-n-butyl phthalate		
		6200	Di-n-octyl phthalate		
		6265	Fluoranthene		
		6270	Fluorene		
		6275	Hexachlorobenzene		
		6285	Hexachlorocyclopentadiene		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		4840	Hexachloroethane		
		6315	Indeno(1,2,3-cd) pyrene		
		5005	Naphthalene		
		5015	Nitrobenzene		
		6525	n-Nitrosodiethylamine		
		6530	n-Nitrosodimethylamine		
		6545	n-Nitrosodi-n-propylamine		
		6535	n-Nitrosodiphenylamine		
		6605	Pentachlorophenol		
		6615	Phenanthrene		
		6665	Pyrene		
	EPA 8270E			10242543	Semivolatile Organic compounds by GC/MS
		6703	1,1'-Biphenyl (BZ-0)		
		6715	1,2,4,5-Tetrachlorobenzene		
		5155	1,2,4-Trichlorobenzene		
		4610	1,2-Dichlorobenzene		
		6220	1,2-Diphenylhydrazine		
		6885	1,3,5-Trinitrobenzene (1,3,5-TNB)		
		4615	1,3-Dichlorobenzene		
		6160	1,3-Dinitrobenzene (1,3-DNB)		
		4679	1,3-phenylenediamine		
		4620	1,4-Dichlorobenzene		
		6165	1,4-Dinitrobenzene		
		4735	1,4-Dioxane (1,4- Diethyleneoxide)		
		6420	1,4-Naphthoquinone		
		6630	1,4-Phenylenediamine		
		5790	1-Chloronaphthalene		
		6380	1-Methylnaphthalene		
		6425	1-Naphthylamine		
		4659	2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl)ether		
		6735	2,3,4,6-Tetrachlorophenol		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		6835	2,4,5-Trichlorophenol		
		6840	2,4,6-Trichlorophenol		
		6000	2,4-Dichlorophenol		
		6130	2,4-Dimethylphenol		
		6175	2,4-Dinitrophenol		
		6185	2,4-Dinitrotoluene (2,4-DNT)		
		6005	2,6-Dichlorophenol		
		6190	2,6-Dinitrotoluene (2,6-DNT)		
		5515	2-Acetylaminofluorene		
		5795	2-Chloronaphthalene		
		5800	2-Chlorophenol		
		5866	2-Ethoxyethanol (cellosolve)		
		6360	2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)		
		5145	2-Methylaniline (o-Toluidine)		
		6385	2-Methylnaphthalene		
		6400	2-Methylphenol (o-Cresol)		
		6430	2-Naphthylamine		
		6460	2-Nitroaniline		
		6490	2-Nitrophenol		
		5050	2-Picoline (2-Methylpyridine)		
		6412	3 & 4 Methylphenol		
		5945	3,3'-Dichlorobenzidine		
		6120	3,3'-Dimethylbenzidine		
		6398	3,5-Dimethylphenol		
		6355	3-Methylcholanthrene		
		6405	3-Methylphenol (m-Cresol)		
		6465	3-Nitroaniline		
		6365	4,4-Methylenebis(2-chloroaniline)		
		5540	4-Aminobiphenyl		
		5660	4-Bromophenyl phenyl ether (BDE-3)		
		5700	4-Chloro-3-methylphenol		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		5745	4-Chloroaniline		
		5825	4-Chlorophenyl phenylether		
		6105	4-Dimethyl aminoazobenzene		
		6410	4-Methylphenol (p-Cresol)		
		6470	4-Nitroaniline		
		6500	4-Nitrophenol		
		6510	4-Nitroquinoline 1-oxide		
		6570	5-Nitro-o-toluidine		
		6112	6-Methylchrysene		
		6115	7,12-Dimethylbenz(a) anthracene		
		6125	a-a-Dimethylphenethylamine		
		5500	Acenaphthene		
		5505	Acenaphthylene		
		5510	Acetophenone		
		4330	Acrylamide		
		7005	Alachlor		
		4357	alpha-Methylstyrene		
		6700	alpha-Terpineol		
		5545	Aniline		
		5555	Anthracene		
		5560	Aramite		
		7065	Atrazine		
		5562	Azobenzene		
		5570	Benzaldehyde		
		5567	Benzenethiol		
		5595	Benzidine		
		5575	Benzo(a)anthracene		
		5580	Benzo(a)pyrene		
		5605	Benzo(e)pyrene		
		5590	Benzo(g,h,i)perylene		
		5600	Benzo(k)fluoranthene		
		5585	Benzo[b]fluoranthene		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		5610	Benzoic acid		
		5630	Benzyl alcohol		
		5635	Benzyl chloride		
		5760	bis(2-Chloroethoxy)methane		
		5765	bis(2-Chloroethyl) ether		
		5670	Butyl benzyl phthalate		
		7180	Caprolactam		
		5680	Carbazole		
		7210	Carbofuran phenol		
		7260	Chlorobenzilate		
		5855	Chrysene		
		5862	Cresols, Total		
		6065	Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)		
		7405	Diallate		
		9354	Dibenz(a, h) acridine		
		5900	Dibenz(a, j) acridine		
		5895	Dibenz(a,h) anthracene		
		5890	Dibenzo(a,e) pyrene		
		5905	Dibenzofuran		
		6070	Diethyl phthalate		
		7475	Dimethoate		
		6135	Dimethyl phthalate		
		5925	Di-n-butyl phthalate		
		6200	Di-n-octyl phthalate		
		8620	Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)		
		6205	Diphenylamine		
		8625	Disulfoton		
		6260	Ethyl methanesulfonate		
		7580	Famphur		
		6265	Fluoranthene		
		6270	Fluorene		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		6275	Hexachlorobenzene		
		4835	Hexachlorobutadiene		
		6285	Hexachlorocyclopentadiene		
		4840	Hexachloroethane		
		6290	Hexachlorophene		
		6295	Hexachloropropene		
		6312	Indene		
		6315	Indeno(1,2,3-cd) pyrene		
		7725	Isodrin		
		6320	Isophorone		
		6325	Isosafrole		
		6345	Methapyrilene		
		6375	Methyl methanesulfonate		
		7825	Methyl parathion (Parathion, methyl)		
		5010	n, n-Dimethyl formamide		
		5005	Naphthalene		
		5875	n-Decane		
		6300	n-Hexadecane		
		5015	Nitrobenzene		
		6525	n-Nitrosodiethylamine		
		6530	n-Nitrosodimethylamine		
		5025	n-Nitroso-di-n-butylamine		
		6545	n-Nitrosodi-n-propylamine		
		6535	n-Nitrosodiphenylamine		
		6550	n-Nitrosomethylethylamine		
		6555	n-Nitrosomorpholine		
		6560	n-Nitrosopiperidine		
		6565	n-Nitrosopyrrolidine		
		8290	o,o,o-Triethyl phosphorothioate		
		5550	o-Anisidine		
		5553	Octachlorostyrene		
		7955	Parathion, ethyl		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		6590	Pentachlorobenzene		
		5035	Pentachloroethane		
		6600	Pentachloronitrobenzene		
		6605	Pentachlorophenol		
		6608	Perylene		
		6610	Phenacetin		
		6615	Phenanthrene		
		6625	Phenol		
		7985	Phorate		
		6635	Phthalic acid		
		6640	Phthalic anhydride		
		6650	Pronamide (Kerb)		
		6665	Pyrene		
		5095	Pyridine		
		6670	Quinoline		
		6685	Safrole		
		8155	Sulfotepp		
		8235	Thionazin (Zinophos)		
		8262	Tributyl phosphate		
		5200	Triethylamine		
		8310	tris-(2,3-Dibromopropyl) phosphate (tris-BP)		
	EPA 8270E SIM			10242565	Semivolatile Organic compounds by Gas Chromatography/Mass Spectrometry (GC/MS-SIM)
		6160	1,3-Dinitrobenzene (1,3-DNB)		
		4735	1,4-Dioxane (1,4- Diethyleneoxide)		
		6380	1-Methylnaphthalene		
		6175	2,4-Dinitrophenol		
		6185	2,4-Dinitrotoluene (2,4-DNT)		
		6190	2,6-Dinitrotoluene (2,6-DNT)		
		6385	2-Methylnaphthalene		
		5945	3,3'-Dichlorobenzidine		
		5745	4-Chloroaniline		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		5500	Acenaphthene		
		5505	Acenaphthylene		
		5555	Anthracene		
		5575	Benzo(a)anthracene		
		5580	Benzo(a)pyrene		
		5590	Benzo(g,h,i)perylene		
		5600	Benzo(k)fluoranthene		
		5585	Benzo[b]fluoranthene		
		5765	bis(2-Chloroethyl) ether		
		5670	Butyl benzyl phthalate		
		5855	Chrysene		
		6065	Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)		
		5895	Dibenz(a,h) anthracene		
		5905	Dibenzofuran		
		6070	Diethyl phthalate		
		6135	Dimethyl phthalate		
		5925	Di-n-butyl phthalate		
		6200	Di-n-octyl phthalate		
		6265	Fluoranthene		
		6270	Fluorene		
		6275	Hexachlorobenzene		
		6285	Hexachlorocyclopentadiene		
		4840	Hexachloroethane		
		6315	Indeno(1,2,3-cd) pyrene		
		5005	Naphthalene		
		5015	Nitrobenzene		
		6530	n-Nitrosodimethylamine		
		6545	n-Nitrosodi-n-propylamine		
		6535	n-Nitrosodiphenylamine		
		6605	Pentachlorophenol		
		6615	Phenanthrene		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		6665	Pyrene		
	EPA 8321A			10189001	Solvent Extractable non-volatile compounds by HPLC/TS/MS
		6885	1,3,5-Trinitrobenzene (1,3,5-TNB)		
		6160	1,3-Dinitrobenzene (1,3-DNB)		
		6014	2,3-Dinitrotoluene		
		8655	2,4,5-T		
		9651	2,4,6-Trinitrotoluene (2,4,6-TNT)		
		8545	2,4-D		
		8560	2,4-DB		
		6185	2,4-Dinitrotoluene (2,4-DNT)		
		6190	2,6-Dinitrotoluene (2,6-DNT)		
		9303	2-Amino-4,6-dinitrotoluene (2-am-dnt)		
		9507	2-Nitrotoluene		
		6150	3,5-Dinitroaniline		
		9510	3-Nitrotoluene		
		9306	4-Amino-2,6-dinitrotoluene (4-am-dnt)		
		9513	4-Nitrotoluene		
		7010	Aldicarb (Temik)		
		7040	Aminocarb		
		7195	Carbaryl (Sevin)		
		7205	Carbofuran (Furaden)		
		7275	Chloropropham		
		8555	Dalapon		
		8595	Dicamba		
		8605	Dichloroprop (Dichlorprop)		
		8620	Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)		
		7505	Diuron		
		7610	Fenuron		
		7630	Fluometuron		
		7765	Linuron (Lorox)		
		7775	MCPA		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		7780	MCPP		
		7800	Methiocarb (Mesurol)		
		7805	Methomyl (Lannate)		
		6415	Methyl-2,4,6-trinitrophenylnitramine (tetryl)		
		7855	Mexacarbate		
		7885	Monuron		
		7915	Neburon		
		5015	Nitrobenzene		
		6485	Nitroglycerin		
		9522	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)		
		6605	Pentachlorophenol		
		9558	Pentaerythritoltetranitrate (PETN)		
		8075	Propham		
		8080	Propoxur (Baygon)		
		9432	RDX (hexahydro-1,3,5-trinitro-1,3,5-triazine)		
		8120	Siduron		
		8650	Silvex (2,4,5-TP)		
		9577	Thiodiglycol		
	EPA 8321B			10189205	Solvent Extractable non-volatile compounds by HPLC/TS/MS
		6885	1,3,5-Trinitrobenzene (1,3,5-TNB)		
		6160	1,3-Dinitrobenzene (1,3-DNB)		
		6014	2,3-Dinitrotoluene		
		8655	2,4,5-T		
		9651	2,4,6-Trinitrotoluene (2,4,6-TNT)		
		8545	2,4-D		
		8560	2,4-DB		
		6185	2,4-Dinitrotoluene (2,4-DNT)		
		6190	2,6-Dinitrotoluene (2,6-DNT)		
		9303	2-Amino-4,6-dinitrotoluene (2-am-dnt)		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		9507	2-Nitrotoluene		
		6150	3,5-Dinitroaniline		
		9510	3-Nitrotoluene		
		9306	4-Amino-2,6-dinitrotoluene (4-am-dnt)		
		9513	4-Nitrotoluene		
		7010	Aldicarb (Temik)		
		7040	Aminocarb		
		7195	Carbaryl (Sevin)		
		7205	Carbofuran (Furaden)		
		7275	Chloropropham		
		8555	Dalapon		
		8595	Dicamba		
		8605	Dichloroprop (Dichlorprop)		
		8620	Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)		
		7505	Diuron		
		7610	Fenuron		
		7630	Fluometuron		
		7765	Linuron (Lorox)		
		7775	MCPA		
		7780	MCPP		
		7800	Methiocarb (Mesurol)		
		7805	Methomyl (Lannate)		
		6415	Methyl-2,4,6-trinitrophenylnitramine (tetryl)		
		7855	Mexacarbate		
		7885	Monuron		
		7915	Neburon		
		5015	Nitrobenzene		
		6485	Nitroglycerin		
		9522	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)		
		6605	Pentachlorophenol		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		9558	Pentaerythritoltetranitrate (PETN)		
		8075	Propham		
		8080	Propoxur (Baygon)		
		9432	RDX (hexahydro-1,3,5-trinitro-1,3,5-triazine)		
		8120	Siduron		
		8650	Silvex (2,4,5-TP)		
	EPA 8330A			10190008	Nitroaromatics and Nitramines by High Performance Liquid Chromatography (HPLC)
		6885	1,3,5-Trinitrobenzene (1,3,5-TNB)		
		6160	1,3-Dinitrobenzene (1,3-DNB)		
		9651	2,4,6-Trinitrotoluene (2,4,6-TNT)		
		5882	2,4-diamino-6-nitrotoluene		
		6185	2,4-Dinitrotoluene (2,4-DNT)		
		6181	2,6-diamino-4-nitrotoluene		
		6190	2,6-Dinitrotoluene (2,6-DNT)		
		9303	2-Amino-4,6-dinitrotoluene (2-am-dnt)		
		9507	2-Nitrotoluene		
		9510	3-Nitrotoluene		
		9306	4-Amino-2,6-dinitrotoluene (4-am-dnt)		
		9513	4-Nitrotoluene		
		7046	Ammonium Picrate		
		6415	Methyl-2,4,6-trinitrophenylnitramine (tetryl)		
		5015	Nitrobenzene		
		6485	Nitroglycerin		
		9522	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)		
		9558	Pentaerythritoltetranitrate (PETN)		
		1899	Picric Acid (2,4,6-Trinitrophenol)		
		9432	RDX (hexahydro-1,3,5-trinitro-1,3,5-triazine)		
	EPA 8330B			10308006	Nitroaromatics, Nitramines and Nitrate Esters by High Performance Liquid Chromatography (HPLC)

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		6887	1,3,5-Trinitroso-1,3,5-hexahydrotriazine (TNX)		
		6885	1,3,5-Trinitrobenzene (1,3,5-TNB)		
		6160	1,3-Dinitrobenzene (1,3-DNB)		
		9651	2,4,6-Trinitrotoluene (2,4,6-TNT)		
		5882	2,4-diamino-6-nitrotoluene		
		6185	2,4-Dinitrotoluene (2,4-DNT)		
		6181	2,6-diamino-4-nitrotoluene		
		6190	2,6-Dinitrotoluene (2,6-DNT)		
		9303	2-Amino-4,6-dinitrotoluene (2-am-dnt)		
		9507	2-Nitrotoluene		
		6150	3,5-Dinitroaniline		
		9510	3-Nitrotoluene		
		9306	4-Amino-2,6-dinitrotoluene (4-am-dnt)		
		9513	4-Nitrotoluene		
		7046	Ammonium Picrate		
		9416	Hexahydro-1,3-dinitroso-5-nitro-1,3,5-triazine (DNX)		
		9418	Hexahydro-1-nitroso-3,5-dinitro-1,3,5-triazine (MNX)		
		6415	Methyl-2,4,6-trinitrophenylnitramine (tetryl)		
		5015	Nitrobenzene		
		6485	Nitroglycerin		
		9522	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)		
		9558	Pentaerythritoltetranitrate (PETN)		
		1899	Picric Acid (2,4,6-Trinitrophenol)		
		9432	RDX (hexahydro-1,3,5-trinitro-1,3,5-triazine)		
	EPA 9012A			10193405	Total and Amenable Cyanide (automated colorimetric with off-line distillation)
		1510	Amenable cyanide		
		1645	Total cyanide		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
	EPA 9012B			10243206	Total and Amenable Cyanide (automated colorimetric with off-line distillation)
		1510	Amenable cyanide		
		1645	Total cyanide		
	EPA 9020B			10194408	Total Organic Halides
		2045	Total organic halides (TOX)		
	EPA 9030B			10195605	Acid-Soluble and Acid-Insoluble sulfides: Distillation
		2005	Sulfide		
	EPA 9034			10196006	Titrimetric Procedure for Acid-Soluble and Acid-Insoluble Sulfides
		2005	Sulfide		
	EPA 9040B			10197203	pH Electrometric Measurement
		1900	pH		
	EPA 9040C			10244403	pH Electrometric Measurement
		1900	pH		
	EPA 9050A			10198808	Specific Conductance
		1610	Conductivity		
	EPA 9056			10199005	Determination of Inorganic Anions by Ion Chromatography
		1540	Bromide		
		1575	Chloride		
		1730	Fluoride		
		1805	Nitrate		
		1835	Nitrite		
		1870	Orthophosphate as P		
		2000	Sulfate		
		1825	Total nitrate+nitrite		
	EPA 9056A EPA 9056A			10199607	Determination of Inorganic Anions by Ion Chromatography
		1540	Bromide		
		1575	Chloride		
		1730	Fluoride		
		1805	Nitrate		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		1820	Nitrate plus Nitrite as N		
		1835	Nitrite		
		1870	Orthophosphate as P		
		2000	Sulfate		
	EPA 9060			10200201	Total Organic Carbon
		1710	Dissolved organic carbon (DOC)		
		1813	Total Inorganic Carbon		
		2040	Total organic carbon		
	EPA 9060A			10244801	Total Organic Carbon
		1710	Dissolved organic carbon (DOC)		
		1813	Total Inorganic Carbon		
		2040	Total organic carbon		
		1813	Total Inorganic Carbon		
	EPA 9066			10200609	Phenolics (Colorimetric, Automated 4-AAP with Distillation)
		1905	Total phenolics		
	EPA RSK-175 (GC-FID)			10212905	Methane, Ethane, and Ethene in water by Headspace GC/FID
		4323	Acetylene		
		4747	Ethane		
		4752	Ethene		
		4877	Isobutylene		
		4926	Methane		
		5007	n-Butane		
		5028	n-Pentane		
		5029	n-Propane		
	FLDEP SOP 02/12/01			90015820	Calculation of Un-ionized Ammonia in Fresh Water
		2058	Un-ionized Ammonia		
	NWTPH-Dx			90018409	Oregon DEQ TPH Diesel Range
		9369	Diesel range organics (DRO)		
		9499	Motor Oil		
		9506	Residual Range Organics (RRO)		
		2050	Total Petroleum Hydrocarbons (TPH)		

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	NWTPH-Gx			90018603	Oregon DEQ TPH Gasoline Range Organics by GC/FID-PID Purge & Trap
		9408	Gasoline range organics (GRO)		
	SM 2120 B-2001 online			20039309	Color by Visual Comparison
		1605	Color		
	SM 2120 B-2011			20039310	Color
		1605	Color		
	SM 2320 B-2011 SM 2320 B-2011			20045618	Alkalinity as CaCO3
		1505	Alkalinity as CaCO3		
	SM 2320 B-97 SM 2320 B-97			20045607	Alkalinity by Titration Method
		1505	Alkalinity as CaCO3		
	SM 2340 B-2011 online			20046611	Hardness
		1550	Calcium hardness as CaCO3		
		1755	Total hardness as CaCO3		
	SM 2340 B-2011 SM 2340 B-2011			20046611	Hardness
		1750	Hardness		
	SM 2340 B-97 SM 2340 B-97			20046600	Hardness by calculation
		1550	Calcium hardness as CaCO3		
		1750	Hardness		
		1755	Total hardness as CaCO3		
	SM 2340 C-1997 SM 2340 C-1997			20047603	Hardness - EDTA Titrimetric Method
		1755	Total hardness as CaCO3		
	SM 2340 C-2011 22nd Ed			20047614	Hardness by EDTA Titration
		1755	Total hardness as CaCO3		
	SM 2510 B 22nd Ed			20048413	Conductivity by Probe
		1610	Conductivity		
	SM 2510 B-2011			20048617	Conductivity by Probe
		1610	Conductivity		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
	SM 2510 B-97 SM 2510 B-97			20048606	Conductivity by Probe
		1610	Conductivity		
	SM 2540 B-2011 2011			20049416	Total Solids Dried at 103 - 105C
		1950	Residue-total		
	SM 2540 B-97 SM 2540 B-97			20049405	Total Solids Dried at 103 - 105C
		1950	Residue-total		
	SM 2540 C-2011 SM 2540 C-2011			20050413	Residue-filterable (TDS)
		1955	Residue-filterable (TDS)		
	SM 2540 C-97 SM 2540 C-97			20050402	Total Dissolved Solids Dried at 180C
		1955	Residue-filterable (TDS)		
	SM 2540 D-2011			20051212	Total Suspended Solids Dried at 103 - 105 C
		1960	Residue-nonfilterable (TSS)		
	SM 2540 D-97 SM 2540 D-97			20051201	Total Suspended Solids Dried at 103 - 105C
		1960	Residue-nonfilterable (TSS)		
	SM 3500-Cr B-2009 online			20066255	Chromium by Colorimetric Method
		1045	Chromium VI		
	SM 3500-Cr B-2011			20066266	Chromium by Colorimetric Method
		1045	Chromium VI		
	SM 3500-Cr D 19th ED			20067009	Chromium by Colorimetric Method
		1045	Chromium VI		
	SM 3500-Fe B 20th ED			20068604	Iron by Colorimetric Method
		1073	Iron-(II) (Ferrous Iron)		
	SM 3500-Fe B 21st ED			20068808	Iron by Phenanthroline Method
		1073	Iron-(II) (Ferrous Iron)		
	SM 3500-Fe B-97 online			20069005	Iron by Phenanthroline Method
		1073	Iron-(II) (Ferrous Iron)		
	SM 3500-Fe D 19th ED			20069209	Iron by Phenanthroline Method

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		1073	Iron-(II) (Ferrous Iron)		
	SM 4500-Cl⁻ E-2011			20086811	Chloride - Automated Ferricyanide Method
		1575	Chloride		
	SM 4500-CN E-1999			20096417	Cyanide by Colorimetric Method
		1645	Total cyanide		
	SM 4500-CN E-2011 2011			20096428	Cyanide by Colormetric Method
		1645	Total cyanide		
	SM 4500-CN G-1999 online			20097216	Cyanide Amenable to Chlorination after Distillation
		1510	Amenable cyanide		
	SM 4500-CN⁻ C-2011			20065663	Cyanide (Total) After Distillation
		1645	Total cyanide		
	SM 4500-CN⁻ C-97 online			20095607	Cyanide by Total Cyanide after Distillation
		1645	Total cyanide		
	SM 4500-CN⁻ G-2011			20097227	Cyanides Amenable to Chlorination after Distillation
		1510	Amenable cyanide		
	SM 4500-CN⁻ I-2011			20098026	Weak Acid Dissociable Cyanide
		2074	Weak Acid Dissociable Cyanide		
	SM 4500-CN⁻ I-97 online			20098004	Cyanide by Weak Acid Dissociable Cyanide
		2074	Weak Acid Dissociable Cyanide		
	SM 4500-H+ B-2000 online			20105219	pH Value by Electrometric Method .
		1900	pH		
	SM 4500-H+ B-2011 SM 4500-H+ B-2011			20105220	pH - Electrometric Measurement
		1900	pH		
	SM 4500-NO2 B-2011 online			20113115	Nitrite as N
		1840	Nitrite as N		
	SM 4500-NO2⁻ B 18th ED			20024004	Nitrite Nitrogen by Colorimetric Determination

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		1840	Nitrite as N		
	SM 4500-NO_2^- B 19th ED			20112407	Nitrite by Colorimetric Determination
		1840	Nitrite as N		
	SM 4500-NO_2^- B 20th ED			20112601	Nitrite by Colorimetric Determination
		1840	Nitrite as N		
	SM 4500-NO_2^- B 21st ED			20112805	Nitrite by Colorimetric Method
		1840	Nitrite as N		
	SM 4500-NO_2^- B 22nd ED			20112816	Nitrite - Colorimetric Method
		1840	Nitrite as N		
	SM 4500-NO_2^- B-2000 online			20113104	Nitrite by Colorimetric Determination
		1835	Nitrite		
		1840	Nitrite as N		
	SM 4500-S2 D-2000			20125853	Sulfide by Methylene Blue Method
		2005	Sulfide		
	SM 4500-S2 F-2011			20126663	Sulfide by Iodometric Method
		2005	Sulfide		
	SM 4500-$S2^-$ D-2011 online			20125864	Sulfide by Methylene Blue Method
		2005	Sulfide		
	SM 4500-$S2^-$ F-2000 online			20126652	Sulfide by Iodometric Method
		2005	Sulfide		
	SM 4500-$SO3^-$ B-2000 online			20130625	Sulfite by Iodometric Method
		2015	Sulfite-SO3		
	SM 4500-$SO3^-$ B-2011			20130636	Sulfite by Iodometric Method
		2015	Sulfite-SO3		
	SM 4500-$SO4^-$ E-2011			20132461	Sulfate - Turbidimetric Method
		2000	Sulfate		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
	SM 5210 B-2001 online			20135255	Biochemical Oxygen Demand (BOD), 5-Day
		1530	Biochemical oxygen demand		
		1555	Carbonaceous BOD, CBOD		
	SM 5210 B-2011 online			20135266	Biochemical Oxygen Demand (5 days @ 20 C).
		1555	Carbonaceous BOD, CBOD		
	SM 5210 B-2011 SM 5210 B-2011			20135266	Biochemical Oxygen Demand (5 days @ 20 C).
		1530	Biochemical oxygen demand		
	SM 5310 B-2000			20137819	Total Organic Carbon (TOC) by Combustion Infra-red Method
		1710	Dissolved organic carbon (DOC)		
		2040	Total organic carbon		
	SM 5310 B-2011 2011			20137820	TOC by High-Temperature Combustion Method
		1710	Dissolved organic carbon (DOC)		
		2040	Total organic carbon		

Solids

	AK101 GRO			90015002	Determination of Gasoline Range Organics - Alaska Department of Environmental Conservation
		9408	Gasoline range organics (GRO)		
		4027	Total BTEX		
	AK102 DRO			90015206	Determination of Diesel Range Organics - Alaska Department of Environmental Conservation
		9369	Diesel range organics (DRO)		
	AK103 RRO			90015400	Determination of Residual Range Organics - Alaska Department of Environmental Conservation
		9499	Motor Oil		
	ASTM D2216 - 10 10			30025106	Standard Test Methods for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass
		8641	Percent Moisture		
	ASTM D5057-90			30032145	Standard Test Method for Screening Apparent Specific Gravity and Bulk Density of Waste
		8017	Bulk Density		
	CA HML 939-M			90016765	Determination of Organic Lead Compounds by

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
					Graphite Furnace Absorption Spectrometry
		1208	Organic Lead		
	CA Title 22 WET			90017235	CA Waste Extraction Test (WET)
		1407	California Waste Extraction Test		
	DV-LC-0012 DV-LC-0012			60036035	TestAmerica Denver - PFOA in NPW and SCM by HPLC-MS-MS
		7044	Ammonium Perfluorooctanoate (APFO)		
		6911	Perfluorobutane Sulfonate (PFBS)		
		6915	Perfluorobutanoic acid (PFBA)		
		9562	Perfluorodecane Sulfonate (PFDS)		
		6905	Perfluorodecanoic acid (PFDA)		
		6903	Perfluorododecanoic acid (PFDoA)		
		6908	Perfluoroheptanoic acid (PFHpA)		
		6910	Perfluorohexane sulfonate (PFHxS)		
		6913	Perfluorohexanoic acid (PFHxA)		
		6906	Perfluorononanoic acid (PFNA)		
		6917	Perfluorooctane sulfonamide (PFOSAm)		
		6909	Perfluorooctane sulfonate (PFOS)		
		6912	Perfluorooctanoic acid (PFOA)		
		6914	Perfluoropentanoic acid (PFPeA)		
		6902	Perfluorotetradecanoic acid (PFTDA)		
		9563	Perfluorotridecanoic acid (PFTrDA)		
		6904	Perfluoroundecanoic acid (PFUnA)		
	DV-LC-0020 3			60036013	TestAmerica Denver - Disodium Iminodiacetate (IDA) by LC/MS/MS (modified EPA 8321A)
		6119	Disodium Inimodiacetate		
	EPA 1010			10116606	Pensky-Martens Closed-Cup Method for Determining Ignitability
		1780	Ignitability		
	EPA 1010A			10234807	Pensky-Martens Closed-Cup Method for Determining Ignitability
		1780	Ignitability		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
	EPA 1311			10118806	Toxicity Characteristic Leaching Procedure
		1466	Toxicity Characteristic Leaching Procedure (TCLP)		
	EPA 1312			10119003	Synthetic Precipitation Leaching Procedure
		1460	Synthetic Precipitation Leaching Procedure (SPLP)		
	EPA 160.4			10010409	Total Volatile Solids, ignition @ 550 C.
		2070	Volatile suspended solids		
	EPA 3050B			10135601	Acid Digestion of Sediments, Sludges, and soils
		1400	Acid Digestion of Solids		
	EPA 351.2			10065006	Total Kjeldahl Nitrogen - Block Digest, Phenate
		1795	Total Kjeldahl Nitrogen (TKN)		
	EPA 353.2 2			10067604	Nitrate/Nitrite Nitrogen - Automated, Cadmium
		1820	Nitrate plus Nitrite as N		
		1840	Nitrite as N		
		1825	Total nitrate+nitrite		
	EPA 3540C			10140202	Soxhlet Extraction
		1452	Soxhlet Extraction		
	EPA 3546			10141205	Microwave Extraction
		1428	Microwave Extraction		
	EPA 3550C			10142004	Ultrasonic Extraction
		1468	Ultrasonic Extraction		
	EPA 3580A			10143007	Waste Dilution
		1470	Waste Dilution		
	EPA 3620B			10145809	Florisil Cleanup
		1414	Florisil Clean-up		
	EPA 3620C			10146006	Florisil Cleanup
		1414	Florisil Clean-up		
	EPA 3660B			10148400	Sulfur cleanup
		1456	Sulfur Clean-up		
	EPA 3665A			10148808	Sulfuric Acid / permanganate Cleanup
		1458	Sulfuric Acid / Permanganate Clean-Up		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
	EPA 5035			10154004	Closed-System Purge-and-Trap and Extraction for Volatile Organics in Soil and Waste Samples
		1392	Closed-System Purge & Trap (Methanol)		
	EPA 5035A			10284807	Closed-System Purge-and-Trap and Extraction for Volatile Organics in Soil and Waste Samples
		1392	Closed-System Purge & Trap (Methanol)		
	EPA 6010B			10155609	ICP - AES
		1000	Aluminum		
		1005	Antimony		
		1010	Arsenic		
		1015	Barium		
		1020	Beryllium		
		1023	Bismuth		
		1025	Boron		
		1030	Cadmium		
		1035	Calcium		
		1040	Chromium		
		1050	Cobalt		
		1055	Copper		
		1070	Iron		
		1075	Lead		
		1080	Lithium		
		1085	Magnesium		
		1090	Manganese		
		1100	Molybdenum		
		1105	Nickel		
		1910	Phosphorus, total		
		1125	Potassium		
		1140	Selenium		
		1990	Silica as SiO2		
		1145	Silicon		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		1150	Silver		
		1155	Sodium		
		1160	Strontium		
		2017	Sulfur		
		1165	Thallium		
		1175	Tin		
		1180	Titanium		
		1185	Vanadium		
		1190	Zinc		
	EPA 6010C			10155803	ICP - AES
		1000	Aluminum		
		1005	Antimony		
		1010	Arsenic		
		1015	Barium		
		1020	Beryllium		
		1023	Bismuth		
		1025	Boron		
		1030	Cadmium		
		1035	Calcium		
		1040	Chromium		
		1050	Cobalt		
		1055	Copper		
		1070	Iron		
		1075	Lead		
		1080	Lithium		
		1085	Magnesium		
		1090	Manganese		
		1100	Molybdenum		
		1105	Nickel		
		1910	Phosphorus, total		
		1125	Potassium		
		1140	Selenium		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		1990	Silica as SiO2		
		1145	Silicon		
		1150	Silver		
		1155	Sodium		
		1160	Strontium		
		2017	Sulfur		
		1165	Thallium		
		1175	Tin		
		1180	Titanium		
		1185	Vanadium		
		1190	Zinc		
	EPA 6010D 4			10155916	Metals by ICP - AES
		1023	Bismuth		
	EPA 6010D EPA 6010D			10155916	Metals by ICP - AES
		1000	Aluminum		
		1005	Antimony		
		1010	Arsenic		
		1015	Barium		
		1020	Beryllium		
		1025	Boron		
		1030	Cadmium		
		1035	Calcium		
		1040	Chromium		
		1050	Cobalt		
		1055	Copper		
		1070	Iron		
		1075	Lead		
		1080	Lithium		
		1085	Magnesium		
		1090	Manganese		
		1100	Molybdenum		
		1105	Nickel		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		1910	Phosphorus, total		
		1125	Potassium		
		1140	Selenium		
		1990	Silica as SiO2		
		1145	Silicon		
		1150	Silver		
		1155	Sodium		
		1160	Strontium		
		2017	Sulfur		
		1165	Thallium		
		1175	Tin		
		1180	Titanium		
		1185	Vanadium		
		1190	Zinc		
	EPA 6020			10156000	Inductively Coupled Plasma-Mass Spectrometry
		1000	Aluminum		
		1005	Antimony		
		1010	Arsenic		
		1015	Barium		
		1020	Beryllium		
		1030	Cadmium		
		1040	Chromium		
		1050	Cobalt		
		1055	Copper		
		1075	Lead		
		1090	Manganese		
		1100	Molybdenum		
		1105	Nickel		
		1140	Selenium		
		1150	Silver		
		1160	Strontium		
		1165	Thallium		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		1170	Thorium		
		1175	Tin		
		1184	Uranium (mass)		
		1185	Vanadium		
		1190	Zinc		
	EPA 6020A 1			10156419	Inductively Coupled Plasma -Mass Spectrometry
		1000	Aluminum		
		1005	Antimony		
		1010	Arsenic		
		1015	Barium		
		1020	Beryllium		
		1030	Cadmium		
		1040	Chromium		
		1050	Cobalt		
		1055	Copper		
		1075	Lead		
		1090	Manganese		
		1100	Molybdenum		
		1105	Nickel		
		1140	Selenium		
		1150	Silver		
		1160	Strontium		
		1165	Thallium		
		1170	Thorium		
		1175	Tin		
		1184	Uranium (mass)		
		1185	Vanadium		
		1190	Zinc		
	EPA 6020B 2			10156420	Inductively Coupled Plasma-Mass Spectrometry
		1000	Aluminum		
		1160	Strontium		
	EPA 6020B EPA 6020B			10156420	Inductively Coupled Plasma-Mass Spectrometry

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		1005	Antimony		
		1010	Arsenic		
		1015	Barium		
		1020	Beryllium		
		1030	Cadmium		
		1040	Chromium		
		1050	Cobalt		
		1055	Copper		
		1075	Lead		
		1090	Manganese		
		1100	Molybdenum		
		1105	Nickel		
		1140	Selenium		
		1150	Silver		
		1165	Thallium		
		1170	Thorium		
		1175	Tin		
		1184	Uranium (mass)		
		1185	Vanadium		
		1190	Zinc		
	EPA 6860			10304800	Perchlorate in Water, Soils and Solid Wastes Using Ion Chromatography/Electrospray Ionization/Mass Spectrometry
		1895	Perchlorate		
	EPA 7196A			10162400	Chromium Hexavalent colorimetric
		1045	Chromium VI		
	EPA 7471A			10166208	Mercury in Solid Waste by Cold Vapor Atomic Absorption
		1095	Mercury		
	EPA 7471B			10166402	Mercury by Cold Vapor Atomic Absorption
		1095	Mercury		
	EPA 8011			10173009	1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by Microextraction and GC/ECD

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		5180	1,2,3-Trichloropropane		
		4585	1,2-Dibromoethane (EDB, Ethylene dibromide)		
		4580	Dibromochloropropane		
	EPA 8015B			10173601	Non-halogenated organics using GC/FID
		9369	Diesel range organics (DRO)		
		9408	Gasoline range organics (GRO)		
		9488	Jet Fuel		
		9499	Motor Oil		
	EPA 8015C			10173805	Non-halogenated organics using GC/FID
		9369	Diesel range organics (DRO)		
		9408	Gasoline range organics (GRO)		
		9488	Jet Fuel		
		9499	Motor Oil		
	EPA 8015D			10305609	Nonhalogenated Organics Using GC/FID
		9369	Diesel range organics (DRO)		
		9408	Gasoline range organics (GRO)		
		9488	Jet Fuel		
		9499	Motor Oil		
	EPA 8081A			10178606	Organochlorine Pesticides by GC/ECD
		8580	2,4'-DDD		
		8585	2,4'-DDE		
		8590	2,4'-DDT		
		7355	4,4'-DDD		
		7360	4,4'-DDE		
		7365	4,4'-DDT		
		7025	Aldrin		
		7110	alpha-BHC (alpha-Hexachlorocyclohexane)		
		7115	beta-BHC (beta-Hexachlorocyclohexane)		
		7250	Chlordane (tech.)		
		7260	Chlorobenzilate		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		7240	cis-chlordane (alpha-Chlordane)		
		7105	delta-BHC		
		7405	Diallate		
		7470	Dieldrin		
		7510	Endosulfan I		
		7515	Endosulfan II		
		7520	Endosulfan sulfate		
		7540	Endrin		
		7530	Endrin aldehyde		
		7535	Endrin ketone		
		7120	gamma-BHC (Lindane, gamma-HexachlorocyclohexanE)		
		7245	gamma-Chlordane		
		7685	Heptachlor		
		7690	Heptachlor epoxide		
		6275	Hexachlorobenzene		
		6280	Hexachlorocyclohexanes		
		7725	Isodrin		
		7740	Kepone		
		7810	Methoxychlor		
		7870	Mirex		
		8250	Toxaphene (Chlorinated camphene)		
		8310	tris-(2,3-Dibromopropyl) phosphate (tris-BP)		
	EPA 8081B			10178800	Organochlorine Pesticides by GC/ECD
		8580	2,4'-DDD		
		8585	2,4'-DDE		
		8590	2,4'-DDT		
		7355	4,4'-DDD		
		7360	4,4'-DDE		
		7365	4,4'-DDT		
		7025	Aldrin		
		7110	alpha-BHC (alpha-		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
			Hexachlorocyclohexane)		
		7115	beta-BHC (beta-Hexachlorocyclohexane)		
		7250	Chlordane (tech.)		
		7260	Chlorobenzilate		
		7240	cis-chlordane (alpha-Chlordane)		
		7105	delta-BHC		
		7405	Diallate		
		7460	Dicofol		
		7470	Dieldrin		
		7510	Endosulfan I		
		7515	Endosulfan II		
		7520	Endosulfan sulfate		
		7540	Endrin		
		7530	Endrin aldehyde		
		7535	Endrin ketone		
		7120	gamma-BHC (Lindane, gamma-HexachlorocyclohexanE)		
		7245	gamma-Chlordane		
		7685	Heptachlor		
		7690	Heptachlor epoxide		
		6275	Hexachlorobenzene		
		6280	Hexachlorocyclohexanes		
		7725	Isodrin		
		7740	Kepone		
		7810	Methoxychlor		
		7870	Mirex		
		8250	Toxaphene (Chlorinated camphene)		
		8310	tris-(2,3-Dibromopropyl) phosphate (tris-BP)		
	EPA 8082			10179007	Polychlorinated Biphenyls (PCBs) by GC/ECD
		8880	Aroclor-1016 (PCB-1016)		
		8885	Aroclor-1221 (PCB-1221)		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		8890	Aroclor-1232 (PCB-1232)		
		8895	Aroclor-1242 (PCB-1242)		
		8900	Aroclor-1248 (PCB-1248)		
		8905	Aroclor-1254 (PCB-1254)		
		8910	Aroclor-1260 (PCB-1260)		
		8912	Aroclor-1262 (PCB-1262)		
		8913	Aroclor-1268 (PCB-1268)		
	EPA 8082A			10179201	Polychlorinated Biphenyls (PCBs) by GC/ECD
		8880	Aroclor-1016 (PCB-1016)		
		8885	Aroclor-1221 (PCB-1221)		
		8890	Aroclor-1232 (PCB-1232)		
		8895	Aroclor-1242 (PCB-1242)		
		8900	Aroclor-1248 (PCB-1248)		
		8905	Aroclor-1254 (PCB-1254)		
		8910	Aroclor-1260 (PCB-1260)		
		8912	Aroclor-1262 (PCB-1262)		
		8913	Aroclor-1268 (PCB-1268)		
	EPA 8141A			10182000	Organophosphorous Pesticides by GC/NPD
		7045	Anilazine		
		7065	Atrazine		
		7070	Azinphos-ethyl (Ethyl guthion)		
		7075	Azinphos-methyl (Guthion)		
		7125	Bolstar (Sulprofos)		
		7220	Carbophenothion		
		7300	Chlorpyrifos		
		7315	Coumaphos		
		7390	Demeton		
		7395	Demeton-o		
		7385	Demeton-s		
		7410	Diazinon		
		8610	Dichlorovos (DDVP, Dichlorvos)		
		7475	Dimethoate		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		8625	Disulfoton		
		7550	EPN		
		7570	Ethoprop		
		7580	Famphur		
		7600	Fensulfothion		
		7605	Fenthion		
		7770	Malathion		
		7785	Merphos		
		7825	Methyl parathion (Parathion, methyl)		
		7850	Mevinphos		
		7905	Naled		
		8290	o,o,o-Triethyl phosphorothioate		
		7955	Parathion, ethyl		
		7985	Phorate		
		8000	Phosmet (Imidan)		
		8060	Propazine		
		8110	Ronnel		
		8125	Simazine		
		8155	Sulfotepp		
		8200	Tetrachlorvinphos (Stirophos, Gardona) Z-isomer		
		8235	Thionazin (Zinophos)		
		8245	Tokuthion (Prothiophos)		
		8275	Trichloronate		
	EPA 8141B			10182204	Organophosphorous Pesticides by GC/NPD
		7045	Anilazine		
		7065	Atrazine		
		7070	Azinphos-ethyl (Ethyl guthion)		
		7075	Azinphos-methyl (Guthion)		
		7125	Bolstar (Sulprofos)		
		7220	Carbophenothion		
		7300	Chlorpyrifos		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		7315	Coumaphos		
		7390	Demeton		
		7395	Demeton-o		
		7385	Demeton-s		
		7410	Diazinon		
		8610	Dichlorovos (DDVP, Dichlorvos)		
		7475	Dimethoate		
		8625	Disulfoton		
		7550	EPN		
		7570	Ethoprop		
		7580	Famphur		
		7600	Fensulfothion		
		7605	Fenthion		
		7770	Malathion		
		7785	Merphos		
		7825	Methyl parathion (Parathion, methyl)		
		7850	Mevinphos		
		7905	Naled		
		7955	Parathion, ethyl		
		7985	Phorate		
		8000	Phosmet (Imidan)		
		8110	Ronnel		
		8125	Simazine		
		8155	Sulfotepp		
		8200	Tetrachlorvinphos (Stirophos, Gardona) Z-isomer		
		8235	Thionazin (Zinophos)		
		8245	Tokuthion (Prothiophos)		
		8275	Trichloronate		
	EPA 8151A			10183207	Chlorinated Herbicides by GC/ECD
		8655	2,4,5-T		
		8545	2,4-D		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		8560	2,4-DB		
		8555	Dalapon		
		8595	Dicamba		
		8605	Dichloroprop (Dichlorprop)		
		7775	MCPA		
		7780	MCPP		
		6605	Pentachlorophenol		
		8645	Picloram		
		8650	Silvex (2,4,5-TP)		
	EPA 8260B			10184802	Volatile Organic Compounds by purge and trap GC/MS
		5105	1,1,1,2-Tetrachloroethane		
		5185	1,1,1-Trichloro-2,2,2-trifluoroethane (Freon 113a)		
		5160	1,1,1-Trichloroethane		
		5110	1,1,2,2-Tetrachloroethane		
		5195	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)		
		5165	1,1,2-Trichloroethane		
		5167	1,1,2-Trichlorofluoroethane		
		5172	1,1,2-Trifluoroethane		
		5171	1,1-Dichloro-1-fluoroethane		
		4630	1,1-Dichloroethane		
		4640	1,1-Dichloroethylene		
		4670	1,1-Dichloropropene		
		5150	1,2,3-Trichlorobenzene		
		5180	1,2,3-Trichloropropane		
		5182	1,2,3-Trimethylbenzene		
		5155	1,2,4-Trichlorobenzene		
		5210	1,2,4-Trimethylbenzene		
		4570	1,2-Dibromo-3-chloropropane (DBCP)		
		4585	1,2-Dibromoethane (EDB, Ethylene dibromide)		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		4695	1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon-114)		
		4697	1,2-Dichloro-1,1,2-trifluoroethane		
		4610	1,2-Dichlorobenzene		
		4635	1,2-Dichloroethane (Ethylene dichloride)		
		4655	1,2-Dichloropropane		
		6800	1,3,5-Trichlorobenzene		
		5215	1,3,5-Trimethylbenzene		
		4615	1,3-Dichlorobenzene		
		4660	1,3-Dichloropropane		
		4675	1,3-Dichloropropene		
		4620	1,4-Dichlorobenzene		
		4735	1,4-Dioxane (1,4- Diethyleneoxide)		
		4919	1-Chloro-1,1-difluoroethane		
		4510	1-Chlorohexane		
		5222	2,2-Dichloro-1,1,1-trifluoroethane (Freon 123)		
		4665	2,2-Dichloropropane		
		4410	2-Butanone (Methyl ethyl ketone, MEK)		
		4411	2-Chloro-1,1,1-trifluoroethane		
		4500	2-Chloroethyl vinyl ether		
		4535	2-Chlorotoluene		
		4860	2-Hexanone (MBK)		
		5020	2-Nitropropane		
		5045	2-Pentanone		
		4540	4-Chlorotoluene		
		4910	4-Isopropyltoluene (p-Cymene)		
		4995	4-Methyl-2-pentanone (MIBK)		
		4315	Acetone		
		4320	Acetonitrile		
		4325	Acrolein (Propenal)		
		4340	Acrylonitrile		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		4355	Allyl chloride (3-Chloropropene)		
		4375	Benzene		
		4385	Bromobenzene		
		4390	Bromochloromethane		
		4395	Bromodichloromethane		
		4400	Bromoform		
		4450	Carbon disulfide		
		4455	Carbon tetrachloride		
		4475	Chlorobenzene		
		4575	Chlorodibromomethane		
		4577	Chlorodifluoromethane (Freon-22)		
		4485	Chloroethane (Ethyl chloride)		
		4486	Chlorofluoromethane		
		4505	Chloroform		
		4522	Chloropentafluoroethane		
		4525	Chloroprene (2-Chloro-1,3-butadiene)		
		4526	Chlorotrifluoroethene		
		4705	cis & trans-1,2-Dichloroethene		
		4645	cis-1,2-Dichloroethylene		
		4680	cis-1,3-Dichloropropene		
		4600	cis-1,4-Dichloro-2-butene		
		4555	Cyclohexane		
		4560	Cyclohexanone		
		4595	Dibromomethane (Methylene bromide)		
		4625	Dichlorodifluoromethane (Freon-12)		
		4627	Dichlorofluoromethane (Freon 21)		
		4725	Diethyl ether		
		9375	Di-isopropylether (DIPE)		
		4750	Ethanol		
		4755	Ethyl acetate		
		4810	Ethyl methacrylate		
		4765	Ethylbenzene		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		4795	Ethylene oxide		
		4770	Ethyl-t-butylether (ETBE) (2-Ethoxy-2-methylpropane)		
		4772	Fluoromethane (Freon 41)		
		4835	Hexachlorobutadiene		
		4870	Iodomethane (Methyl iodide)		
		4875	Isobutyl alcohol (2-Methyl-1-propanol)		
		4895	Isopropyl alcohol (2-Propanol, Isopropanol)		
		4900	Isopropylbenzene (Cumene)		
		5240	m+p-xylene		
		4925	Methacrylonitrile		
		4940	Methyl acetate		
		4950	Methyl bromide (Bromomethane)		
		4960	Methyl chloride (Chloromethane)		
		4990	Methyl methacrylate		
		5000	Methyl tert-butyl ether (MTBE)		
		4965	Methylcyclohexane		
		4975	Methylene chloride (Dichloromethane)		
		5245	m-Xylene		
		5005	Naphthalene		
		4425	n-Butyl alcohol (1-Butanol, n-Butanol)		
		4435	n-Butylbenzene		
		4855	n-Hexane		
		5090	n-Propylbenzene		
		5250	o-Xylene		
		5035	Pentachloroethane		
		5080	Propionitrile (Ethyl cyanide)		
		9579	Propylene oxide		
		5255	p-Xylene		
		9607	sec-Butyl Alcohol (2-Butanol)		
		4440	sec-Butylbenzene		
		5100	Styrene		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		4370	T-amylmethylether (TAME)		
		4420	tert-Butyl alcohol		
		4445	tert-Butylbenzene		
		5115	Tetrachloroethylene (Perchloroethylene)		
		5120	Tetrahydrofuran (THF)		
		9574	Tetrahydrothiophene		
		5140	Toluene		
		4027	Total BTEX		
		5205	Total trihalomethanes		
		4700	trans-1,2-Dichloroethylene		
		4685	trans-1,3-Dichloropropylene		
		4605	trans-1,4-Dichloro-2-butene		
		5170	Trichloroethene (Trichloroethylene)		
		5175	Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)		
		5225	Vinyl acetate		
		5235	Vinyl chloride		
		5237	Vinyl Fluoride		
		5260	Xylene (total)		
	EPA 8260B SIM			10184904	Volatile Organic Compounds by purge and trap GC/MS-SIM
		5110	1,1,2,2-Tetrachloroethane		
		5165	1,1,2-Trichloroethane		
		4635	1,2-Dichloroethane (Ethylene dichloride)		
		9318	1,3-Butadiene		
		4675	1,3-Dichloropropene		
		4735	1,4-Dioxane (1,4- Diethyleneoxide)		
		4375	Benzene		
		4395	Bromodichloromethane		
		4575	Chlorodibromomethane		
		4505	Chloroform		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		4680	cis-1,3-Dichloropropene		
		4835	Hexachlorobutadiene		
		4420	tert-Butyl alcohol		
		4685	trans-1,3-Dichloropropylene		
		5235	Vinyl chloride		
	EPA 8260C			10307003	Volatile Organics: GC/MS (capillary column)
		5105	1,1,1,2-Tetrachloroethane		
		5195	1,1,1-Trichloro-2,2,2-trifluoroethane (Freon 113a)		
		5160	1,1,1-Trichloroethane		
		5110	1,1,2,2-Tetrachloroethane		
		5185	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)		
		5165	1,1,2-Trichloroethane		
		5167	1,1,2-Trichlorofluoroethane		
		5172	1,1,2-Trifluoroethane		
		5171	1,1-Dichloro-1-fluoroethane		
		4630	1,1-Dichloroethane		
		4640	1,1-Dichloroethylene		
		4643	1,1-Dichloropropane		
		4670	1,1-Dichloropropene		
		5150	1,2,3-Trichlorobenzene		
		5180	1,2,3-Trichloropropane		
		5182	1,2,3-Trimethylbenzene		
		5155	1,2,4-Trichlorobenzene		
		5210	1,2,4-Trimethylbenzene		
		4570	1,2-Dibromo-3-chloropropane (DBCP)		
		4585	1,2-Dibromoethane (EDB, Ethylene dibromide)		
		4695	1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon-114)		
		4697	1,2-Dichloro-1,1,2-trifluoroethane		
		4610	1,2-Dichlorobenzene		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		4635	1,2-Dichloroethane (Ethylene dichloride)		
		4655	1,2-Dichloropropane		
		6800	1,3,5-Trichlorobenzene		
		5215	1,3,5-Trimethylbenzene		
		9318	1,3-Butadiene		
		4615	1,3-Dichlorobenzene		
		4660	1,3-Dichloropropane		
		4675	1,3-Dichloropropene		
		4620	1,4-Dichlorobenzene		
		4622	1,4-Difluorobenzene		
		4735	1,4-Dioxane (1,4- Diethyleneoxide)		
		4919	1-Chloro-1,1-difluoroethane		
		4510	1-Chlorohexane		
		5220	2,2,4-Trimethylpentane		
		5222	2,2-Dichloro-1,1,1-trifluoroethane (Freon 123)		
		4665	2,2-Dichloropropane		
		4410	2-Butanone (Methyl ethyl ketone, MEK)		
		4411	2-Chloro-1,1,1-trifluoroethane		
		4500	2-Chloroethyl vinyl ether		
		4535	2-Chlorotoluene		
		4860	2-Hexanone (MBK)		
		5020	2-Nitropropane		
		5045	2-Pentanone		
		4540	4-Chlorotoluene		
		4910	4-Isopropyltoluene (p-Cymene)		
		4995	4-Methyl-2-pentanone (MIBK)		
		4315	Acetone		
		4320	Acetonitrile		
		4325	Acrolein (Propenal)		
		4340	Acrylonitrile		
		4355	Allyl chloride (3-Chloropropene)		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		4375	Benzene		
		5635	Benzyl chloride		
		4385	Bromobenzene		
		4390	Bromochloromethane		
		4395	Bromodichloromethane		
		4400	Bromoform		
		4403	Butyl acetate		
		4450	Carbon disulfide		
		4455	Carbon tetrachloride		
		4475	Chlorobenzene		
		4575	Chlorodibromomethane		
		4577	Chlorodifluoromethane (Freon-22)		
		4485	Chloroethane (Ethyl chloride)		
		4486	Chlorofluoromethane		
		4505	Chloroform		
		4522	Chloropentafluoroethane		
		4525	Chloroprene (2-Chloro-1,3-butadiene)		
		4526	Chlorotrifluoroethene		
		4705	cis & trans-1,2-Dichloroethene		
		4645	cis-1,2-Dichloroethylene		
		4680	cis-1,3-Dichloropropene		
		4600	cis-1,4-Dichloro-2-butene		
		4555	Cyclohexane		
		4560	Cyclohexanone		
		4595	Dibromomethane (Methylene bromide)		
		4625	Dichlorodifluoromethane (Freon-12)		
		4627	Dichlorofluoromethane (Freon 21)		
		4725	Diethyl ether		
		9375	Di-isopropylether (DIPE)		
		4729	Dimethyl disulfide		
		4750	Ethanol		
		4755	Ethyl acetate		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		4760	Ethyl acrylate		
		4810	Ethyl methacrylate		
		4765	Ethylbenzene		
		4795	Ethylene oxide		
		4770	Ethyl-t-butylether (ETBE) (2-Ethoxy-2-methylpropane)		
		4771	Fluorobenzene		
		4772	Fluoromethane (Freon 41)		
		4835	Hexachlorobutadiene		
		4870	Iodomethane (Methyl iodide)		
		4875	Isobutyl alcohol (2-Methyl-1-propanol)		
		4895	Isopropyl alcohol (2-Propanol, Isopropanol)		
		4900	Isopropylbenzene (Cumene)		
		5240	m+p-xylene		
		4925	Methacrylonitrile		
		4940	Methyl acetate		
		4950	Methyl bromide (Bromomethane)		
		4960	Methyl chloride (Chloromethane)		
		4990	Methyl methacrylate		
		5000	Methyl tert-butyl ether (MTBE)		
		4965	Methylcyclohexane		
		4975	Methylene chloride (Dichloromethane)		
		5245	m-Xylene		
		5005	Naphthalene		
		4425	n-Butyl alcohol (1-Butanol, n-Butanol)		
		4435	n-Butylbenzene		
		4825	n-Heptane		
		4855	n-Hexane		
		6575	Nonanal		
		5090	n-Propylbenzene		
		5250	o-Xylene		
		5035	Pentachloroethane		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		5080	Propionitrile (Ethyl cyanide)		
		9579	Propylene oxide		
		5255	p-Xylene		
		9607	sec-Butyl Alcohol (2-Butanol)		
		4440	sec-Butylbenzene		
		5100	Styrene		
		4370	T-amylmethylether (TAME)		
		4420	tert-Butyl alcohol		
		4445	tert-Butylbenzene		
		5115	Tetrachloroethylene (Perchloroethylene)		
		5120	Tetrahydrofuran (THF)		
		9574	Tetrahydrothiophene		
		5140	Toluene		
		4027	Total BTEX		
		5205	Total trihalomethanes		
		4700	trans-1,2-Dichloroethylene		
		4685	trans-1,3-Dichloropropylene		
		4605	trans-1,4-Dichloro-2-butene		
		5170	Trichloroethene (Trichloroethylene)		
		5175	Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)		
		5225	Vinyl acetate		
		5235	Vinyl chloride		
		5237	Vinyl Fluoride		
		5260	Xylene (total)		
	EPA 8260C SIM			10307105	Volatile Organic Compounds by GC/MS-SIM
		5110	1,1,2,2-Tetrachloroethane		
		5165	1,1,2-Trichloroethane		
		4635	1,2-Dichloroethane (Ethylene dichloride)		
		4675	1,3-Dichloropropene		
		4735	1,4-Dioxane (1,4- Diethyleneoxide)		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		4375	Benzene		
		4395	Bromodichloromethane		
		4575	Chlorodibromomethane		
		4505	Chloroform		
		4680	cis-1,3-Dichloropropene		
		4835	Hexachlorobutadiene		
		4420	tert-Butyl alcohol		
		4685	trans-1,3-Dichloropropylene		
		5235	Vinyl chloride		
	EPA 8260C-SIM			10307105	Volatile Organic Compounds by GC/MS-SIM
		9318	1,3-Butadiene		
	EPA 8260D			10307127	Volatile Organic Compounds By GC/MS
		5105	1,1,1,2-Tetrachloroethane		
		5160	1,1,1-Trichloroethane		
		5110	1,1,2,2-Tetrachloroethane		
		5185	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)		
		5165	1,1,2-Trichloroethane		
		4630	1,1-Dichloroethane		
		4640	1,1-Dichloroethylene		
		4670	1,1-Dichloropropene		
		5150	1,2,3-Trichlorobenzene		
		5180	1,2,3-Trichloropropane		
		5182	1,2,3-Trimethylbenzene		
		5155	1,2,4-Trichlorobenzene		
		5210	1,2,4-Trimethylbenzene		
		4570	1,2-Dibromo-3-chloropropane (DBCP)		
		4585	1,2-Dibromoethane (EDB, Ethylene dibromide)		
		4695	1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon-114)		
		4697	1,2-Dichloro-1,1,2-trifluoroethane		
		4610	1,2-Dichlorobenzene		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		4635	1,2-Dichloroethane (Ethylene dichloride)		
		4655	1,2-Dichloropropane		
		6800	1,3,5-Trichlorobenzene		
		5215	1,3,5-Trimethylbenzene		
		4615	1,3-Dichlorobenzene		
		4660	1,3-Dichloropropane		
		4675	1,3-Dichloropropene		
		4620	1,4-Dichlorobenzene		
		4735	1,4-Dioxane (1,4- Diethyleneoxide)		
		4510	1-Chlorohexane		
		5222	2,2-Dichloro-1,1,1-trifluoroethane (Freon 123)		
		4665	2,2-Dichloropropane		
		4410	2-Butanone (Methyl ethyl ketone, MEK)		
		4411	2-Chloro-1,1,1-trifluoroethane		
		4500	2-Chloroethyl vinyl ether		
		4535	2-Chlorotoluene		
		4860	2-Hexanone (MBK)		
		5020	2-Nitropropane		
		5045	2-Pentanone		
		4540	4-Chlorotoluene		
		4910	4-Isopropyltoluene (p-Cymene)		
		4995	4-Methyl-2-pentanone (MIBK)		
		4315	Acetone		
		4320	Acetonitrile		
		4325	Acrolein (Propenal)		
		4340	Acrylonitrile		
		4355	Allyl chloride (3-Chloropropene)		
		4375	Benzene		
		4385	Bromobenzene		
		4390	Bromochloromethane		
		4395	Bromodichloromethane		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		4400	Bromoform		
		4450	Carbon disulfide		
		4455	Carbon tetrachloride		
		4475	Chlorobenzene		
		4575	Chlorodibromomethane		
		4485	Chloroethane (Ethyl chloride)		
		4505	Chloroform		
		4525	Chloroprene (2-Chloro-1,3-butadiene)		
		4526	Chlorotrifluoroethene		
		4705	cis & trans-1,2-Dichloroethene		
		4645	cis-1,2-Dichloroethylene		
		4680	cis-1,3-Dichloropropene		
		4600	cis-1,4-Dichloro-2-butene		
		4555	Cyclohexane		
		4560	Cyclohexanone		
		4595	Dibromomethane (Methylene bromide)		
		4625	Dichlorodifluoromethane (Freon-12)		
		4627	Dichlorofluoromethane (Freon 21)		
		4725	Diethyl ether		
		9375	Di-isopropylether (DIPE)		
		4750	Ethanol		
		4755	Ethyl acetate		
		4760	Ethyl acrylate		
		4810	Ethyl methacrylate		
		4765	Ethylbenzene		
		4795	Ethylene oxide		
		4770	Ethyl-t-butylether (ETBE) (2-Ethoxy-2-methylpropane)		
		4771	Fluorobenzene		
		4835	Hexachlorobutadiene		
		4870	Iodomethane (Methyl iodide)		
		4875	Isobutyl alcohol (2-Methyl-1-propanol)		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		4895	Isopropyl alcohol (2-Propanol, Isopropanol)		
		4900	Isopropylbenzene (Cumene)		
		5240	m+p-xylene		
		4925	Methacrylonitrile		
		4940	Methyl acetate		
		4950	Methyl bromide (Bromomethane)		
		4960	Methyl chloride (Chloromethane)		
		4990	Methyl methacrylate		
		5000	Methyl tert-butyl ether (MTBE)		
		4965	Methylcyclohexane		
		4975	Methylene chloride (Dichloromethane)		
		5245	m-Xylene		
		5005	Naphthalene		
		4425	n-Butyl alcohol (1-Butanol, n-Butanol)		
		4435	n-Butylbenzene		
		4825	n-Heptane		
		4855	n-Hexane		
		6575	Nonanal		
		5090	n-Propylbenzene		
		5250	o-Xylene		
		5035	Pentachloroethane		
		5080	Propionitrile (Ethyl cyanide)		
		9579	Propylene oxide		
		5255	p-Xylene		
		9607	sec-Butyl Alcohol (2-Butanol)		
		4440	sec-Butylbenzene		
		5100	Styrene		
		4370	T-amylmethylether (TAME)		
		4420	tert-Butyl alcohol		
		4445	tert-Butylbenzene		
		5115	Tetrachloroethylene (Perchloroethylene)		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		5120	Tetrahydrofuran (THF)		
		9574	Tetrahydrothiophene		
		5140	Toluene		
		4027	Total BTEX		
		5205	Total trihalomethanes		
		4700	trans-1,2-Dichloroethylene		
		4685	trans-1,3-Dichloropropylene		
		4605	trans-1,4-Dichloro-2-butene		
		5170	Trichloroethene (Trichloroethylene)		
		5175	Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)		
		5225	Vinyl acetate		
		5235	Vinyl chloride		
		5260	Xylene (total)		
	EPA 8260D SIM			10307138	Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry Selected Ion Monitoring (GC/MS SIM)
		5110	1,1,2,2-Tetrachloroethane		
		5165	1,1,2-Trichloroethane		
		4635	1,2-Dichloroethane (Ethylene dichloride)		
		9318	1,3-Butadiene		
		4675	1,3-Dichloropropene		
		4735	1,4-Dioxane (1,4- Diethyleneoxide)		
		4375	Benzene		
		4395	Bromodichloromethane		
		4575	Chlorodibromomethane		
		4505	Chloroform		
		4680	cis-1,3-Dichloropropene		
		4835	Hexachlorobutadiene		
		4420	tert-Butyl alcohol		
		4685	trans-1,3-Dichloropropylene		
		5235	Vinyl chloride		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
	EPA 8270C			10185805	Semivolatile Organic compounds by GC/MS
		6703	1,1'-Biphenyl (BZ-0)		
		6715	1,2,4,5-Tetrachlorobenzene		
		5155	1,2,4-Trichlorobenzene		
		4610	1,2-Dichlorobenzene		
		6220	1,2-Diphenylhydrazine		
		6885	1,3,5-Trinitrobenzene (1,3,5-TNB)		
		4615	1,3-Dichlorobenzene		
		6160	1,3-Dinitrobenzene (1,3-DNB)		
		4620	1,4-Dichlorobenzene		
		6165	1,4-Dinitrobenzene		
		4735	1,4-Dioxane (1,4- Diethyleneoxide)		
		6420	1,4-Naphthoquinone		
		6630	1,4-Phenylenediamine		
		6630	1,4-Phenylenediamine		
		5790	1-Chloronaphthalene		
		6380	1-Methylnaphthalene		
		6425	1-Naphthylamine		
		4659	2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl)ether		
		4659	2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl)ether		
		6735	2,3,4,6-Tetrachlorophenol		
		6835	2,4,5-Trichlorophenol		
		6840	2,4,6-Trichlorophenol		
		6000	2,4-Dichlorophenol		
		6130	2,4-Dimethylphenol		
		6175	2,4-Dinitrophenol		
		6185	2,4-Dinitrotoluene (2,4-DNT)		
		6005	2,6-Dichlorophenol		
		6190	2,6-Dinitrotoluene (2,6-DNT)		
		5515	2-Acetylaminofluorene		
		9322	2-Butoxyethanol		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		5795	2-Chloronaphthalene		
		5800	2-Chlorophenol		
		5866	2-Ethoxyethanol (cellosolve)		
		6360	2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)		
		5145	2-Methylaniline (o-Toluidine)		
		6385	2-Methylnaphthalene		
		6400	2-Methylphenol (o-Cresol)		
		6430	2-Naphthylamine		
		6460	2-Nitroaniline		
		6490	2-Nitrophenol		
		5050	2-Picoline (2-Methylpyridine)		
		6412	3 & 4 Methylphenol		
		5945	3,3'-Dichlorobenzidine		
		6120	3,3'-Dimethylbenzidine		
		6355	3-Methylcholanthrene		
		6405	3-Methylphenol (m-Cresol)		
		6465	3-Nitroaniline		
		6365	4,4-Methylenebis(2-chloroaniline)		
		5540	4-Aminobiphenyl		
		5660	4-Bromophenyl phenyl ether (BDE-3)		
		5700	4-Chloro-3-methylphenol		
		5745	4-Chloroaniline		
		5825	4-Chlorophenyl phenylether		
		6105	4-Dimethyl aminoazobenzene		
		6410	4-Methylphenol (p-Cresol)		
		6470	4-Nitroaniline		
		6500	4-Nitrophenol		
		6510	4-Nitroquinoline 1-oxide		
		6570	5-Nitro-o-toluidine		
		6112	6-Methylchrysene		
		6115	7,12-Dimethylbenz(a) anthracene		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		6125	a-a-Dimethylphenethylamine		
		5500	Acenaphthene		
		5505	Acenaphthylene		
		5510	Acetophenone		
		4330	Acrylamide		
		7005	Alachlor		
		4357	alpha-Methylstyrene		
		5545	Aniline		
		5555	Anthracene		
		5560	Aramite		
		7065	Atrazine		
		5562	Azobenzene		
		5570	Benzaldehyde		
		5567	Benzenethiol		
		5595	Benzidine		
		5575	Benzo(a)anthracene		
		5580	Benzo(a)pyrene		
		5605	Benzo(e)pyrene		
		5590	Benzo(g,h,i)perylene		
		5600	Benzo(k)fluoranthene		
		5585	Benzo[b]fluoranthene		
		5610	Benzoic acid		
		5630	Benzyl alcohol		
		5760	bis(2-Chloroethoxy)methane		
		5765	bis(2-Chloroethyl) ether		
		5670	Butyl benzyl phthalate		
		7180	Caprolactam		
		5680	Carbazole		
		7210	Carbofuran phenol		
		7260	Chlorobenzilate		
		5855	Chrysene		
		8906	Coelution - 3-Chlorophenol + 4-		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
			Chlorophenol		
		5862	Cresols, Total		
		6065	Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)		
		7405	Diallate		
		9354	Dibenz(a, h) acridine		
		5900	Dibenz(a, j) acridine		
		5895	Dibenz(a,h) anthracene		
		5890	Dibenzo(a,e) pyrene		
		5905	Dibenzofuran		
		6070	Diethyl phthalate		
		7475	Dimethoate		
		6135	Dimethyl phthalate		
		5925	Di-n-butyl phthalate		
		6200	Di-n-octyl phthalate		
		8620	Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)		
		6205	Diphenylamine		
		8625	Disulfoton		
		6260	Ethyl methanesulfonate		
		7580	Famphur		
		6265	Fluoranthene		
		6270	Fluorene		
		6275	Hexachlorobenzene		
		4835	Hexachlorobutadiene		
		6285	Hexachlorocyclopentadiene		
		4840	Hexachloroethane		
		6290	Hexachlorophene		
		6295	Hexachloropropene		
		6312	Indene		
		6315	Indeno(1,2,3-cd) pyrene		
		7725	Isodrin		
		6320	Isophorone		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		6325	Isosafrole		
		7740	Kepone		
		6345	Methapyrilene		
		6375	Methyl methanesulfonate		
		7825	Methyl parathion (Parathion, methyl)		
		5010	n, n-Dimethyl formamide		
		5005	Naphthalene		
		5875	n-Decane		
		6300	n-Hexadecane		
		5015	Nitrobenzene		
		6525	n-Nitrosodiethylamine		
		6530	n-Nitrosodimethylamine		
		5025	n-Nitroso-di-n-butylamine		
		6545	n-Nitrosodi-n-propylamine		
		6535	n-Nitrosodiphenylamine		
		6550	n-Nitrosomethylethylamine		
		6555	n-Nitrosomorpholine		
		6560	n-Nitrosopiperidine		
		6565	n-Nitrosopyrrolidine		
		8290	o,o,o-Triethyl phosphorothioate		
		5550	o-Anisidine		
		5553	Octachlorostyrene		
		7955	Parathion, ethyl		
		6590	Pentachlorobenzene		
		5035	Pentachloroethane		
		6600	Pentachloronitrobenzene		
		6605	Pentachlorophenol		
		6608	Perylene		
		6610	Phenacetin		
		6615	Phenanthrene		
		6625	Phenol		
		7985	Phorate		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		6635	Phthalic acid		
		6640	Phthalic anhydride		
		6650	Pronamide (Kerb)		
		6665	Pyrene		
		5095	Pyridine		
		6670	Quinoline		
		6685	Safrole		
		8155	Sulfotepp		
		8235	Thionazin (Zinophos)		
		8262	Tributyl phosphate		
		5200	Triethylamine		
		8310	tris-(2,3-Dibromopropyl) phosphate (tris-BP)		
	EPA 8270C SIM			10242407	Semivolatile Organic compounds by GC/MS Selective Ion Monitoring
		6160	1,3-Dinitrobenzene (1,3-DNB)		
		4735	1,4-Dioxane (1,4- Diethyleneoxide)		
		6380	1-Methylnaphthalene		
		6175	2,4-Dinitrophenol		
		6185	2,4-Dinitrotoluene (2,4-DNT)		
		6190	2,6-Dinitrotoluene (2,6-DNT)		
		6385	2-Methylnaphthalene		
		5945	3,3'-Dichlorobenzidine		
		5745	4-Chloroaniline		
		5500	Acenaphthene		
		5505	Acenaphthylene		
		5555	Anthracene		
		5575	Benzo(a)anthracene		
		5580	Benzo(a)pyrene		
		5605	Benzo(e)pyrene		
		5590	Benzo(g,h,i)perylene		
		5600	Benzo(k)fluoranthene		
		5585	Benzo[b]fluoranthene		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		5765	bis(2-Chloroethyl) ether		
		5670	Butyl benzyl phthalate		
		5855	Chrysene		
		6065	Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)		
		5895	Dibenz(a,h) anthracene		
		5905	Dibenzofuran		
		6070	Diethyl phthalate		
		6135	Dimethyl phthalate		
		5925	Di-n-butyl phthalate		
		6200	Di-n-octyl phthalate		
		6265	Fluoranthene		
		6270	Fluorene		
		6275	Hexachlorobenzene		
		6285	Hexachlorocyclopentadiene		
		4840	Hexachloroethane		
		6315	Indeno(1,2,3-cd) pyrene		
		5005	Naphthalene		
		5015	Nitrobenzene		
		6525	n-Nitrosodiethylamine		
		6530	n-Nitrosodimethylamine		
		6545	n-Nitrosodi-n-propylamine		
		6535	n-Nitrosodiphenylamine		
		6605	Pentachlorophenol		
		6615	Phenanthrene		
		6665	Pyrene		
	EPA 8270D			10186002	Semivolatile Organic compounds by GC/MS
		6703	1,1'-Biphenyl (BZ-0)		
		6715	1,2,4,5-Tetrachlorobenzene		
		5155	1,2,4-Trichlorobenzene		
		4610	1,2-Dichlorobenzene		
		6220	1,2-Diphenylhydrazine		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		6885	1,3,5-Trinitrobenzene (1,3,5-TNB)		
		4615	1,3-Dichlorobenzene		
		6160	1,3-Dinitrobenzene (1,3-DNB)		
		4620	1,4-Dichlorobenzene		
		6165	1,4-Dinitrobenzene		
		4735	1,4-Dioxane (1,4- Diethyleneoxide)		
		6420	1,4-Naphthoquinone		
		6630	1,4-Phenylenediamine		
		6630	1,4-Phenylenediamine		
		5790	1-Chloronaphthalene		
		6380	1-Methylnaphthalene		
		6425	1-Naphthylamine		
		4659	2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl)ether		
		4659	2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl)ether		
		6735	2,3,4,6-Tetrachlorophenol		
		6835	2,4,5-Trichlorophenol		
		6840	2,4,6-Trichlorophenol		
		6000	2,4-Dichlorophenol		
		6130	2,4-Dimethylphenol		
		6175	2,4-Dinitrophenol		
		6185	2,4-Dinitrotoluene (2,4-DNT)		
		6005	2,6-Dichlorophenol		
		6190	2,6-Dinitrotoluene (2,6-DNT)		
		5515	2-Acetylaminofluorene		
		5795	2-Chloronaphthalene		
		5800	2-Chlorophenol		
		6360	2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)		
		5145	2-Methylaniline (o-Toluidine)		
		6385	2-Methylnaphthalene		
		6400	2-Methylphenol (o-Cresol)		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		6430	2-Naphthylamine		
		6460	2-Nitroaniline		
		6490	2-Nitrophenol		
		5050	2-Picoline (2-Methylpyridine)		
		6412	3 & 4 Methylphenol		
		5945	3,3'-Dichlorobenzidine		
		6120	3,3'-Dimethylbenzidine		
		6355	3-Methylcholanthrene		
		6405	3-Methylphenol (m-Cresol)		
		6465	3-Nitroaniline		
		6365	4,4-Methylenebis(2-chloroaniline)		
		5540	4-Aminobiphenyl		
		5660	4-Bromophenyl phenyl ether (BDE-3)		
		5700	4-Chloro-3-methylphenol		
		5745	4-Chloroaniline		
		5825	4-Chlorophenyl phenylether		
		6105	4-Dimethyl aminoazobenzene		
		6410	4-Methylphenol (p-Cresol)		
		6470	4-Nitroaniline		
		6500	4-Nitrophenol		
		6510	4-Nitroquinoline 1-oxide		
		6570	5-Nitro-o-toluidine		
		6112	6-Methylchrysene		
		6115	7,12-Dimethylbenz(a) anthracene		
		6125	a-a-Dimethylphenethylamine		
		5500	Acenaphthene		
		5505	Acenaphthylene		
		5510	Acetophenone		
		4330	Acrylamide		
		7005	Alachlor		
		4357	alpha-Methylstyrene		
		5545	Aniline		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		5555	Anthracene		
		5560	Aramite		
		7065	Atrazine		
		5562	Azobenzene		
		5570	Benzaldehyde		
		5595	Benzidine		
		5575	Benzo(a)anthracene		
		5580	Benzo(a)pyrene		
		5605	Benzo(e)pyrene		
		5590	Benzo(g,h,i)perylene		
		5600	Benzo(k)fluoranthene		
		5585	Benzo[b]fluoranthene		
		5610	Benzoic acid		
		5630	Benzyl alcohol		
		5760	bis(2-Chloroethoxy)methane		
		5765	bis(2-Chloroethyl) ether		
		5670	Butyl benzyl phthalate		
		7180	Caprolactam		
		5680	Carbazole		
		7210	Carbofuran phenol		
		7260	Chlorobenzilate		
		5855	Chrysene		
		8906	Coelution - 3-Chlorophenol + 4-Chlorophenol		
		5862	Cresols, Total		
		6065	Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)		
		7405	Diallate		
		9354	Dibenz(a, h) acridine		
		5900	Dibenz(a, j) acridine		
		5895	Dibenz(a,h) anthracene		
		5890	Dibenzo(a,e) pyrene		
		5905	Dibenzofuran		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		6070	Diethyl phthalate		
		7475	Dimethoate		
		6135	Dimethyl phthalate		
		5925	Di-n-butyl phthalate		
		6200	Di-n-octyl phthalate		
		8620	Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)		
		6205	Diphenylamine		
		8625	Disulfoton		
		6260	Ethyl methanesulfonate		
		7580	Famphur		
		6265	Fluoranthene		
		6270	Fluorene		
		6275	Hexachlorobenzene		
		4835	Hexachlorobutadiene		
		6285	Hexachlorocyclopentadiene		
		4840	Hexachloroethane		
		6290	Hexachlorophene		
		6295	Hexachloropropene		
		6312	Indene		
		6315	Indeno(1,2,3-cd) pyrene		
		7725	Isodrin		
		6320	Isophorone		
		6325	Isosafrole		
		7740	Kepone		
		6345	Methapyrilene		
		6375	Methyl methanesulfonate		
		7825	Methyl parathion (Parathion, methyl)		
		5010	n, n-Dimethyl formamide		
		5005	Naphthalene		
		5875	n-Decane		
		6300	n-Hexadecane		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		5015	Nitrobenzene		
		6525	n-Nitrosodiethylamine		
		6530	n-Nitrosodimethylamine		
		5025	n-Nitroso-di-n-butylamine		
		6545	n-Nitrosodi-n-propylamine		
		6535	n-Nitrosodiphenylamine		
		6550	n-Nitrosomethylethylamine		
		6555	n-Nitrosomorpholine		
		6560	n-Nitrosopiperidine		
		6565	n-Nitrosopyrrolidine		
		8290	o,o,o-Triethyl phosphorothioate		
		5550	o-Anisidine		
		5553	Octachlorostyrene		
		7955	Parathion, ethyl		
		6590	Pentachlorobenzene		
		5035	Pentachloroethane		
		6600	Pentachloronitrobenzene		
		6605	Pentachlorophenol		
		6608	Perylene		
		6610	Phenacetin		
		6615	Phenanthrene		
		6625	Phenol		
		7985	Phorate		
		6635	Phthalic acid		
		6640	Phthalic anhydride		
		6650	Pronamide (Kerb)		
		6665	Pyrene		
		5095	Pyridine		
		6670	Quinoline		
		6685	Safrole		
		8155	Sulfotepp		
		8235	Thionazin (Zinophos)		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		8262	Tributyl phosphate		
		5200	Triethylamine		
		8310	tris-(2,3-Dibromopropyl) phosphate (tris-BP)		
	EPA 8270D SIM			10242509	Semivolatile Organic compounds by GC/MS Selective Ion Monitoring
		6160	1,3-Dinitrobenzene (1,3-DNB)		
		4735	1,4-Dioxane (1,4- Diethyleneoxide)		
		6380	1-Methylnaphthalene		
		6175	2,4-Dinitrophenol		
		6185	2,4-Dinitrotoluene (2,4-DNT)		
		6190	2,6-Dinitrotoluene (2,6-DNT)		
		6385	2-Methylnaphthalene		
		5945	3,3'-Dichlorobenzidine		
		5745	4-Chloroaniline		
		5500	Acenaphthene		
		5505	Acenaphthylene		
		5555	Anthracene		
		5575	Benzo(a)anthracene		
		5580	Benzo(a)pyrene		
		5590	Benzo(g,h,i)perylene		
		5600	Benzo(k)fluoranthene		
		5585	Benzo[b]fluoranthene		
		5765	bis(2-Chloroethyl) ether		
		5670	Butyl benzyl phthalate		
		5855	Chrysene		
		6065	Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)		
		5895	Dibenz(a,h) anthracene		
		5905	Dibenzofuran		
		6070	Diethyl phthalate		
		6135	Dimethyl phthalate		
		5925	Di-n-butyl phthalate		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		6200	Di-n-octyl phthalate		
		6265	Fluoranthene		
		6270	Fluorene		
		6275	Hexachlorobenzene		
		6285	Hexachlorocyclopentadiene		
		4840	Hexachloroethane		
		6315	Indeno(1,2,3-cd) pyrene		
		5005	Naphthalene		
		5015	Nitrobenzene		
		6525	n-Nitrosodiethylamine		
		6530	n-Nitrosodimethylamine		
		6545	n-Nitrosodi-n-propylamine		
		6535	n-Nitrosodiphenylamine		
		6605	Pentachlorophenol		
		6615	Phenanthrene		
		6665	Pyrene		
	EPA 8270E			10242543	Semivolatile Organic compounds by GC/MS
		6703	1,1'-Biphenyl (BZ-0)		
		6715	1,2,4,5-Tetrachlorobenzene		
		5155	1,2,4-Trichlorobenzene		
		4610	1,2-Dichlorobenzene		
		6220	1,2-Diphenylhydrazine		
		6885	1,3,5-Trinitrobenzene (1,3,5-TNB)		
		4615	1,3-Dichlorobenzene		
		6160	1,3-Dinitrobenzene (1,3-DNB)		
		4620	1,4-Dichlorobenzene		
		6165	1,4-Dinitrobenzene		
		4735	1,4-Dioxane (1,4- Diethyleneoxide)		
		6420	1,4-Naphthoquinone		
		6630	1,4-Phenylenediamine		
		5790	1-Chloronaphthalene		
		6380	1-Methylnaphthalene		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		6425	1-Naphthylamine		
		4659	2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl)ether		
		6735	2,3,4,6-Tetrachlorophenol		
		6835	2,4,5-Trichlorophenol		
		6840	2,4,6-Trichlorophenol		
		6000	2,4-Dichlorophenol		
		6130	2,4-Dimethylphenol		
		6175	2,4-Dinitrophenol		
		6185	2,4-Dinitrotoluene (2,4-DNT)		
		6005	2,6-Dichlorophenol		
		6190	2,6-Dinitrotoluene (2,6-DNT)		
		5515	2-Acetylaminofluorene		
		5795	2-Chloronaphthalene		
		5800	2-Chlorophenol		
		5866	2-Ethoxyethanol (cellosolve)		
		6360	2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)		
		5145	2-Methylaniline (o-Toluidine)		
		6385	2-Methylnaphthalene		
		6400	2-Methylphenol (o-Cresol)		
		6430	2-Naphthylamine		
		6460	2-Nitroaniline		
		6490	2-Nitrophenol		
		5050	2-Picoline (2-Methylpyridine)		
		6412	3 & 4 Methylphenol		
		5945	3,3'-Dichlorobenzidine		
		6120	3,3'-Dimethylbenzidine		
		6355	3-Methylcholanthrene		
		6405	3-Methylphenol (m-Cresol)		
		6465	3-Nitroaniline		
		6365	4,4-Methylenebis(2-chloroaniline)		
		5540	4-Aminobiphenyl		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		5660	4-Bromophenyl phenyl ether (BDE-3)		
		5700	4-Chloro-3-methylphenol		
		5745	4-Chloroaniline		
		5825	4-Chlorophenyl phenylether		
		6105	4-Dimethyl aminoazobenzene		
		6410	4-Methylphenol (p-Cresol)		
		6470	4-Nitroaniline		
		6500	4-Nitrophenol		
		6510	4-Nitroquinoline 1-oxide		
		6570	5-Nitro-o-toluidine		
		6112	6-Methylchrysene		
		6115	7,12-Dimethylbenz(a) anthracene		
		6125	a-a-Dimethylphenethylamine		
		5500	Acenaphthene		
		5505	Acenaphthylene		
		5510	Acetophenone		
		4330	Acrylamide		
		7005	Alachlor		
		4357	alpha-Methylstyrene		
		5545	Aniline		
		5555	Anthracene		
		5560	Aramite		
		7065	Atrazine		
		5562	Azobenzene		
		5570	Benzaldehyde		
		5567	Benzenethiol		
		5595	Benzidine		
		5575	Benzo(a)anthracene		
		5580	Benzo(a)pyrene		
		5605	Benzo(e)pyrene		
		5590	Benzo(g,h,i)perylene		
		5600	Benzo(k)fluoranthene		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		5585	Benzo[b]fluoranthene		
		5610	Benzoic acid		
		5630	Benzyl alcohol		
		5760	bis(2-Chloroethoxy)methane		
		5765	bis(2-Chloroethyl) ether		
		5670	Butyl benzyl phthalate		
		7180	Caprolactam		
		5680	Carbazole		
		7210	Carbofuran phenol		
		7260	Chlorobenzilate		
		5855	Chrysene		
		8906	Coelution - 3-Chlorophenol + 4-Chlorophenol		
		5862	Cresols, Total		
		6065	Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)		
		7405	Diallate		
		9354	Dibenz(a, h) acridine		
		5900	Dibenz(a, j) acridine		
		5895	Dibenz(a,h) anthracene		
		5890	Dibenzo(a,e) pyrene		
		5905	Dibenzofuran		
		6070	Diethyl phthalate		
		7475	Dimethoate		
		6135	Dimethyl phthalate		
		5925	Di-n-butyl phthalate		
		6200	Di-n-octyl phthalate		
		8620	Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)		
		6205	Diphenylamine		
		8625	Disulfoton		
		6260	Ethyl methanesulfonate		
		7580	Famphur		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		6265	Fluoranthene		
		6270	Fluorene		
		6275	Hexachlorobenzene		
		4835	Hexachlorobutadiene		
		6285	Hexachlorocyclopentadiene		
		4840	Hexachloroethane		
		6290	Hexachlorophene		
		6295	Hexachloropropene		
		6312	Indene		
		6315	Indeno(1,2,3-cd) pyrene		
		7725	Isodrin		
		6320	Isophorone		
		6325	Isosafrole		
		7740	Kepone		
		6345	Methapyrilene		
		6375	Methyl methanesulfonate		
		7825	Methyl parathion (Parathion, methyl)		
		5010	n, n-Dimethyl formamide		
		5005	Naphthalene		
		5875	n-Decane		
		6300	n-Hexadecane		
		5015	Nitrobenzene		
		6525	n-Nitrosodiethylamine		
		6530	n-Nitrosodimethylamine		
		5025	n-Nitroso-di-n-butylamine		
		6545	n-Nitrosodi-n-propylamine		
		6535	n-Nitrosodiphenylamine		
		6550	n-Nitrosomethylethylamine		
		6555	n-Nitrosomorpholine		
		6560	n-Nitrosopiperidine		
		6565	n-Nitrosopyrrolidine		
		8290	o,o,o-Triethyl phosphorothioate		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		5550	o-Anisidine		
		5553	Octachlorostyrene		
		7955	Parathion, ethyl		
		6590	Pentachlorobenzene		
		5035	Pentachloroethane		
		6600	Pentachloronitrobenzene		
		6605	Pentachlorophenol		
		6608	Perylene		
		6610	Phenacetin		
		6615	Phenanthrene		
		6625	Phenol		
		7985	Phorate		
		6635	Phthalic acid		
		6640	Phthalic anhydride		
		6650	Pronamide (Kerb)		
		6665	Pyrene		
		5095	Pyridine		
		6670	Quinoline		
		6685	Safrole		
		8155	Sulfotepp		
		8235	Thionazin (Zinophos)		
		8262	Tributyl phosphate		
		5200	Triethylamine		
		8310	tris-(2,3-Dibromopropyl) phosphate (tris-BP)		
	EPA 8270E SIM			10242565	Semivolatile Organic compounds by Gas Chromatography/Mass Spectrometry (GC/MS-SIM)
		6160	1,3-Dinitrobenzene (1,3-DNB)		
		4735	1,4-Dioxane (1,4- Diethyleneoxide)		
		6380	1-Methylnaphthalene		
		6175	2,4-Dinitrophenol		
		6185	2,4-Dinitrotoluene (2,4-DNT)		
		6190	2,6-Dinitrotoluene (2,6-DNT)		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		6385	2-Methylnaphthalene		
		5945	3,3'-Dichlorobenzidine		
		5745	4-Chloroaniline		
		5500	Acenaphthene		
		5505	Acenaphthylene		
		5555	Anthracene		
		5575	Benzo(a)anthracene		
		5580	Benzo(a)pyrene		
		5605	Benzo(e)pyrene		
		5590	Benzo(g,h,i)perylene		
		5600	Benzo(k)fluoranthene		
		5585	Benzo[b]fluoranthene		
		5765	bis(2-Chloroethyl) ether		
		5670	Butyl benzyl phthalate		
		5855	Chrysene		
		6065	Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)		
		5895	Dibenz(a,h) anthracene		
		5905	Dibenzofuran		
		6070	Diethyl phthalate		
		6135	Dimethyl phthalate		
		5925	Di-n-butyl phthalate		
		6200	Di-n-octyl phthalate		
		6265	Fluoranthene		
		6270	Fluorene		
		6275	Hexachlorobenzene		
		6285	Hexachlorocyclopentadiene		
		4840	Hexachloroethane		
		6315	Indeno(1,2,3-cd) pyrene		
		5005	Naphthalene		
		5015	Nitrobenzene		
		6525	n-Nitrosodiethylamine		

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Environmental Laboratory Accreditation Program

ORELAP Fields of Accreditation

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ORELAP ID: 4025
EPA CODE: CO00026
Certificate: 4025 - 015

Issue Date: 9/9/2021 Expiration Date: 1/8/2022

As of 9/9/2021 this list supersedes all previous lists for this certificate number.

Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		6530	n-Nitrosodimethylamine		
		6545	n-Nitrosodi-n-propylamine		
		6535	n-Nitrosodiphenylamine		
		6605	Pentachlorophenol		
		6615	Phenanthrene		
		6665	Pyrene		
	EPA 8321A			10189001	Solvent Extractable non-volatile compounds by HPLC/TS/MS
		6885	1,3,5-Trinitrobenzene (1,3,5-TNB)		
		6160	1,3-Dinitrobenzene (1,3-DNB)		
		6014	2,3-Dinitrotoluene		
		8655	2,4,5-T		
		9651	2,4,6-Trinitrotoluene (2,4,6-TNT)		
		8545	2,4-D		
		8560	2,4-DB		
		6185	2,4-Dinitrotoluene (2,4-DNT)		
		6190	2,6-Dinitrotoluene (2,6-DNT)		
		9303	2-Amino-4,6-dinitrotoluene (2-am-dnt)		
		9507	2-Nitrotoluene		
		9510	3-Nitrotoluene		
		9306	4-Amino-2,6-dinitrotoluene (4-am-dnt)		
		9513	4-Nitrotoluene		
		7010	Aldicarb (Temik)		
		7040	Aminocarb		
		7195	Carbaryl (Sevin)		
		7205	Carbofuran (Furaden)		
		7275	Chloropropham		
		8555	Dalapon		
		8595	Dicamba		
		8605	Dichloroprop (Dichlorprop)		
		8620	Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)		
		7505	Diuron		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		7610	Fenuron		
		7630	Fluometuron		
		7765	Linuron (Lorox)		
		7775	MCPA		
		7780	MCPP		
		7800	Methiocarb (Mesurol)		
		7805	Methomyl (Lannate)		
		6415	Methyl-2,4,6-trinitrophenylnitramine (tetryl)		
		7855	Mexacarbate		
		7885	Monuron		
		7915	Neburon		
		5015	Nitrobenzene		
		6485	Nitroglycerin		
		9522	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)		
		6605	Pentachlorophenol		
		9558	Pentaerythritoltetranitrate (PETN)		
		8075	Propham		
		8080	Propoxur (Baygon)		
		9432	RDX (hexahydro-1,3,5-trinitro-1,3,5-triazine)		
		8120	Siduron		
		8650	Silvex (2,4,5-TP)		
		9577	Thiodiglycol		
	EPA 8321B			10189205	Solvent Extractable non-volatile compounds by HPLC/TS/MS
		6885	1,3,5-Trinitrobenzene (1,3,5-TNB)		
		6160	1,3-Dinitrobenzene (1,3-DNB)		
		6014	2,3-Dinitrotoluene		
		8655	2,4,5-T		
		9651	2,4,6-Trinitrotoluene (2,4,6-TNT)		
		8545	2,4-D		

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Issue Date: 9/9/2021 Expiration Date: 1/8/2022

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		8560	2,4-DB		
		6185	2,4-Dinitrotoluene (2,4-DNT)		
		6190	2,6-Dinitrotoluene (2,6-DNT)		
		9303	2-Amino-4,6-dinitrotoluene (2-am-dnt)		
		9507	2-Nitrotoluene		
		9510	3-Nitrotoluene		
		9306	4-Amino-2,6-dinitrotoluene (4-am-dnt)		
		9513	4-Nitrotoluene		
		7010	Aldicarb (Temik)		
		7040	Aminocarb		
		7195	Carbaryl (Sevin)		
		7205	Carbofuran (Furaden)		
		7275	Chloropropham		
		8555	Dalapon		
		8595	Dicamba		
		8605	Dichloroprop (Dichlorprop)		
		8620	Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)		
		7505	Diuron		
		7610	Fenuron		
		7630	Fluometuron		
		7765	Linuron (Lorox)		
		7775	MCPA		
		7780	MCPP		
		7800	Methiocarb (Mesurol)		
		7805	Methomyl (Lannate)		
		6415	Methyl-2,4,6-trinitrophenylnitramine (tetryl)		
		7855	Mexacarbate		
		7885	Monuron		
		7915	Neburon		
		5015	Nitrobenzene		
		6485	Nitroglycerin		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		9522	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)		
		6605	Pentachlorophenol		
		9558	Pentaerythritoltetranitrate (PETN)		
		8075	Propham		
		8080	Propoxur (Baygon)		
		9432	RDX (hexahydro-1,3,5-trinitro-1,3,5-triazine)		
		8120	Siduron		
		8650	Silvex (2,4,5-TP)		
	EPA 8330A			10190008	Nitroaromatics and Nitramines by High Performance Liquid Chromatography (HPLC)
		6885	1,3,5-Trinitrobenzene (1,3,5-TNB)		
		6160	1,3-Dinitrobenzene (1,3-DNB)		
		9651	2,4,6-Trinitrotoluene (2,4,6-TNT)		
		5882	2,4-diamino-6-nitrotoluene		
		6185	2,4-Dinitrotoluene (2,4-DNT)		
		6181	2,6-diamino-4-nitrotoluene		
		6190	2,6-Dinitrotoluene (2,6-DNT)		
		9303	2-Amino-4,6-dinitrotoluene (2-am-dnt)		
		9507	2-Nitrotoluene		
		9510	3-Nitrotoluene		
		9306	4-Amino-2,6-dinitrotoluene (4-am-dnt)		
		9513	4-Nitrotoluene		
		7046	Ammonium Picrate		
		6415	Methyl-2,4,6-trinitrophenylnitramine (tetryl)		
		5015	Nitrobenzene		
		6485	Nitroglycerin		
		9522	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)		
		9558	Pentaerythritoltetranitrate (PETN)		
		1899	Picric Acid (2,4,6-Trinitrophenol)		
		9432	RDX (hexahydro-1,3,5-trinitro-1,3,5-		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
			triazine)		
	EPA 8330B			10308006	Nitroaromatics, Nitramines and Nitrate Esters by High Performance Liquid Chromatography (HPLC)
		6885	1,3,5-Trinitrobenzene (1,3,5-TNB)		
		6160	1,3-Dinitrobenzene (1,3-DNB)		
		9651	2,4,6-Trinitrotoluene (2,4,6-TNT)		
		5882	2,4-diamino-6-nitrotoluene		
		6185	2,4-Dinitrotoluene (2,4-DNT)		
		6181	2,6-diamino-4-nitrotoluene		
		6190	2,6-Dinitrotoluene (2,6-DNT)		
		9303	2-Amino-4,6-dinitrotoluene (2-am-dnt)		
		9507	2-Nitrotoluene		
		6150	3,5-Dinitroaniline		
		9510	3-Nitrotoluene		
		9306	4-Amino-2,6-dinitrotoluene (4-am-dnt)		
		9513	4-Nitrotoluene		
		7046	Ammonium Picrate		
		6415	Methyl-2,4,6-trinitrophenylnitramine (tetryl)		
		5015	Nitrobenzene		
		6485	Nitroglycerin		
		9522	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)		
		9558	Pentaerythritoltetranitrate (PETN)		
		1899	Picric Acid (2,4,6-Trinitrophenol)		
		9432	RDX (hexahydro-1,3,5-trinitro-1,3,5-triazine)		
	EPA 9012A			10193405	Total and Amenable Cyanide (automated colorimetric with off-line distillation)
		1645	Total cyanide		
	EPA 9012B			10243206	Total and Amenable Cyanide (automated colorimetric with off-line distillation)
		1645	Total cyanide		
	EPA 9030B			10195605	Acid-Soluble and Acid-Insoluble sulfides: Distillation

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		2005	Sulfide		
	EPA 9034			10196006	Titrimetric Procedure for Acid-Soluble and Acid-Insoluble Sulfides
		2005	Sulfide		
	EPA 9045C			10198400	Soil and Waste pH
		1900	pH		
	EPA 9045D			10244607	Soil and Waste pH
		1900	pH		
	EPA 9050A			10198808	Specific Conductance
		1610	Conductivity		
	EPA 9056			10199005	Determination of Inorganic Anions by Ion Chromatography
		1540	Bromide		
		1575	Chloride		
		1730	Fluoride		
		1805	Nitrate		
		1835	Nitrite		
		1870	Orthophosphate as P		
		2000	Sulfate		
		1825	Total nitrate+nitrite		
	EPA 9056A EPA 9056A			10199607	Determination of Inorganic Anions by Ion Chromatography
		1540	Bromide		
		1575	Chloride		
		1730	Fluoride		
		1805	Nitrate		
		1820	Nitrate plus Nitrite as N		
		1835	Nitrite		
		1870	Orthophosphate as P		
		2000	Sulfate		
	EPA 9060			10200201	Total Organic Carbon
		1813	Total Inorganic Carbon		
		2040	Total organic carbon		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
	EPA 9060A			10244823	Total Organic Carbon
		1813	Total Inorganic Carbon		
		2040	Total organic carbon		
	EPA 9095A			10204203	Paint Filter Liquids Test
		1434	Paint Filter Liquids Test		
	NWTPH-Dx			90018409	Oregon DEQ TPH Diesel Range
		9369	Diesel range organics (DRO)		
		9499	Motor Oil		
		8641	Percent Moisture		
		9506	Residual Range Organics (RRO)		
		2050	Total Petroleum Hydrocarbons (TPH)		
	NWTPH-Gx			90018603	Oregon DEQ TPH Gasoline Range Organics by GC/FID-PID Purge & Trap
		9408	Gasoline range organics (GRO)		
	SM 2320 B-2011 online			20045618	Alkalinity as CaCO3
		1505	Alkalinity as CaCO3		
	SM 2320 B-97 SM 2320 B-97			20045607	Alkalinity by Titration Method
		1505	Alkalinity as CaCO3		
	SM 2510 B-2011			20048617	Conductivity by Probe
		1610	Conductivity		
	SM 2510 B-97 SM 2510 B-97			20048606	Conductivity by Probe
		1610	Conductivity		
	SM 4500-CN C-1999			20095652	Cyanide (Total) after Distillation
		1635	Cyanide		
	SM 4500-CN E-1999			20096417	Cyanide by Colorimetric Method
		1645	Total cyanide		
	SM 4500-CN E-2011 2011			20096428	Cyanide by Colormetric Method
		1645	Total cyanide		
	SM 4500-CN^- C-97 online			20095607	Cyanide by Total Cyanide after Distillation

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Issue Date: 9/9/2021 Expiration Date: 1/8/2022

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		1645	Total cyanide		
	SM 4500-NO2 B-2011 online			20113115	Nitrite as N
		1840	Nitrite as N		
	SM 4500-$NO2^-$ B-2000 online			20113104	Nitrite by Colorimetric Determination
		1835	Nitrite		
		1840	Nitrite as N		

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APPENDIX D

Results of Field and Laboratory QA/QC Review

Spring 2021

Compliance Groundwater

QA/QC Results

SCS Engineers QA/QC Review
Groundwater - Spring 2021 Compliance Groundwater Monitoring Event
Riverbend Landfill
TestAmerica-Denver Report #280-147466-1

Samples: MW-14A, MW-14B, MW-21A, MW-21B, MW-16A, FB2 (MW-16A), MW-16B, DUP2 (MW-16B), and TB1.

Sample Date: 04/13-14/2021
Laboratory Sample Received Date: 04/15/2021
Sample Temperatures on arrival at lab: 0.9, 2.8, 3.2, and 3.6°C
Laboratory Data Received Date: 05/05/2021
QA/QC Review Date: 06/8/2021 (IH)

Cation/Anion Balance: MW-14A =0.98%, MW-14B =3.4%, MW-21A =0.27%, MW-21B =2.2%, MW-16A =4.4%, FB2 (MW-16A) =NC, MW-16B =4.2%, DUP2 (MW-16B) =1.3%,

VOCs

Surrogates	All sample surrogate recoveries are within control limits.
Method Blanks	All analytes are non-detect, and all surrogate recoveries within control limits.
LCS	All LCS recoveries are within control limits, and all surrogate recoveries are within control limits.
LCSD	All RPDs are within control limits.
MS/MSD	MS/MSD were not performed for Method 8260B due to insufficient sample volume. Method precision and accuracy have been verified by acceptable LCS/LCSD data. This is noted and qualified in the case narrative. The MS/MSD for Method 8260B performed on a sample from another client exhibited spike recoveries and RPDs outside of control limits for multiple compounds in batch 533813 (F2 flags). This is noted and qualified for in the case narrative.
TICs	TICS were not identified in any samples.

8011

Surrogates	All sample surrogate recoveries are within control limits.
Method Blanks	All analytes are non-detect, and all surrogate recoveries within control limits.
LCS	All LCS recoveries are within control limits, and all surrogate recoveries are within control limits.
LCSD	All RPDs are within control limits.
MS/MSD	MS/MSD were not performed for Method 8011 due to insufficient sample volume. Method precision and accuracy have been verified by acceptable LCS/LCSD data. This is noted and qualified in the case narrative.

Dissolved Metals

Method Blanks	All analytes are non-detect except for dissolved iron above the project established reporting limit in batch 533820 (B flag). This is noted and qualified for in the case narrative.
LCS	All LCS recoveries are within control limits.
Matrix Spikes	All matrix spike recoveries are within control limits except for dissolved calcium, dissolved magnesium, dissolved potassium, and dissolved sodium in batch 533820 (F1 flags). This is noted and qualified for in the case narrative.
MSD	All RPDs are within control limits except for dissolved sodium in batch 533820 (F2 flag). This is noted and qualified for in the case narrative.

General Chemistry

Method Blanks	All analytes are non-detect.
LCS	All LCS recoveries are within control limits.
LCSD	All RPDs are within control limits.
Matrix Spikes	All spike recoveries are within control limits except for nitrate/nitrite in batch 534257 (F1 flag). This are noted and qualified in the case narrative.
MSD	All RPDs are within control limits.
Duplicates	All RPDs are within control limits.

Hold Times

All analytical holding times were met.

Reporting Limit Exceedances

All analytical reporting limits met the environmental monitoring plan required limits.

Field QA/QC

Trip Blanks

Laboratory supplies trip blanks (TB1) were carried into the field 04/13-15/2021 with all samples and returned to the lab for Method 8260B and 8011 analyses. All analytes are non-detect, and all surrogates are within control limits.

Field Blanks

A field blank (FB2) was collected on 04/14/2021 near MW-16A. All analytes were reported as non-detect.

Field Duplicates

A field duplicate (DUP2) was collected on 04/14/2021 at MW-16B. All RPDs were within 20%.

Data Quality Reviews (DQRs)

A DQR was imitated on 6/11/2021 for dissolved iron for MW-16B.

Notes

None.

Data Validation

Upon final review of lab report #280-147466-1 for Riverbend Landfill, SCS Engineers finds the data to be valid for its intended use ***(06/08/2021; IH).***

SCS Engineers QA/QC Review
Groundwater - Spring 2021 Compliance Groundwater Monitoring Event
Riverbend Landfill
Eurofins TestAmerica-Denver Report #280-147597-1

Samples: MW-12A, FB4 (MW-12A), MW-12B, DUP4 (MW-12B), MW-15A, DUP3 (MW-15A), MW-15B, and TB-02.

Sample Date: 04/15-16/2021
Laboratory Sample Received Date: 04/17/2021
Sample Temperatures on arrival at lab: 1.6 and 2.1 °C
Laboratory Data Received Date: 05/13/2021
QA/QC Review Date: 05/17/2021 (TMA)

Cation/Anion Balance: MW-12A = -2.2%, MW-12B = 0.79%, DUP4 = -0.50%, MW-15A = -5.0%, DUP3 = -4.0, MW-15B = -0.44%, and FB4=NC.

VOCs

Surrogates	All sample surrogate recoveries are within control limits.
Method Blanks	All analytes are non-detect.
LCS	All LCS recoveries are within control limits, and all surrogate recoveries are within control limits.
LCSD	All RPDs are within control limits.
MS/MSD	MS/MSD were not performed for Method 8260B due to insufficient sample volume. Method precision and accuracy have been verified by acceptable LCS/LCSD data. This is noted and qualified in the case narrative.
TICs	TICS were not identified in any samples.

8011

Surrogates	All sample surrogate recoveries are within control limits.
Method Blanks	All analytes are non-detect.
LCS	All LCS recoveries are within control limits, and all surrogate recoveries are within control limits.
LCSD	All RPDs are within control limits.
MS/MSD	MS/MSD were not performed for Method 8011 due to insufficient sample volume. Method precision and accuracy have been verified by acceptable LCS/LCSD data. This is noted and qualified in the case narrative.

Dissolved Metals

Method Blanks	All analytes are non-detect.
LCS	All LCS recoveries are within control limits.
Matrix Spikes	All matrix spike recoveries are within control limits.
MSD	All RPDs are within control limits.

General Chemistry

Method Blanks	All analytes are non-detect.
LCS	All LCS recoveries are within control limits.
LCSD	All RPDs are within control limits.
Matrix Spikes	All spike recoveries are within control limits except for chloride, ammonia, and nitrate-nitrite in batches 578589, 534285, and 534909, respectively (F1 Flags). These are noted and qualified in the case narrative.
MSD	All RPDs are within control limits except for chloride, ammonia, and nitrate-nitrite in batches 578589, 534285, and 534909, respectively (F2 Flags). These are noted and qualified in the case narrative.
Duplicates	All RPDs are within control limits.

Hold Times
All hold times were met.

Reporting Limit Exceedances
All analytical reporting limits met the environmental monitoring plan required limits.

Field QA/QC
Trip Blanks
Laboratory supplies trip blanks were carried into the field 04/15-16/2021 with all samples and returned to the lab for Method 8260B and 8011 analyses. All analytes are non-detect, and all surrogates are within control limits.

Field Blanks
A field blank (FB4) was collected on 04/16/2021 near MW-12A. All analytes were reported as non-detect.

Field Duplicates
A field duplicate (DUP3) was collected on 04/15/2021 at MW-15A. All RPDs were within 20% except for dissolved iron (61%), nitrate-nitrite (28%), and total organic carbon (TOC) (32%). It should be noted that the concentrations of dissolved iron and TOC detected in the MW-15A and DUP3 samples were less than 5 times the reporting limit value; consequently, these results are not controlled by RPDs. A field duplicate (DUP4) was collected on 04/16//2021 at MW-12B. All RPDs were within 20% except for TOC (25%). It should be noted that the concentrations TOC detected in the MW-12B and DUP4 samples were less than 5 times the reporting limit value; consequently, these results are not controlled by RPDs.

Data Quality Reviews (DQRs)
None.

Notes
The Method 6010B Instrument Blank was above the control limits for dissolved calcium. Because the associated samples exhibited detections of dissolved calcium greater than ten times the Instrument Blank result, corrective action was deemed unnecessary.

Data Validation
Upon final review of lab report #280-147597-1 for Riverbend Landfill, SCS Engineers finds the data to be valid for its intended use ***(05/17/21; TMA).***

Spring 2021

Detection Groundwater

QA/QC Results

SCS Engineers QA/QC Review
Groundwater - Spring 2021 Detection Groundwater Monitoring Event
Riverbend Landfill
Eurofins TestAmerica-Denver Report #280-147464-1

Samples: MW-20B and FB1 (MW-20B).

Sample Date: 04/13/2021
Laboratory Sample Received Date: 04/15/2021
Sample Temperatures on arrival at lab: 0.9, 2.8, 3.2, and 3.6ºC
Laboratory Data Received Date: 05/03/2021
QA/QC Review Date: 05/19/2021 (TMA)

Cation/Anion Balance: MW-20B = 0.22% and FB1 (MW-20B) = NC.

VOCs

Surrogates	All sample surrogate recoveries are within control limits.
Method Blanks	All analytes are non-detect, and all surrogate recoveries within control limits.
LCS	All LCS recoveries are within control limits. All surrogate recoveries are within control limits.
LCSD	All RPDs are within control limits.
Matrix Spikes	All matrix spike recoveries and surrogates are within control limits.
MSD	Multiple RPDs were outside control limits in batch 533813 (F2 Flags). There are noted and qualified in the case narrative.
TICs	TICS were not identified in any of the samples.

8011

Surrogates	All sample surrogate recoveries are within control limits.
Method Blanks	All analytes are non-detect, and all surrogate recoveries within control limits.
LCS	All LCS recoveries are within control limit. All surrogate recoveries are within control limits
LCSD	All RPDs are within control limits.
MS/MSD	Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) for Method 8011; however, LCS/LCSD pairs were analyzed to demonstrate method precision and accuracy.

Dissolved Metals

Method Blanks	All analytes are non-detect except for dissolved iron (B Flags). These are noted and qualified in the case narrative.
LCS	All LCS recoveries are within control limits.
Matrix Spikes	All matrix spike recoveries are within control limits except for dissolved calcium, dissolved magnesium, and dissolved sodium (F1 and 4 flag) and dissolved potassium (F1 Flags) in batch 533820. It should be noted that the dissolved calcium, dissolved magnesium, and dissolved sodium present in the original samples were greater than 4 times the matrix spike concentration; therefore, control limits are not applicable (4 Flags). These are noted and qualified in the case narrative.
MSD	All RPDs are within control limits except for dissolved sodium in batch 533820 (F2 Flags). These are noted and qualified in the case narrative.

General Chemistry

Method Blanks	All analytes are non-detect.
LCS	All LCS recoveries are within control limits.
LCSD	All RPDs are within control limits.
Matrix Spikes	All matrix spike recoveries are within control limits except for nitrate-nitrite in batch 534109 (F1 Flags). These are noted and qualified in the case narrative.
MSD	All RPDs are within control limits.
Duplicates	All RPDs are within control limits.

Hold Times

All analytical hold times were met.

Reporting Limit Exceedances

All analytical reporting limits met the environmental monitoring plan required limits.

Field QA/QC

Trip Blanks

Laboratory supplied trip blanks (Trip Blank) were carried into the field on 04/13/2021 with all samples are returned to the lab for Method 8260B and 8011 analyses. All analytes are non-detect, and all surrogates are within control limits. The trip blanks are reported in lab report 280-147466-1.

Field Blanks

A field blank (FB1) was collected on 04/13/2021 near MW-20B using laboratory-supplied deionized water. All analytes are reported as non-detect.

Data Quality Reviews (DQRs)

None.

Notes

None.

Data Validation

Upon final review of lab report #280-147464-1 for Riverbend Landfill, SCS Engineers finds the data to be valid for its intended use ***(05/19/2021; TMA).***

SCS Engineers QA/QC Review
Groundwater - Spring 2021 Detection Groundwater Monitoring Event
Riverbend Landfill
Eurofins TestAmerica-Denver Report #280-147469-1

Samples: MW-20A and DUP1.

Sample Date: 04/13/2021
Laboratory Sample Received Date: 04/15/2021
Sample Temperatures on arrival at lab: 0.9, 2.8, 3.2, and 3.6ºC
Laboratory Data Received Date: 05/05/2021
QA/QC Review Date: 06/8/2021 (IH)

Cation/Anion Balance: MW-20A = 0.077% and DUP1 = -1.5%.

VOCs

Surrogates	All sample surrogate recoveries are within control limits.
Method Blanks	All analytes are non-detect, and all surrogate recoveries within control limits.
LCS	All LCS recoveries are within control limits. All surrogate recoveries are within control limits.
LCSD	All RPDs are within control limits.
MS/MSD	Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) for Method 8260; however, LCS/LCSD pairs were analyzed to demonstrate method precision and accuracy.
TICs	TICS were not identified in any of the samples.

8011

Surrogates	All sample surrogate recoveries are within control limits.
Method Blanks	All analytes are non-detect, and all surrogate recoveries within control limits.
LCS	All LCS recoveries are within control limit. All surrogate recoveries are within control limits
LCSD	All RPDs are within control limits.
MS/MSD	Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) for Method 8011; however, LCS/LCSD pairs were analyzed to demonstrate method precision and accuracy.

Dissolved Metals

Method Blanks	All analytes are non-detect except for dissolved iron in batch 534126 (B Flags). This is noted and qualified in the case narrative.
LCS	All LCS recoveries are within control limits.
Matrix Spikes	All matrix spike recoveries are within control.
MSD	All RPDs are within control limits.

General Chemistry

Method Blanks	All analytes are non-detect.
LCS	All LCS recoveries are within control limits.
LCSD	All RPDs are within control limits.
Matrix Spikes	All matrix spike recoveries are within control limits.
MSD	All RPDs are within control limits.
Duplicates	All RPDs are within control limits.

Hold Times
All analytical hold times were met.

Reporting Limit Exceedances
All analytical reporting limits met the environmental monitoring plan required limits.

Field QA/QC
Trip Blanks
Laboratory supplied trip blanks (TB1) were carried into the field on 04/13-14/2021 with all samples are returned to the lab for Method 8260B and 8011 analyses. All analytes are non-detect, and all surrogates are within control limits. Results for TB1 are reported in lab report number 280-147466-1. This is noted in the case narrative.

Field Duplicate
A field duplicate (DUP1) was collected on 4/13/2021 at MW-20A. All calculated RPDs were within 20% except for ammonia (48.28%).

Data Quality Reviews (DQRs)
None.

Notes
None.

Data Validation
Upon final review of lab report #280-147596-1 for Riverbend Landfill, SCS Engineers finds the data to be valid for its intended use ***(06/08/2021; IH).***

SCS Engineers QA/QC Review
Groundwater - Spring 2021 Detection Groundwater Monitoring Event
Riverbend Landfill
Eurofins TestAmerica-Denver Report #280-147470-1

Samples: P-05A, P-06A, and P-07A.

Sample Date: 04/13/2021
Laboratory Sample Received Date: 04/15/2021
Sample Temperatures on arrival at lab: 0.9, 2.8, 3.2, and 3.6°C
Laboratory Data Received Date: 05/05/2021
QA/QC Review Date: 05/18/2021 (TMA)

Cation/Anion Balance: not applicable.

Dissolved Metals

Method Blanks	All analytes are non-detect except for dissolved iron (B Flags) These are noted and qualified the case narrative.
LCS	All LCS recoveries are within control limits.
Matrix Spikes	All matrix spike recoveries are within control limits.
MSD	All RPDs are within control limits.

General Chemistry

Method Blanks	All analytes are non-detect.
LCS	All LCS recoveries are within control limits.
Matrix Spikes	All spike recoveries are within control limits.
MSD	All RPDs are within control limits.
Duplicates	All RPDs are within control limits.

Hold Times
All analytical hold times were met.

Reporting Limit Exceedances
All analytical reporting limits met the environmental monitoring plan required limits.

Field QA/QC
None.

Data Quality Reviews (DQRs
A DQR was initiated on 6/11/2021 for dissolved iron for samples P-06A and P-07A. The analytical QC around the batch does not give any indication that we might have biased the result high.

Notes
None.

Data Validation
Upon final review of lab report #280-147470-1 for Riverbend Landfill, SCS Engineers finds the data to be valid for its intended use ***(05/18/2021; TMA).***

SCS Engineers QA/QC Review
Groundwater - Spring 2021 Detection Groundwater Monitoring Event
Riverbend Landfill
Eurofins TestAmerica-Denver Report #280-147596-1

Samples: MW-19A and TB2.

Sample Date: 04/15/2021
Laboratory Sample Received Date: 04/17/2021
Sample Temperatures on arrival at lab: 1.6 and 2.1ºC
Laboratory Data Received Date: 05/07/2021
QA/QC Review Date: 05/19/2021 (TMA)

Cation/Anion Balance: MW-19A = -3.4%.

VOCs

Surrogates	All sample surrogate recoveries are within control limits.
Method Blanks	All analytes are non-detect, and all surrogate recoveries within control limits.
LCS	All LCS recoveries are within control limits. All surrogate recoveries are within control limits.
LCSD	All RPDs are within control limits.
MS/MSD	Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) for Method 8260; however, LCS/LCSD pairs were analyzed to demonstrate method precision and accuracy.
TICs	TICS were not identified in any of the samples.

8011

Surrogates	All sample surrogate recoveries are within control limits.
Method Blanks	All analytes are non-detect, and all surrogate recoveries within control limits.
LCS	All LCS recoveries are within control limit. All surrogate recoveries are within control limits
LCSD	All RPDs are within control limits.
MS/MSD	Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) for Method 8011; however, LCS/LCSD pairs were analyzed to demonstrate method precision and accuracy.

Dissolved Metals

Method Blanks	All analytes are non-detect except for dissolved iron (B Flags). These are noted and qualified in the case narrative.
LCS	All LCS recoveries are within control limits.
Matrix Spikes	All matrix spike recoveries are within control.
MSD	All RPDs are within control limits.

General Chemistry

Method Blanks	All analytes are non-detect.
LCS	All LCS recoveries are within control limits.
LCSD	All RPDs are within control limits.
Matrix Spikes	All matrix spike recoveries are within control limits.
MSD	All RPDs are within control limits.
Duplicates	All RPDs are within control limits.

Hold Times
All analytical hold times were met.

Reporting Limit Exceedances
All analytical reporting limits met the environmental monitoring plan required limits.

Field QA/QC
Trip Blanks
Laboratory supplied trip blanks (TB2) were carried into the field on 04/15-16/2021 with all samples are returned to the lab for Method 8260B and 8011 analyses. All analytes are non-detect, and all surrogates are within control limits.

Data Quality Reviews (DQRs)
None.

Notes
The Method 6010B Instrument Blank was above the control limits for dissolved calcium. Because the associated samples exhibited detections of dissolved calcium greater than ten times the Instrument Blank result, corrective action was deemed unnecessary.

Data Validation
Upon final review of lab report #280-147596-1 for Riverbend Landfill, SCS Engineers finds the data to be valid for its intended use ***(05/19/2021; TMA).***

SCS Engineers QA/QC Review
Groundwater - Spring 2021 Detection Groundwater Monitoring Event
Riverbend Landfill
Eurofins TestAmerica-Denver Report #280-147600-1

Samples: MW-5A, MW-5B, and TB2.

Sample Date: 04/15/2021
Laboratory Sample Received Date: 04/17/2021
Sample Temperatures on arrival at lab: 1.6 and 2.1°C
Laboratory Data Received Date: 04/29/2021
QA/QC Review Date: 05/18/2021 (TMA)

Cation/Anion Balance: not applicable.

VOCs (Method 8260B)

Surrogates	All sample surrogate recoveries are within control limits.
Method Blanks	All analytes are non-detect, and all surrogate recoveries within control limits.
LCS	All LCS recoveries are within control limits, and all surrogate recoveries are within control limits.
LCSD	All RPDs are within control limits.
Matrix Spikes	All matrix spike recoveries and surrogates are within control limits.
MSD	All RPDs are within control limits.
TICs	TICS were identified in the MW-5A sample.

Method 8011

Surrogates	All sample surrogate recoveries are within control limits.
Method Blanks	All analytes are non-detect, and all surrogate recoveries within control limits.
LCS	All LCS recoveries are within control limits, and all surrogate recoveries are within control limits.
LCSD	All RPDs are within control limits.
MS/MSD	Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) for Method 8011; however, LCS/LCSD pairs were analyzed to demonstrate method precision and accuracy. This is noted and qualified in the case narrative.

Hold Times
None.

Reporting Limit Exceedances
All analytical reporting limits met the environmental monitoring plan required limits.

Field QA/QC
Trip Blanks
Laboratory-supplied trip blanks (TB2) were carried into the field 04/15/2021 with all samples and returned to the lab for Method 8260B and 8011 analyses. All analytes are non-detect, and all surrogates are within control limits.

Data Quality Reviews (DQRs)
None.

Notes
None.

Data Validation
Upon final review of lab report #280-147600-1 for Riverbend Landfill, SCS Engineers finds the data to be valid for its intended use ***(05/18/2021; TMA).***

Spring 2021

Surface Water

QA/QC Results

SCS Engineers QA/QC Review
Surface Water – Spring 2021 South Yamhill River Surface Water Monitoring Event
Riverbend Landfill
TestAmerica-Denver Report #280-147467-1

Samples: Trip Blank, SYR SW-2, SYR MW-12A, and SYR SW-1.

Sample Date: 04/14/2020
Laboratory Sample Received Date: 04/15/2020
Sample Temperatures on arrival at lab: 1.0°C
Laboratory Data Received Date: 05/03/2021
QA/QC Review Date: 06/08/2021 (IH)

Cation/Anion Balance: SYR SW-2= -3.2%, SYR MW-12A = -1.9%, SYR SW-1= 0.16%.

VOCs

Surrogates	All sample surrogate recoveries are within control limits.
Method Blanks	All analytes non-detect.
LCS	All LCS recoveries are within control limits, and all surrogate recoveries are within control limits.
LCSD	All RPDs are within control limits.
MS/MSD	Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) for Method 8260B, however, an LCS/LCSD pair was analyzed to demonstrate method precision and accuracy.
TICs	TICS were not identified in any samples.

Total Metals

Method Blanks	All analytes are non-detect.
LCS	All LCS recoveries are within control limits.
Matrix Spikes	All matrix spike recoveries are within control limits.
MSD	All RPDs are within control limits.

General Chemistry

Method Blanks	All analytes are non-detect except for BOD in batch 532745 (s flag). This is noted and qualified for in the case narrative.
LCS	All LCS recoveries are within control limits except for BOD in batch 532745 (*- flag). This is noted and qualified for in the case narrative.
LCSD	All RPDs are within control limits.
Matrix Spikes	All matrix spike recoveries are within control limits except for chloride in batch 578589 (F1 flag) and total organic halogens in batch 534414 (F1 flag). These are noted and qualified in the case narrative.
MSD	All RPDs are within control limits except for chloride in batch 578589 (F2 flag). This is noted and qualified in the case narrative.
Duplicates	All RPDs are within control limits except for BOD in batch 523745 (b *- flag). This is noted and qualified for in the case narrative

Hold Times
All analytical hold times were met except for laboratory pH (HF Flags). It should be noted that laboratory pH is only performed as a QC check on the field pH.

Reporting Limit Exceedances
All analytical reporting limits met the environmental monitoring plan required limits.

Field QA/QC

Trip Blanks

Laboratory supplied trip blanks (Trip Blank) were carried into the field 04/14/2021 with all samples and returned to the lab for Method 8260B analysis. All analytes are non-detect, and all surrogates are within control limits.

Data Quality Reviews (DQRs)

None.

Notes

The Biochemical Oxygen Demand (BOD) Method 5210B glucose-glutamic acid standard (LCS) recovered slightly below the lower control limit specified in the method at 60% (control limits 85%-115%). Because the 48-hour holding time expired, reanalysis was not performed.

The seeded control blank (method blank) for BOD Method 5210B depleted more than the method-specified limit, 0.2mgO2/L. The laboratory control sample (LCS) recovery was in control. Because the holding time expired, reanalysis was not performed.

E. coli and fecal coliform analysis were performed by Alexin Analytical in Tigard, Oregon and the results are included in this lab report.

Data Validation

Upon final review of lab report #280-147467-1 for Riverbend Landfill, SCS Engineers finds the data to be valid for its intended use ***(06/08/2021; IH).***

Spring 2021

Leachate Management System Liquids

QA/QC Results

SCS Engineers QA/QC Review
Leachate – Spring 2021 Leachate Management System Sumps Monitoring Event
Riverbend Landfill
TestAmerica-Denver Report #280-147602-1

Samples: 1/5P, 4/5S, 6/7P, 6/7S, 8P, 8S, 9P, 9S, and TB3.

Sample Date: 04/15/2021
Laboratory Sample Received Date: 04/17/2021
Sample Temperatures on Arrival at Lab: 0.7°C
Preliminary Laboratory Data Received Date: 05/14/2021
QA/QC Review Date: 06/08/2021 (IH)

Cation/Anion Balance: 1/5P = 4.3%, 4/5S = -1.5%, 6/7P = 17%, 6/7S = 1.4%, 8P = 8.6%, 8S = 0.69%, 9P = 6.7%, and 9S = -1.4%.

VOCs

Surrogates	All sample surrogate recoveries are within control limits.
Method Blanks	All analytes are non-detect, and all surrogate recoveries within control limits.
LCS	All LCS recoveries are within control limits. All surrogate recoveries are within control limits.
LCSD	All RPDs are within control limits.
MS/MSD	Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) for Method 8260B; however, LCS/LCSD pair analysis demonstrated method precision and accuracy. This is noted and qualified in the case narrative.
TICs	TICS were identified in all samples except for 8S.

Dissolved Metals

Method Blanks	All analytes are non-detect.
LCS	All LCS recoveries are within control limits.
Matrix Spikes	All matrix spike recoveries are within control limits.
MSD	All RPDs are within control limits.

Total Metals

Method Blanks	All analytes are non-detect.
LCS	All LCS recoveries are within control limits.
Matrix Spikes	All matrix spike recoveries are within control limits except for total silicon in batch 534189 (4 flag), total thallium and total vanadium in batch 534866, and total beryllium in batch 534277 (F1 flag). This is noted and qualified in the case narrative.
MSD	All RPDs are within control limits except for total arsenic and total barium in batch 534866 (4 flags) and total beryllium in batch 534277 (F2 flag). These are noted and qualified for in the case narrative.

General Chemistry

Method Blanks	All analytes are non-detect.
LCS	All LCS recoveries are within control limits.
LCSD	All RPDs are within control limits.
Matrix Spikes	All matrix spike recoveries are within control limits except for ammonia in batches 534766 (F1 flags), and chemical oxygen demand (COD) in batches 534683 (F1 flags). These are noted and qualified in the case narrative.
MSD	All RPDs are within control limits.
Duplicates	All RPDs are within control limits.

Hold Times
All analytical hold times were met except for laboratory pH for all samples. It should be noted that laboratory pH is only performed as a QC check on the field pH.

Reporting Limit Exceedances
Several reporting limits were elevated due to dilution performed during analysis because of matrix interference and/or the presence of high concentrations of non-target analytes.

Field QA/QC
Trip Blanks
Laboratory supplied trip blanks (TB3) were carried into the field 04/15/2021 with all samples and returned to the lab for Method 8260B analyses. All analytes are non-detect, and all surrogates are within control limits.

Data Quality Reviews (DQRs)
None.

Notes
Dissolved calcium in batch 534364 was within control limits but was flagged with an "^2". This was not noted and qualified for in the case narrative.

Chloride was within control limits in batch 535742 but had an "E" flag. This was not noted and qualified for in the case narrative.

The samples 1/5P, 6/7P, 8P and 9P were analyzed at a dilution for Method 8260B due to a high concentration of target compounds and/or foamy matrix. As a result, the reporting limits were elevated.

The prepreserved hydrochloric acid preserved vials for Method 8260B analysis for the samples 1/5P, 6/7P, 8P and 9P exhibited pH values greater than 2. This is non-compliant with Method 8260B which requires samples to be preserved with hydrochloric acid to a pH of less than 2.

The original total dissolved solid results for the sample 1/5P was over the calibration range and was flagged with an "E". Reanalysis was performed outside of the 7-day holding time with a similar result, and therefore the TDS result from the original analysis performed within the holding time was reported in this submission.

Data Validation
Upon final review of lab report #280-147602-1 for Riverbend Landfill, SCS Engineers finds the data to be valid for its intended use ***(06/08/2021; IH).***

SCS Engineers QA/QC Review
Leachate – Spring 2021 Leachate Lagoon Monitoring Event
Riverbend Landfill
TestAmerica-Denver Report #280-147589-1

Samples: Trip Blank, LEACH-POND, LPOND LDS, FB3 (LPOND LDS).

Sample Date: 04/15/2021
Laboratory Sample Received Date: 04/17/2021
Sample Temperatures on Arrival at Lab: 1.0°C
Preliminary Laboratory Data Received Date: 05/14/2021
QA/QC Review Date: 06/08/2021 (IH)

Cation/Anion Balance: LEACH-POND = 5.1%, LPOND LDS = 13%, FB3 (LPOND LDS) = NC.

VOCs

Surrogates	All sample surrogate recoveries are within control limits.
Method Blanks	All analytes are non-detect.
LCS	All LCS recoveries are within control limits, and all surrogate recoveries are within control limits.
LCSD	All RPDs were within control limits.
MS/MSD	Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) for Method 8260B; however, an LCS/LCSD pair was analyzed to demonstrate method precision and accuracy.
TICs	TICS were not identified in any samples.

Dissolved Metals

Method Blanks	All analytes are non-detect.
LCS	All LCS recoveries are within control limits.
Matrix Spikes	All matrix spike recoveries are within control limits.
MSD	All RPDs are within control limits.

Total Metals

Method Blanks	All analytes are non-detect.
LCS	All LCS recoveries are within control limits.
LCSD	All RPDs were within control limits.
Matrix Spikes	All matrix spike recoveries are within control limits except for total molybdenum in batch 533867 and total silicon in batch 534122 (4 flags) and total molybdenum, total boron, and total silicon in batch 534780 (F1 flags and 4 flag, respectively). These are noted and qualified for in the case narrative.
MSD	All RPDs are within control limits.

General Chemistry

Method Blanks	All analytes are non-detect except for total alkalinity and bicarbonate alkalinity in batch 533680 (B flag). This is noted and qualified for in the case narrative.
LCS	All LCS recoveries are within control limits.
LCSD	All RPDs are within control limits.
Matrix Spikes	All matrix spike recoveries are within control limits except for ammonia in batch 534560 and batch 534766 (F1 flag), TKN in batch 534901 and batch 534388 (F1 flag), and nitrate/nitrite in batch 534909 (F1 flag). These are noted and qualified in the case narrative.
MSD	All RPDs are within control limits except for ammonia in batch 534560 (F2 flag) and nitrate/nitrite in batch 534909 (F2 flag). These are noted and qualified for in the case narrative,

Duplicates	All RPDs are within control limits except for pH in batch 533238 (F3 flag). This is noted and qualified for in the case narrative.

Hold Times

All analytical hold times were met except for laboratory pH. It should be noted that laboratory pH is only performed as a QC check on the field pH.

Reporting Limit Exceedances

Several reporting limits were elevated due to dilution performed during analysis because of matrix interference and/or the presence of high concentrations of non-target analytes.

Field QA/QC

Trip Blanks

Laboratory supplied trip blanks were carried into the field 04/15/2021 with all samples and returned to the lab for Method 8260B analyses. All analytes were reported as non-detect.

Field Blank

A field blank was collected on 04/15/2021 near LPOND LDS using laboratory supplied DI water. All analytes were non-detect except for silicon, specific conductance, and TDS.

Data Quality Reviews (DQRs)

None.

Notes

The samples LEACH-POND and LPOND LDS were analyzed at dilutions for Method 8260B due to foamy matrix. As a result, the reporting limits were elevated.

The prepreserved hydrochloric acid preserved vials for Method 8260B analysis for the samples LEACH-POND and LPOND LDS exhibited pH values greater than 2. This is non-compliant with Method 8260B which requires samples to be preserved with hydrochloric acid to a pH of less than 2. Because these samples were leachate samples, a buffering effect was suspected.

The Method 6010B Instrument Blank was above the control limits for dissolved calcium. Because the associated samples exhibited detections of dissolved calcium greater than ten times the Instrument Blank result, corrective action was deemed unnecessary.

Data Validation

Upon final review of lab report #280-147589-1 for Riverbend Landfill, SCS Engineers finds the data to be valid for its intended use ***(06/08/2021; IH)****.*

Fall 2021

Compliance Groundwater

QA/QC Results

SCS Engineers QA/QC Review
Groundwater - Fall 2021 Compliance Groundwater Monitoring Event
Riverbend Landfill
Eurofins TA-Denver Report #280-156013-1

Samples: MW-12A, MW-12B, and TB3.

Sample Date: 11/19/2021
Laboratory Sample Received Date: 11/22/2021
Sample Temperatures on arrival at lab: 1.2 and 2.8 °C
Preliminary Laboratory Data Received Date: 12/16/2021
QA/QC Review Date: 12/17/2021 (IH)

Cation/Anion Balance: MW-12A = -6.1%, and MW-12B = -5.8%.

VOCs

Surrogates	All sample surrogate recoveries are within control limits.
Method Blanks	All analytes are non-detect.
LCS	All LCS recoveries are within control limits, and all surrogate recoveries are within control limits.
LCSD	All RPDs are within control limits.
MS/MSD	MS/MSD were not performed for Method 8260B due to insufficient sample volume. Method precision and accuracy have been verified by acceptable LCS/LCSD data. This is noted and qualified in the case narrative.
TICs	TICS were not identified in any samples.

8011

Surrogates	All sample surrogate recoveries are within control limits.
Method Blanks	All analytes are non-detect.
LCS	All LCS recoveries are within control limits, and all surrogate recoveries are within control limits.
LCSD	All RPDs are within control limits.
MS/MSD	Insufficient volume was available to perform a matrix spike/ matrix spike duplicate. Method precision and accuracy was verified by acceptable LCS/LCSD data. This is noted and qualified for in the case narrative.

Dissolved Metals

Method Blanks	All analytes are non-detect.
LCS	All LCS recoveries are within control limits.
Matrix Spikes	All matrix spike recoveries are within control limits.
MSD	All RPDs are within control limits.

General Chemistry

Method Blanks	All analytes are non-detect.
LCS	All LCS recoveries are within control limits.
LCSD	All RPDs are within control limits.
Matrix Spikes	All spike recoveries are within control limits except for nitrate/nitrite in batch 559452 (F1 flag). This is noted and qualified for in the case narrative.
MSD	All RPDs are within control limits.
Duplicates	All RPDs are within control limits except for TDS in batch 558626 (F3 flag). This is noted and qualified for in the case narrative.

Hold Times

All hold times were met.

Reporting Limit Exceedances
All analytical reporting limits met the environmental monitoring plan required limits.

Field QA/QC
Trip Blanks
Laboratory supplies trip blanks (TB3) were carried into the field 11/19/2021 with all samples and returned to the lab for Method 8260B and 8011 analyses. All analytes are non-detect, and all surrogates are within control limits.

Data Quality Reviews (DQRs)
A DQR was initiated on 12/20/2021 for the cation/anion balance on MW-12A. This value was corrected by the lab prior to issuing the final report. The lab was requested to check the cation/anion balance for MW-12B on April 26, 2022. The value was corrected by the lab and a revised report was issued on April 28, 2022. (BEL, 4/28/22)

Notes
None.

Data Validation
Upon review of the preliminary data presented in lab report #280-16013-1 for Riverbend Landfill, SCS Engineers finds the data to be valid for its intended use ***(12/17/2021; IH).***

SCS Engineers QA/QC Review
Groundwater - Fall 2021 Compliance Groundwater Monitoring Event
Riverbend Landfill
Eurofins TA-Denver Report #280-155957-1

Samples: MW-14A, MW-14B, DUP3 (MW-14B), MW-15A, MW-15B, FB2 (MW-15B), MW-16A, MW-16B, DUP2 (MW-16B), MW-21A, FB3 (MW-21A), MW-21B, and TB1.

Sample Date: 11/16-18/2021
Laboratory Sample Received Date: 11/19/2021
Sample Temperatures on arrival at lab: 0.6, 1.0, 1.4, and 1.9 °C
Preliminary Laboratory Data Received Date: 12/10/2021
QA/QC Review Date: 12/17/2021 (IH)

Cation/Anion Balance: MW-14A = -1.8%, MW-14B = 2.6%, DUP3 (MW-14B) = 2.6%, MW-15A = -8.9%, MW-15B = -4.2%, FB2 (MW-15B) = NC, MW-16A = -3.9, MW-16B = -0.70%, DUP2 (MW-16B) = -3.1%, MW-21A = -3.7, FB3 (MW-21A) = NC, MW-21B = -0.98%, and TB1.

VOCs

Surrogates	All sample surrogate recoveries are within control limits.
Method Blanks	All analytes are non-detect.
LCS	All LCS recoveries are within control limits, and all surrogate recoveries are within control limits.
LCSD	All RPDs are within control limits.
MS/MSD	MS/MSD were not performed for Method 8260B due to insufficient sample volume. Method precision and accuracy have been verified by acceptable LCS/LCSD data. This is noted and qualified in the case narrative.
MS	All spike recoveries were within control limits except for tetrachloroethene and chloroethane, performed on a sample from another client, in batch 558921 (F1 flags). These are noted and qualified for in the case narrative.
MSD	All RPDs were within control limits.
TICs	TICS were not identified in any samples.

8011

Surrogates	All sample surrogate recoveries are within control limits.
Method Blanks	All analytes are non-detect.
LCS	All LCS recoveries are within control limits, and all surrogate recoveries are within control limits.
LCSD	All RPDs are within control limits.
MS/MSD	Insufficient volume was available to perform a matrix spike/ matrix spike duplicate. Method precision and accuracy was verified by acceptable LCS/LCSD data. This is noted and qualified for in the case narrative.

Dissolved Metals

Method Blanks	All analytes are non-detect.
LCS	All LCS recoveries are within control limits.
Matrix Spikes	All matrix spike recoveries are within control limits.
MSD	All RPDs are within control limits.

General Chemistry

Method Blanks	All analytes are non-detect.
LCS	All LCS recoveries are within control limits.
LCSD	All RPDs are within control limits.
Matrix Spikes	All spike recoveries are within control limits.
MSD	All RPDs are within control limits.
Duplicates	All RPDs are within control limits.

Hold Times
All hold times were met except for reanalysis of TDS due to anomalous concentrations in the samples MW-15A, MW-15B, and FB3. The reanalysis results reflected historical TDS results for these samples, and therefore the reanalysis results are reported in laboratory report number 280-155957-1. The original anomalous result for TDS for MW-15A was 170mg/L. The original anomalous result for TDS for MW-15B was 190mg/L. The original anomalous result for TDS for FB3 was 14mg/L. These are noted and qualified for in the case narrative and flagged with an 'H" flag.

Reporting Limit Exceedances
All analytical reporting limits met the environmental monitoring plan required limits.

Field QA/QC
Trip Blanks
Laboratory supplies trip blanks were carried into the field 11/16-18/2021 with all samples and returned to the lab for Method 8260B and 8011 analyses. All analytes are non-detect, and all surrogates are within control limits.

Field Blanks
A field blank (FB2) was collected on 11/17/2021 near MW-15B. All analytes were reported as non-detect.

A field blank (FB3) was collected on 11/18/2020 near MW-21A. All analytes were reported as non-detect.

Field Duplicates

A field duplicate (DUP2) was collected on 11/17/2020 at MW-16B. All RPDs were within 20%.

A field duplicate (DUP3) was collected on 11/18/2020 at MW-14B. All RPDs were within 20%.

Data Quality Reviews (DQRs)
None.

Notes
None.

Data Validation
Upon review of the preliminary data [resented in lab report #280-155957-1 for Riverbend Landfill, SCS Engineers finds the data to be valid for its intended use ***(12/17/2021; IH).***

Fall 2021

Detection Groundwater

QA/QC Results

SCS Engineers QA/QC Review
Groundwater - Fall 2021 Detection Groundwater Monitoring Event
Riverbend Landfill
Eurofins TA-Denver Report #280-155958-1

Samples: TB1, MW-22A, FB1 (MW-22A), and DUP1 (MW-22A).

Sample Date: 11/16/2021
Laboratory Sample Received Date: 11/19/2021
Sample Temperatures on arrival at lab: 0.6, 1.0, 1.4 and 1.9ºC
Preliminary Laboratory Data Received Date: 12/16/2021
QA/QC Review Date: 12/10/2021 (IH)

Cation/Anion Balance: MW-22A=-4.7%, FB1= NC, DUP1=-7.8%.

VOCs

Surrogates	All sample surrogate recoveries are within control limits.
Method Blanks	All analytes are non-detect, and all surrogate recoveries within control limits.
LCS	All LCS recoveries are within control limits. All surrogate recoveries are within control limits.
LCSD	All RPDs are within control limits.
MS/MSD	Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) for Method 8260B; however, LCS/LCSD pairs were analyzed to demonstrate method precision and accuracy.
TICs	TICs were identified in all samples.

8011

Surrogates	All sample surrogate recoveries are within control limits.
Method Blanks	All analytes are non-detect, and all surrogate recoveries within control limits.
LCS	All LCS recoveries are within control limit. All surrogate recoveries are within control limits
LCSD	All RPDs are within control limits.
MS/MSD	Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) for Method 8011; however, LCS/LCSD pairs were analyzed to demonstrate method precision and accuracy.

Dissolved Metals

Method Blanks	All analytes are non-detect.
LCS	All LCS recoveries are within control limits.
Matrix Spikes	All matrix spike recoveries are within control limits.
MSD	All RPDs are within control limits.

General Chemistry

Method Blanks	All analytes are non-detect.
LCS	All LCS recoveries are within control limits.
LCSD	All RPDs are within control limits.
Matrix Spikes	All matrix spike recoveries are within control limits except for nitrate/nitrite in batches 559192 and 559452 (F1 flag). These are noted and qualified for in the case narrative.
MSD	All spike recoveries and RPDs are within control limits.

Hold Times
All analytical hold times were met.

Reporting Limit Exceedances
All analytical reporting limits met the environmental monitoring plan required limits.

Field QA/QC
Trip Blanks
Laboratory supplied trip blanks (TB1) were carried into the field on 11/16/2021 with all samples are returned to the lab for Method 8260B and 8011 analyses. All analytes are non-detect, and all surrogates are within control limits.

Field Duplicate
A field duplicate (DUP1) was collected at MW-22A. All RPDs were within 20%.

Field Blank
A field blank (FB1) was collected near MW-22A using laboratory supplied DI water. All analytes were reported as non-detect.

Data Quality Reviews (DQRs)
None.

Notes
None.

Data Validation
Upon review of preliminary data presented in lab report #280-155958-1 for Riverbend Landfill, SCS Engineers finds the data to be valid for its intended use ***(12/17/2021; IH).***

SCS Engineers QA/QC Review
Groundwater - Fall 2021 Detection Groundwater Monitoring Event
Riverbend Landfill
Eurofins TA-Denver Report #280-155958-1

Samples: TB1 and MW-20A

Sample Date: 11/16/2021
Laboratory Sample Received Date: 11/19/2021
Sample Temperatures on arrival at lab: 0.6, 1.0, 1.4 and 1.9ºC
Preliminary Laboratory Data Received Date: 12/16/2021
QA/QC Review Date: 12/10/2021 (IH)

Cation/Anion Balance: MW-20A=-6.2%

VOCs

Surrogates	All sample surrogate recoveries are within control limits.
Method Blanks	All analytes are non-detect, and all surrogate recoveries within control limits.
LCS	All LCS recoveries are within control limits. All surrogate recoveries are within control limits.
LCSD	All RPDs are within control limits.
MS/MSD	Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) for Method 8260B; however, LCS/LCSD pairs were analyzed to demonstrate method precision and accuracy.
TICs	TICs were not identified in any samples.

8011

Surrogates	All sample surrogate recoveries are within control limits.
Method Blanks	All analytes are non-detect, and all surrogate recoveries within control limits.
LCS	All LCS recoveries are within control limit. All surrogate recoveries are within control limits
LCSD	All RPDs are within control limits.
MS/MSD	Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) for Method 8011; however, LCS/LCSD pairs were analyzed to demonstrate method precision and accuracy.

Dissolved Metals

Method Blanks	All analytes are non-detect.
LCS	All LCS recoveries are within control limits.
Matrix Spikes	All matrix spike recoveries are within control limits.
MSD	All RPDs are within control limits.

General Chemistry

Method Blanks	All analytes are non-detect.
LCS	All LCS recoveries are within control limits.
LCSD	All RPDs are within control limits.
Matrix Spikes	All matrix spike recoveries are within control limits.
MSD	All spike recoveries and RPDs are within control limits.

Hold Times
All analytical hold times were met except for bicarbonate alkalinity due to an instrument failure. This is noted in the case narrative and flagged with an "H" flag.

Reporting Limit Exceedances
All analytical reporting limits met the environmental monitoring plan required limits.

Field QA/QC

Trip Blanks

Laboratory supplied trip blanks (TB1) were carried into the field on 11/16/2021 with all samples are returned to the lab for Method 8260B and 8011 analyses. All analytes are non-detect, and all surrogates are within control limits.

Data Quality Reviews (DQRs)

None.

Notes

None.

Data Validation

Upon review of preliminary data presented in lab report #280-155967-1 for Riverbend Landfill, SCS Engineers finds the data to be valid for its intended use ***(12/17/2021; IH).***

SCS Engineers QA/QC Review
Groundwater - Fall 2021 Downgradient Detection Groundwater Monitoring Event
Riverbend Landfill
Eurofins TestAmerica-Denver Report #280-155968-1

Samples: TB1 and MW-5A
Sample Date: 11/16-17/2021
Laboratory Sample Received Date: 11/19/2021
Sample Temperatures on arrival at lab: 0.6, 1.0, 1.4, and 1.9ºC
Preliminary Laboratory Data Received Date: 12/6/2021
QA/QC Review Date: 12/17/2021 (IH)

VOCs

Surrogates	All sample surrogate recoveries are within control limits.
Method Blanks	All analytes are non-detect, and all surrogate recoveries within control limits.
LCS	All LCS recoveries are within control limits. All surrogate recoveries are within control limits.
LCSD	All RPDs are within control limits.
MS/MSD	Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) for Method 8260B; however, LCS/LCSD pairs were analyzed to demonstrate method precision and accuracy.
MS	All % recoveries were within control limits except for cis-1,2-dichloroethene, performed on a sample from another client, in batch 558920 (F1 flag). This is noted and qualified for in the case narrative.
MSD	All RPDs were within control limits.
TICs	TICs were not identified in any samples.

8011

Surrogates	All sample surrogate recoveries are within control limits.
Method Blanks	All analytes are non-detect, and all surrogate recoveries within control limits.
LCS	All LCS recoveries are within control limit. All surrogate recoveries are within control limits
LCSD	All RPDs are within control limits.
MS/MSD	Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) for Method 8011; however, LCS/LCSD pairs were analyzed to demonstrate method precision and accuracy.

Hold Times
All analytical hold times were met.

Reporting Limit Exceedances
All analytical reporting limits met the environmental monitoring plan required limits.

Field QA/QC
Trip Blanks
Laboratory supplied trip blanks (TB1) were carried into the field on 11/16/2021 with all samples and returned to the lab for Method 8260B and 8011 analyses. All analytes are non-detect.

Data Quality Reviews (DQRs)
None.

Notes
None.

Data Validation
Upon review of the preliminary data presented in lab report #280-155968-1 for Riverbend Landfill, SCS Engineers finds the data to be valid for its intended use ***(12/17/2021; IH).***

SCS Engineers QA/QC Review
Groundwater - Fall 2021 Detection Groundwater Monitoring Event
Riverbend Landfill
Eurofins TestAmerica-Denver Report #280-156011-1

Samples: TB3, MW-19A, FB4 (MW-19A), and DUP4 (MW-19A).

Sample Date: 11/19/2020
Laboratory Sample Received Date: 11/22/2021
Sample Temperatures on arrival at lab: 1.2 and 2.8ºC
Preliminary Laboratory Data Received Date: 12/16/2021
QA/QC Review Date: 12/17/2021 (IH)

Cation/Anion Balance: MW-19A=-4.9%, FB4= NC, DUP4=-19%.

VOCs

Surrogates	All sample surrogate recoveries are within control limits.
Method Blanks	All analytes are non-detect, and all surrogate recoveries within control limits.
LCS	All LCS recoveries are within control limits. All surrogate recoveries are within control limits.
LCSD	All RPDs are within control limits.
MS/MSD	Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) for Method 8260B; however, LCS/LCSD pairs were analyzed to demonstrate method precision and accuracy.
TICs	TICs were not identified in any samples.

8011

Surrogates	All sample surrogate recoveries are within control limits.
Method Blanks	All analytes are non-detect, and all surrogate recoveries within control limits.
LCS	All LCS recoveries are within control limit. All surrogate recoveries are within control limits
LCSD	All RPDs are within control limits.
MS/MSD	Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) for Method 8011; however, LCS/LCSD pairs were analyzed to demonstrate method precision and accuracy.

Dissolved Metals

Method Blanks	All analytes are non-detect.
LCS	All LCS recoveries are within control limits.
Matrix Spikes	All matrix spike recoveries are within control limits.
MSD	All RPDs are within control limits.

General Chemistry

Method Blanks	All analytes are non-detect.
LCS	All LCS recoveries are within control limits.
LCSD	All RPDs are within control limits.
Matrix Spikes	All matrix spike recoveries are within control limits.
MSD	All spike recoveries and RPDs are within control limits.
Duplicates	All RPDs are within control limits except for TDS in batch 558626 (F3 flag). This is noted and qualified for in the case narrative.

Hold Times
All analytical hold times were met.

Reporting Limit Exceedances
All analytical reporting limits met the environmental monitoring plan required limits.

Field QA/QC
Trip Blanks
Laboratory supplied trip blanks (TB3) were carried into the field on 11/19/2021 with all samples are returned to the lab for Method 8260B and 8011 analyses. All analytes are non-detect, and all surrogates are within control limits.

Field Duplicate
A field duplicate (DUP4) was collected at MW-19A. All RPDs were within 20% except for ammonia (35%). It should be noted that the concentrations of ammonia in samples MW-19A and DUP4 were less than five times the reporting limit. Consequently, these results are not controlled by RPDs.

Field Blank
A field blank (FB4) was collected near MW-19A using laboratory supplied DI water. All analytes were reported as non-detect except for TDS (12mg/L).

Data Quality Reviews (DQRs)
None.

Notes
None.

Data Validation
Upon review of the preliminary data presented in lab report #280-156011-1 for Riverbend Landfill, SCS Engineers finds the data to be valid for its intended use ***(12/17/2021; IH).***

Fall 2021

Leachate Pond and Leachate Pond LDS Liquids

QA/QC Results

SCS Engineers QA/QC Review
Leachate – Fall 2021 Leachate Lagoon Monitoring Event
Riverbend Landfill
Eurofins TestAmerica-Denver Report #280-155912-1

Samples: TB2, LPOND LDS, and Leach-Pond.

Sample Date: 11/18/2021
Laboratory Sample Received Date: 11/19/2021
Sample Temperatures on Arrival at Lab: 0.6°C
Preliminary Laboratory Data Received Date: 12/13/2021
QA/QC Review Date: 12/17/2021 (IH)

Cation/Anion Balance: LPond LDS = 3.3%, Leach-Pond= 4.6%

VOCs

Surrogates	All sample surrogate recoveries are within control limits.
Method Blanks	All analytes are non-detect.
LCS	All LCS recoveries are within control limits, and all surrogate recoveries are within control limits.
LCSD	All spike recoveries and RPDs are within control limits.
Matrix Spikes	All matrix spike recoveries are within control limits.
MSD	All RPDs are within control limits.
TICs	TICS were identified in all samples except for the trip blank.

Dissolved Metals

Method Blanks	All analytes are non-detect.
LCS	All LCS recoveries are within control limits.
Matrix Spikes	All matrix spike recoveries are within control limits.
MSD	All RPDs are within control limits.

Total Metals

Method Blanks	All analytes are non-detect.
LCS	All LCS recoveries are within control limits.
Matrix Spikes	All matrix spike recoveries are within control limits.
MSD	All RPDs are within control limits.

General Chemistry

Method Blanks	All analytes are non-detect.
LCS	All LCS recoveries are within control limits.
LCSD	All RPDs are within control limits.
Matrix Spikes	All matrix spike recoveries are within control limits except for chloride in batch 560175 (E and 4 flags), TKN in batch 559753 (F1 flag), and COD in batch 558861 (F1 flag). These are noted and qualified for in the case narrative.
MSD	All RPDs are within control limits.
Duplicates	All RPDs are within control limits except for TDS in batch 558626 (F3 flag). This is noted and qualified for in the case narrative.

Hold Times
All analytical hold times were met except for laboratory pH. It should be noted that laboratory pH is only performed as a QC check on the field pH.

Reporting Limit Exceedances
Several reporting limits were elevated due to dilution performed during analysis because of matrix interference and/or the presence of high concentrations of non-target analytes.

Field QA/QC

Trip Blanks

Laboratory supplied trip blanks (TB2) were carried into the field 11/18/2021 with all samples and returned to the lab for Method 8260B analyses. All analytes were reported as non-detect.

Data Quality Reviews (DQRs)

None.

Notes

The prepreserved hydrochloric acid preserved vials for Method 8260B analysis for the sample LPOND LDS exhibited a pH value greater than 2. This is non-compliant with Method 8260B which requires samples to be preserved with hydrochloric acid to a pH of less than 2. Because this sample was a leachate sample, a buffering effect was suspected.

The method 6020 Continuing Calibration Verification (CCV) sample was above the control limits for total beryllium. Because the data are considered biased high and total beryllium was not detected in the associated samples above the reporting limit, corrective action was deemed unnecessary. This is noted in the case narrative and flagged with a "^+" flag.

Data Validation

Upon review of the preliminary data presented in lab report #280-155912-1 for Riverbend Landfill, SCS Engineers finds the data to be valid for its intended use ***(12/17/2021; IH)****.*

APPENDIX E

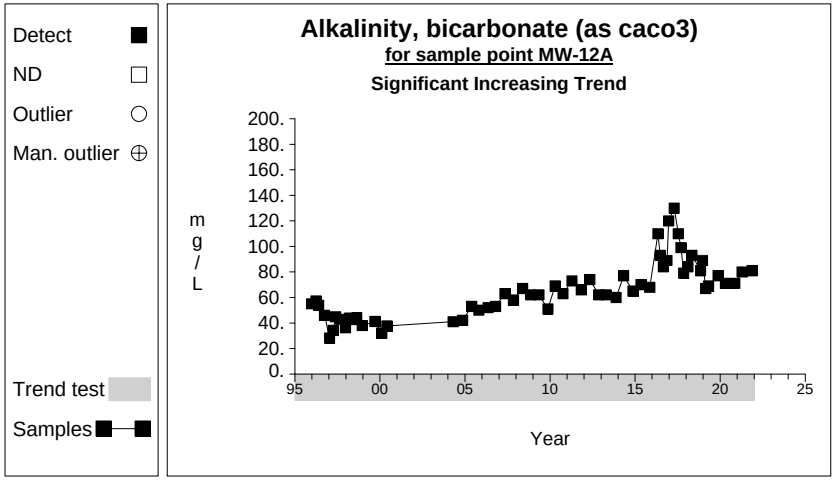
Time-Concentration Graphs of 2021 and Historical Groundwater, Surface Water, and Leachate Management System Samples Analytical Data

Compliance and Detection Wells

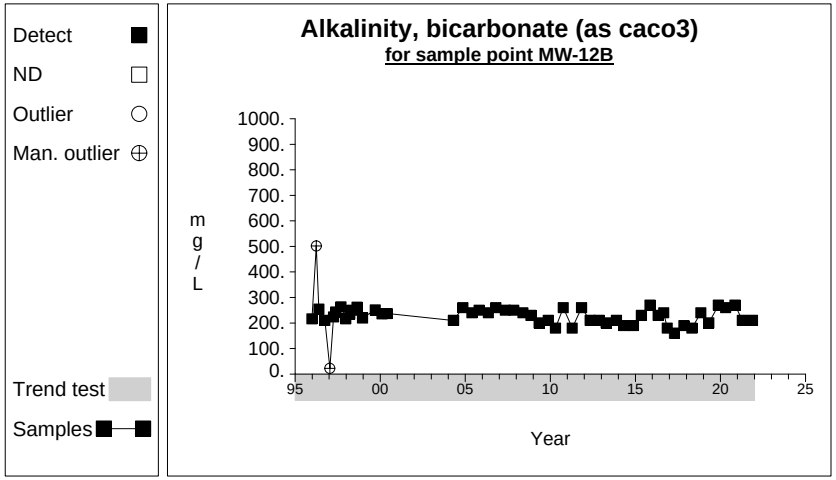
Shallow (Silt-Clay) and Deep (Sand-Gravel) Water-Bearing Zones

Trend Analysis

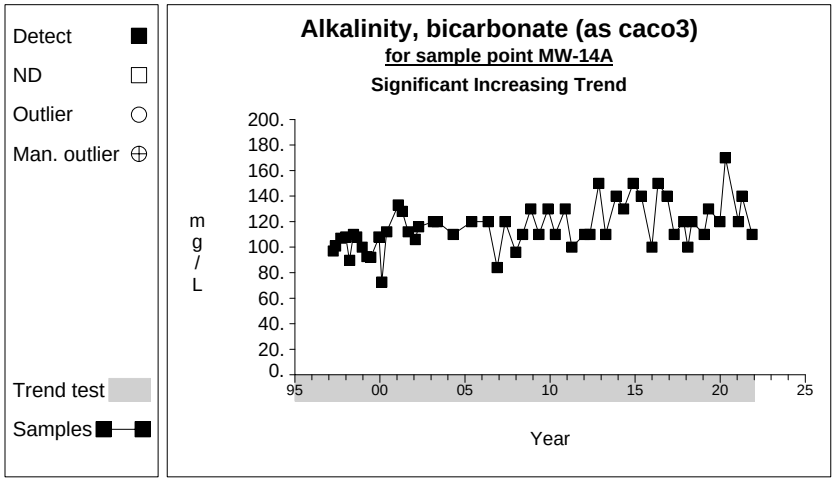
Time Series



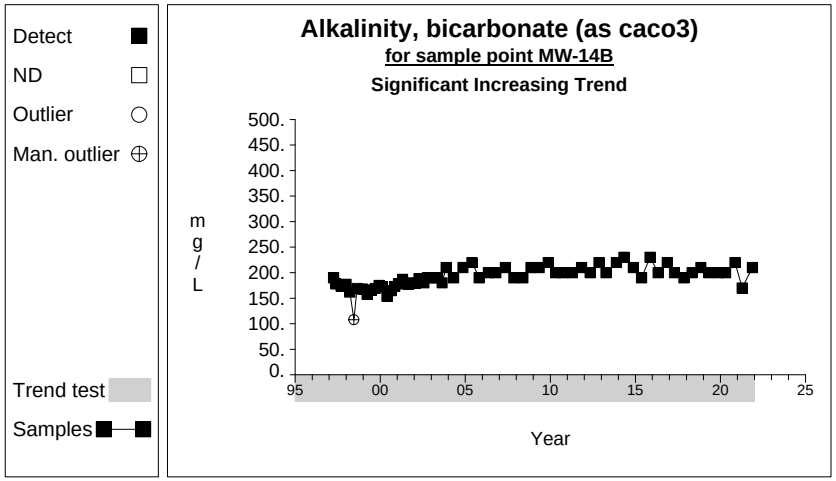
Graph 1



Graph 2

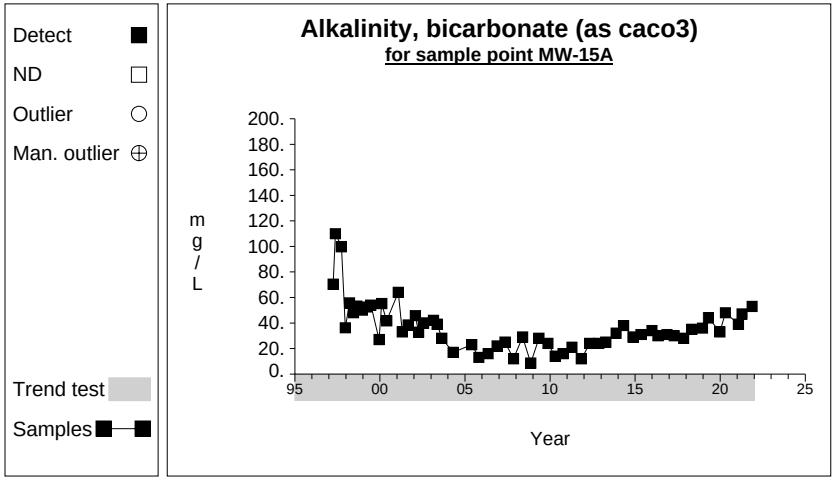


Graph 3

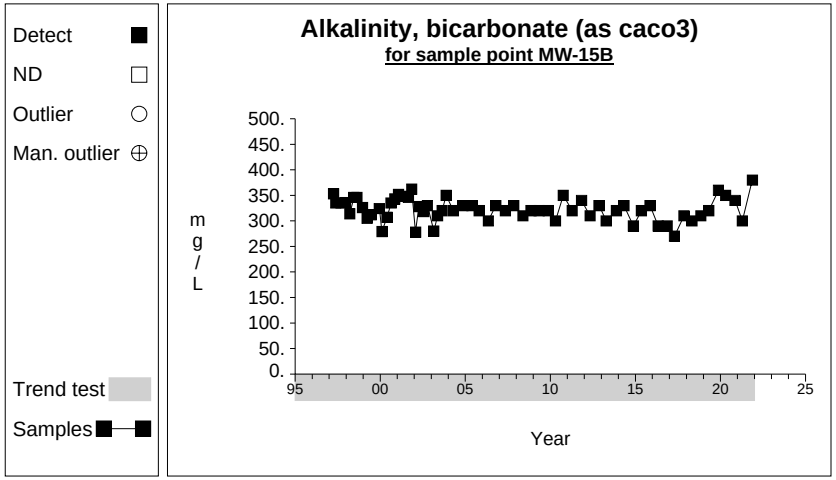


Graph 4

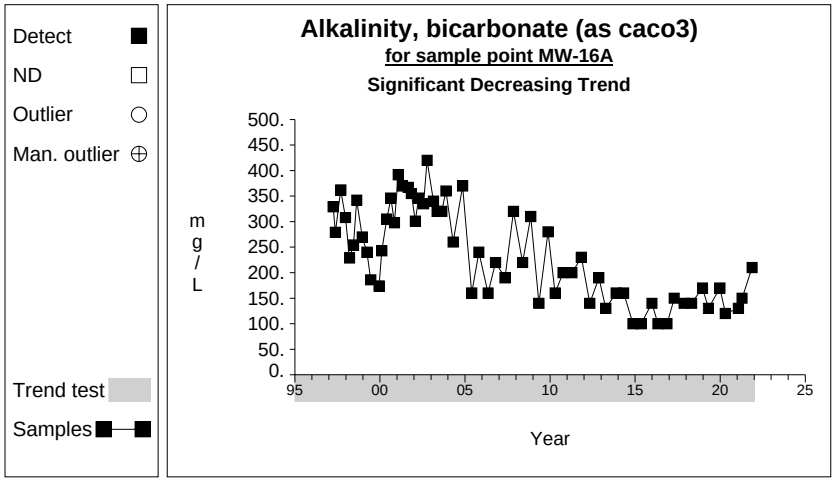
Time Series



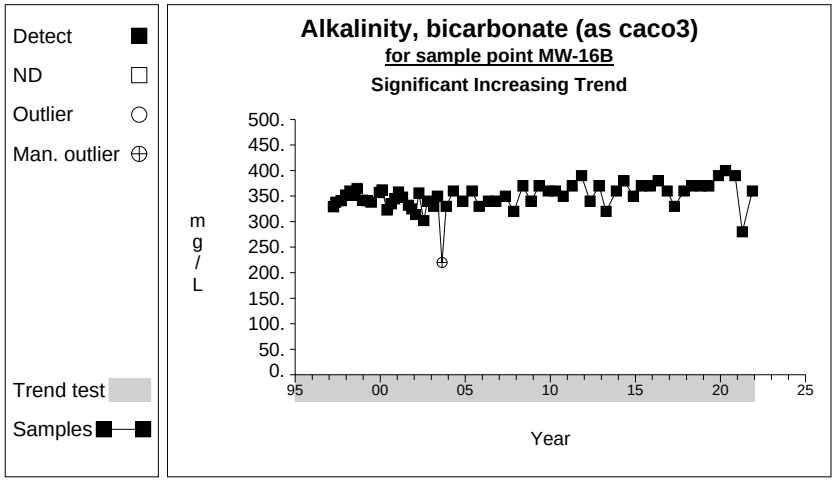
Graph 5



Graph 6

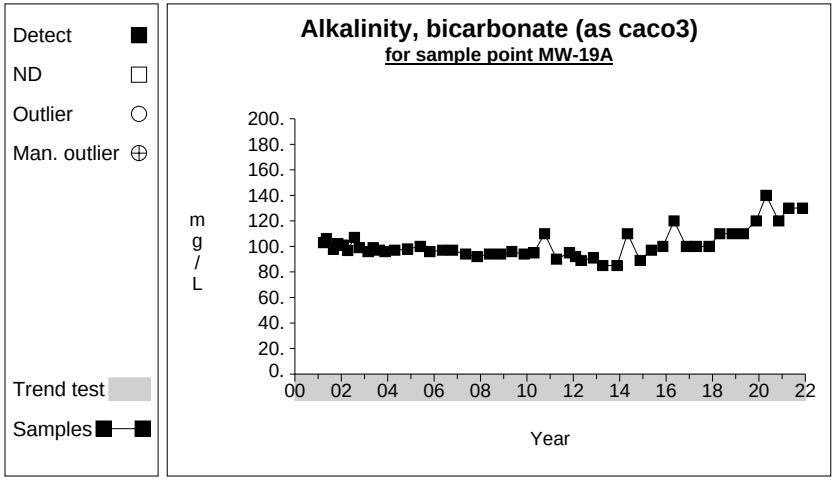


Graph 7

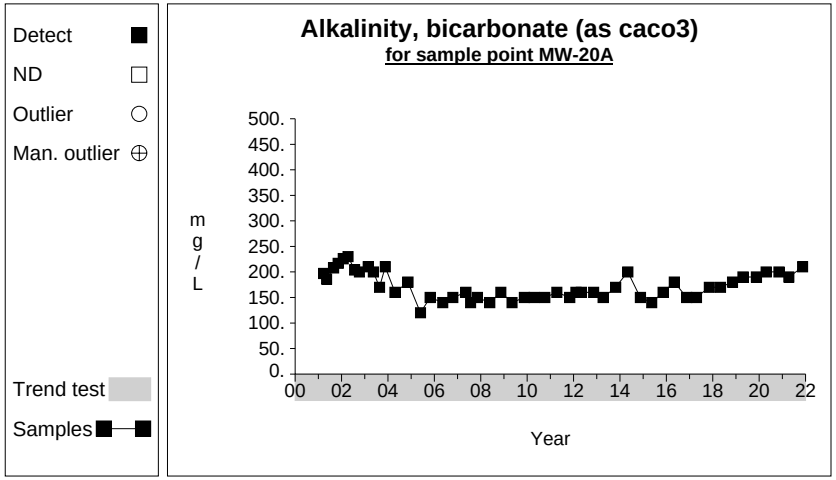


Graph 8

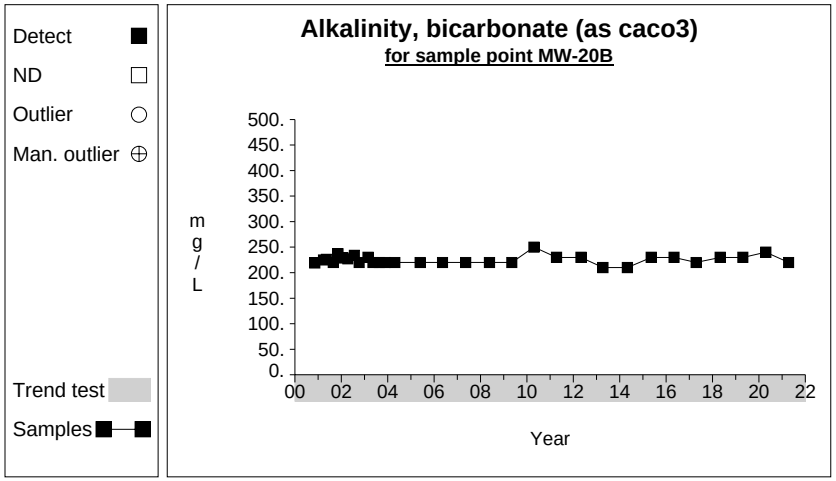
Time Series



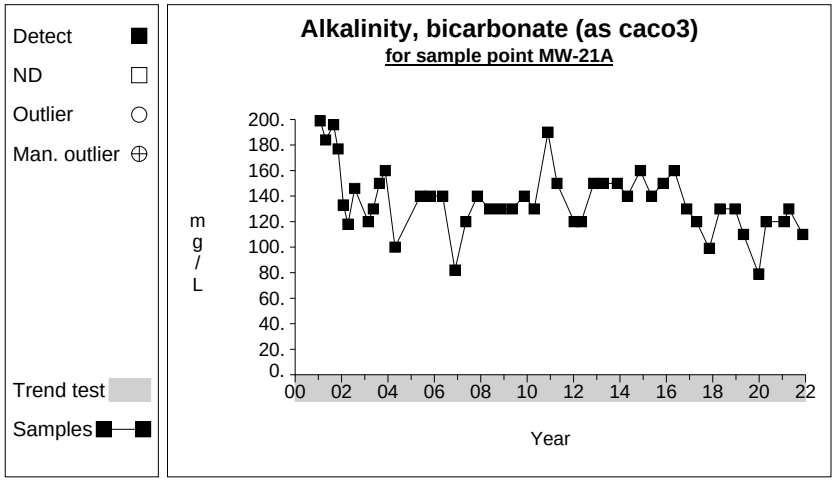
Graph 9



Graph 10

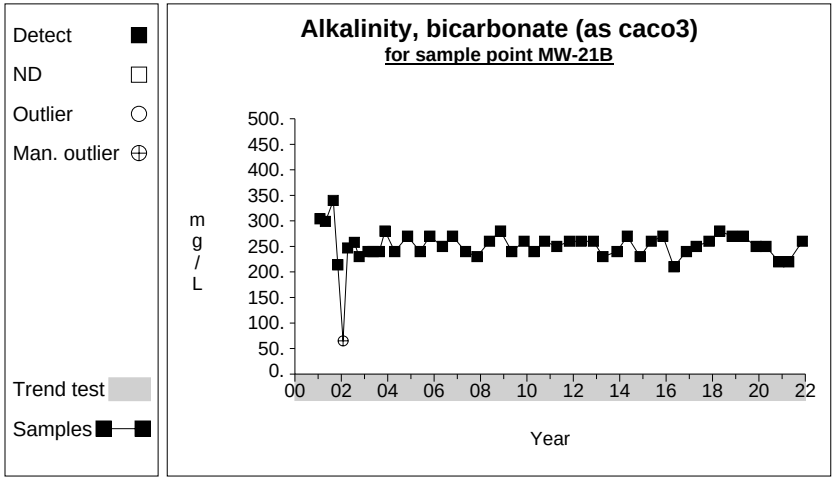


Graph 11

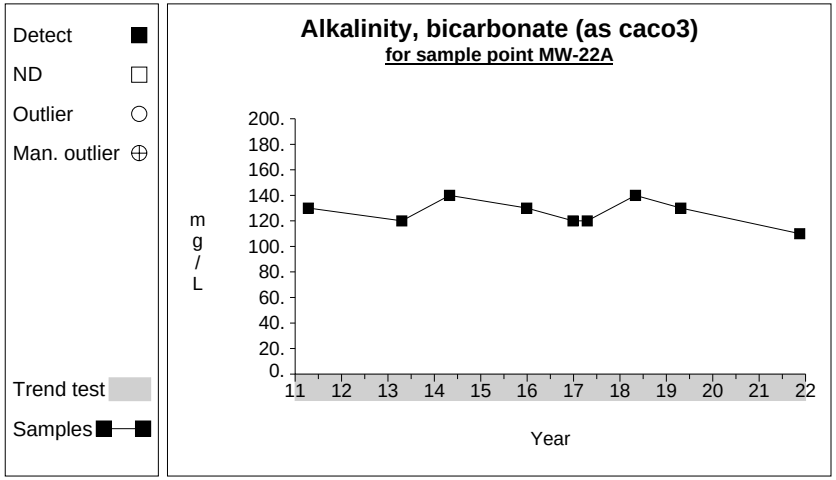


Graph 12

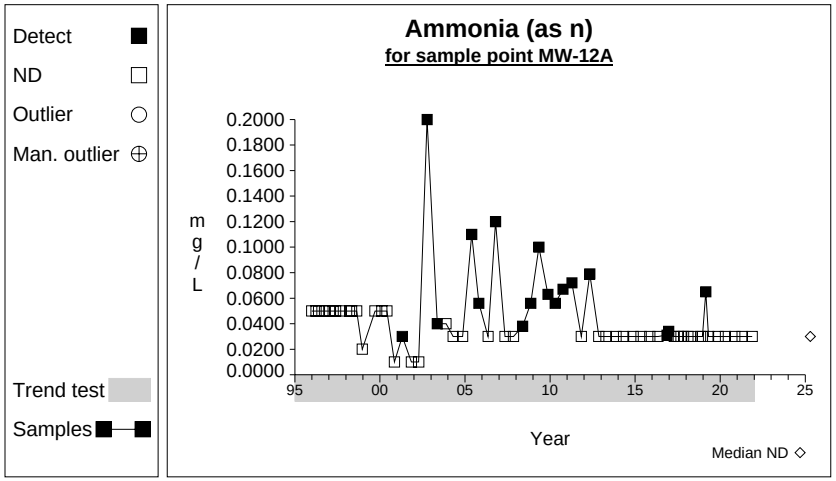
Time Series



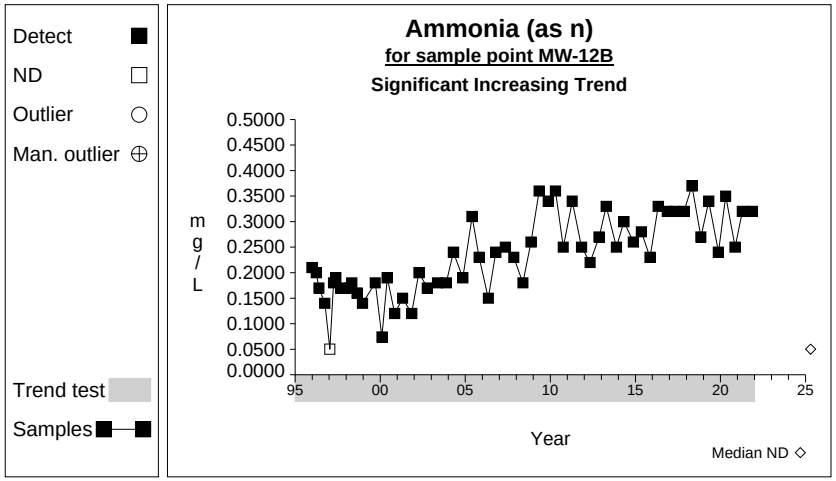
Graph 13



Graph 14

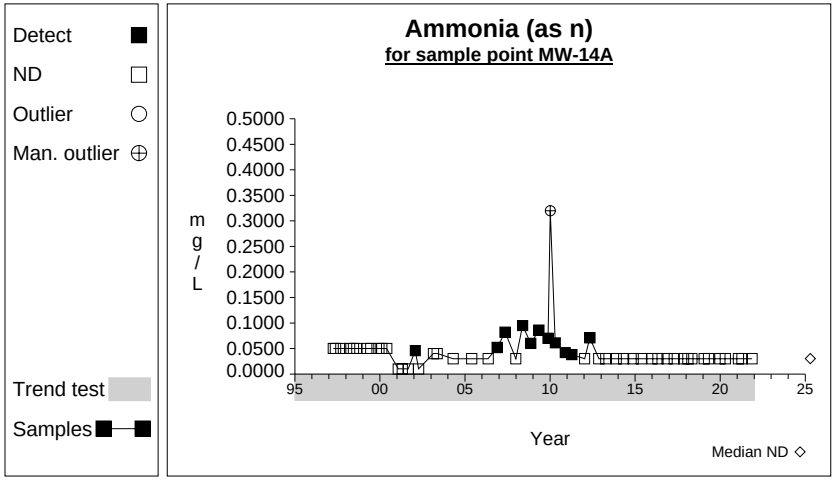


Graph 15

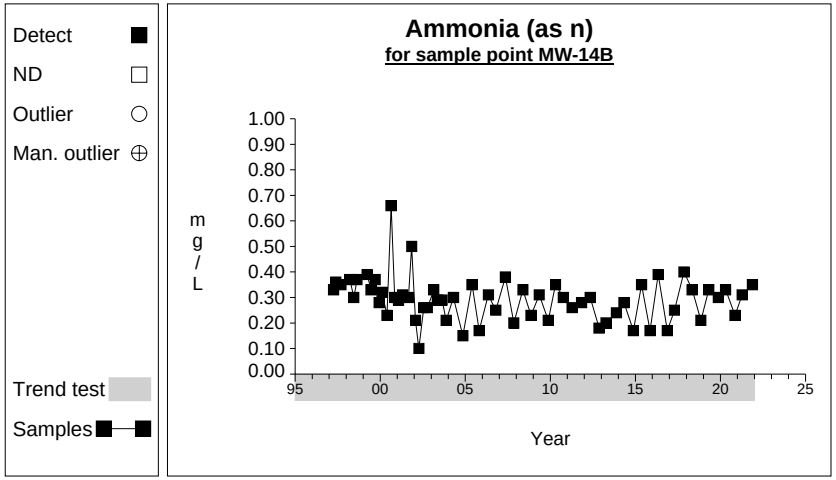


Graph 16

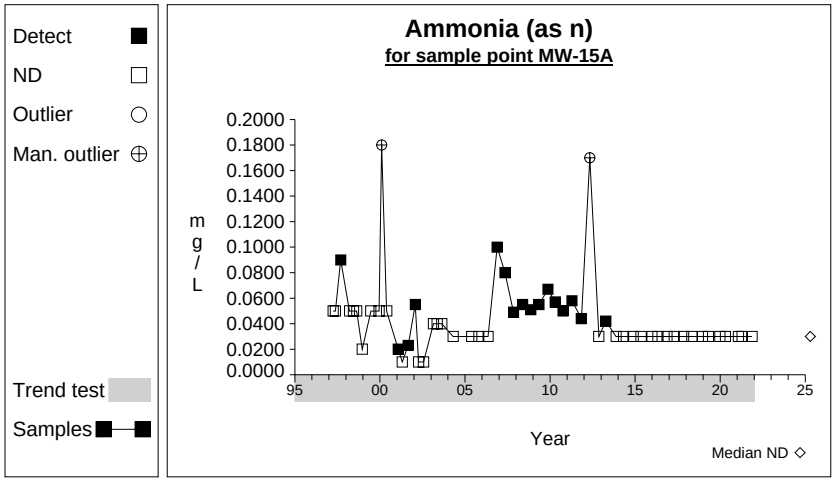
Time Series



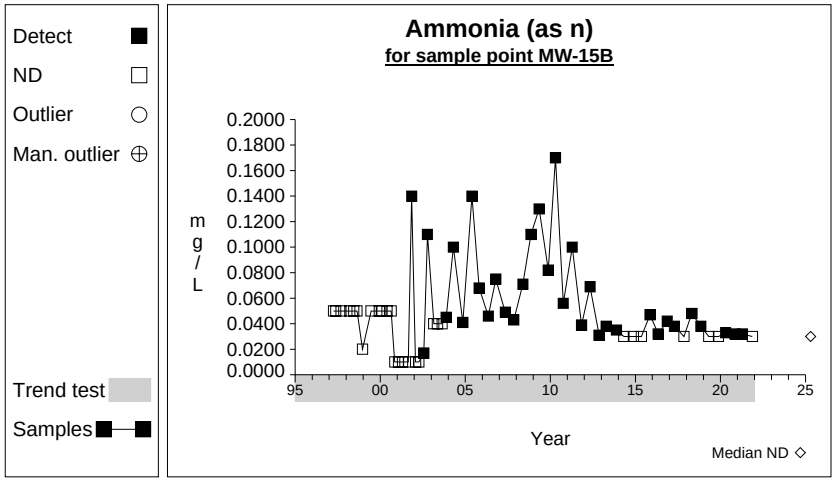
Graph 17



Graph 18

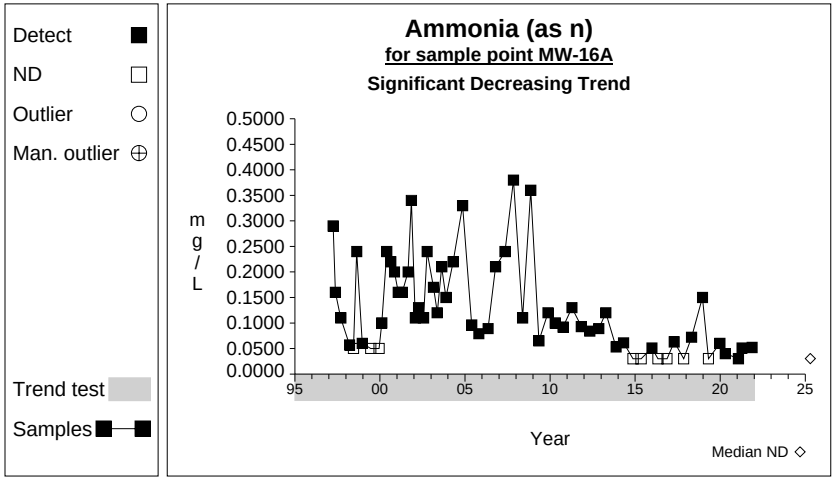


Graph 19

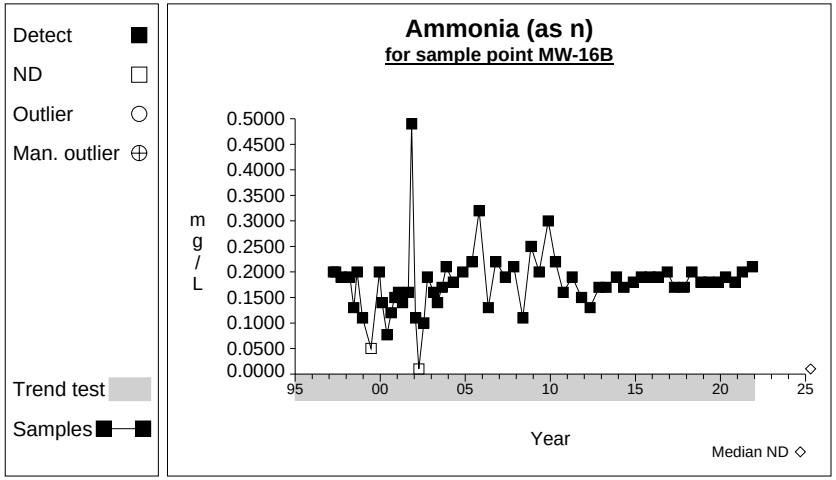


Graph 20

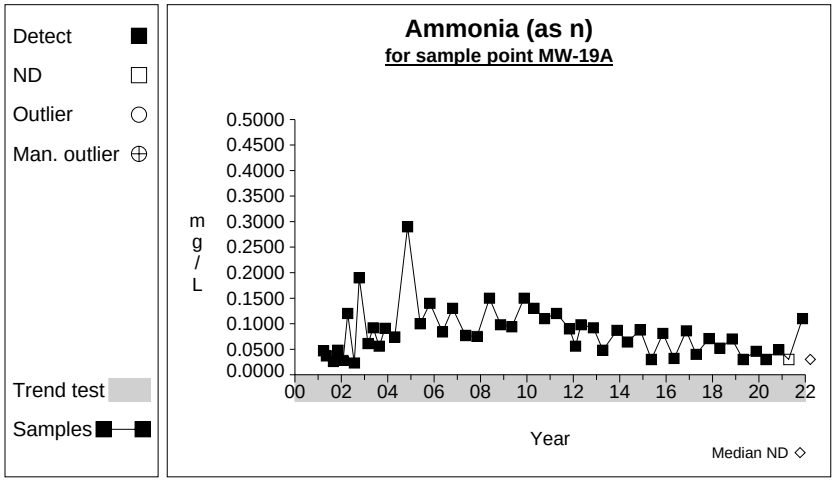
Time Series



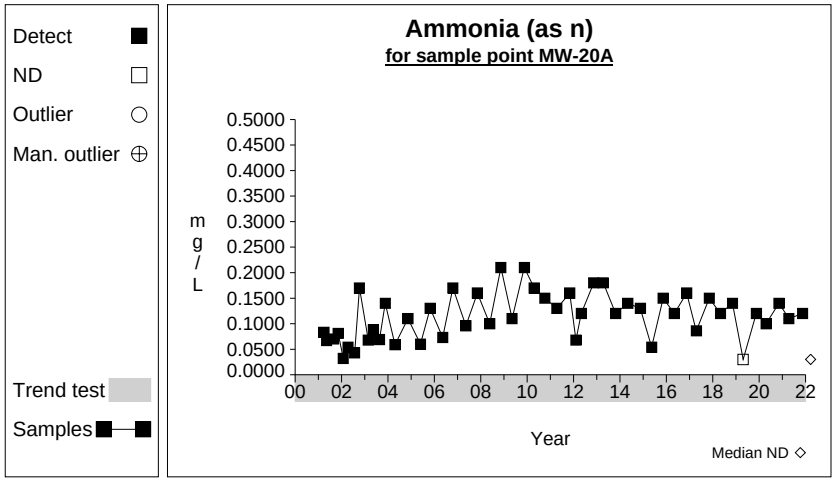
Graph 21



Graph 22

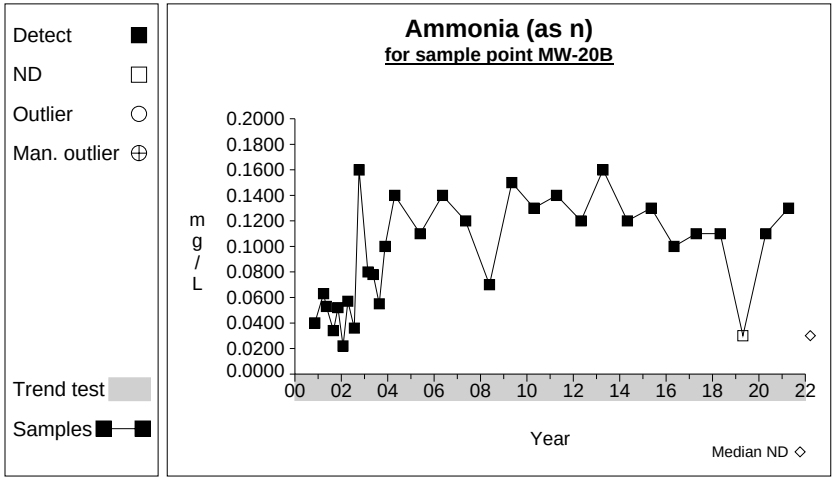


Graph 23

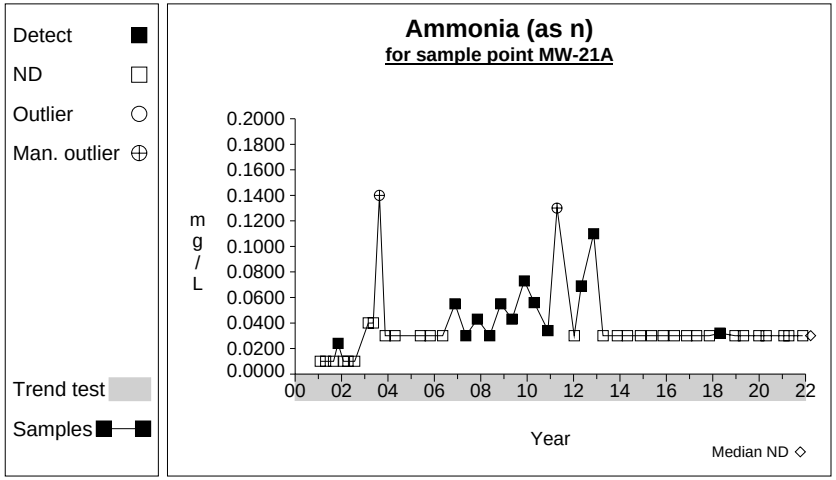


Graph 24

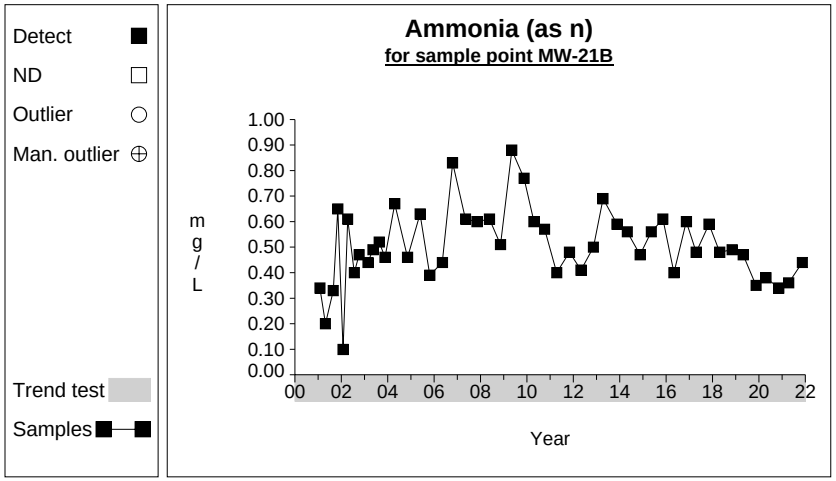
Time Series



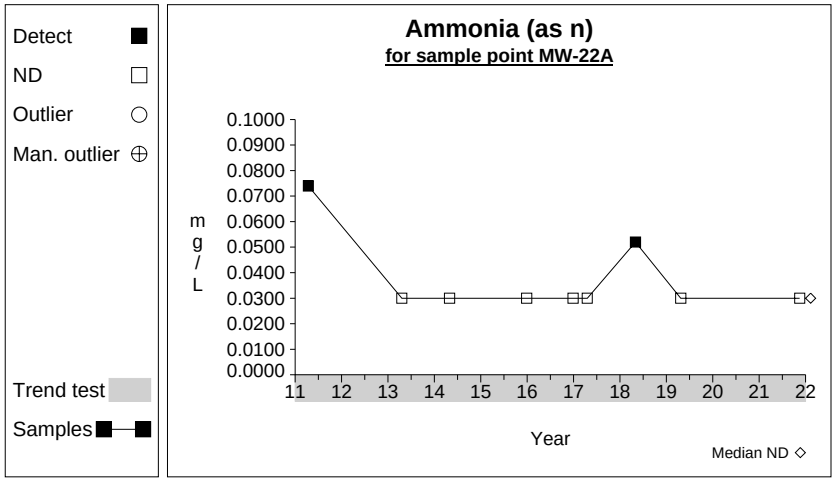
Graph 25



Graph 26

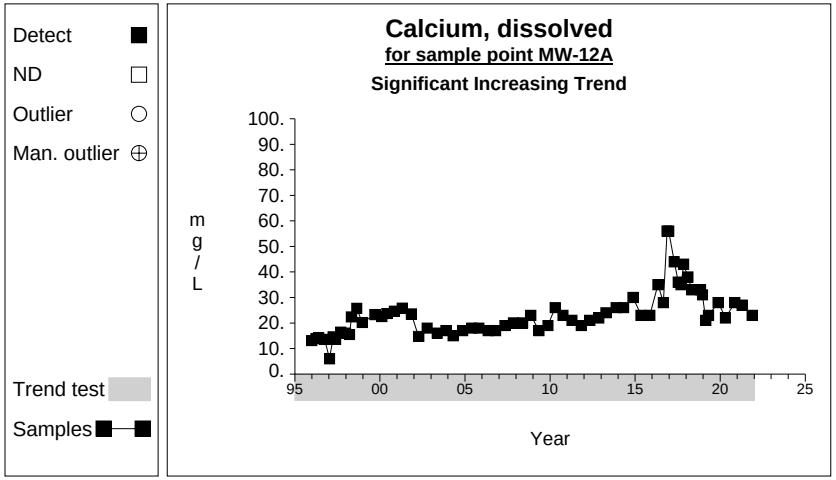


Graph 27

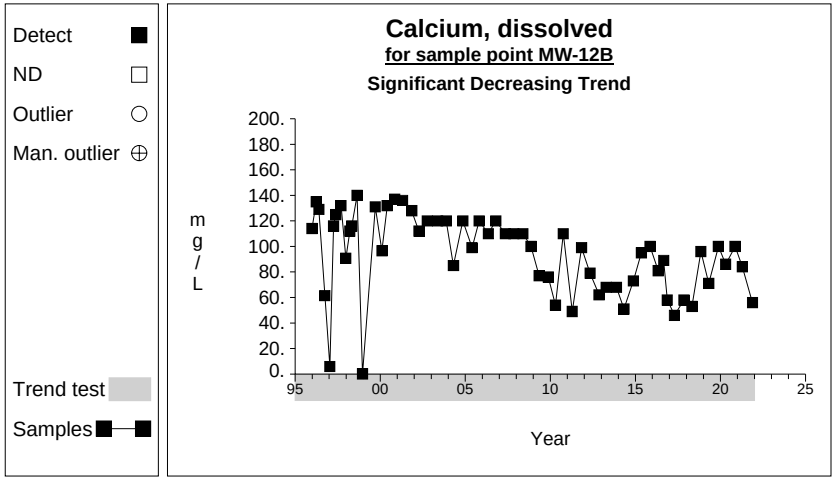


Graph 28

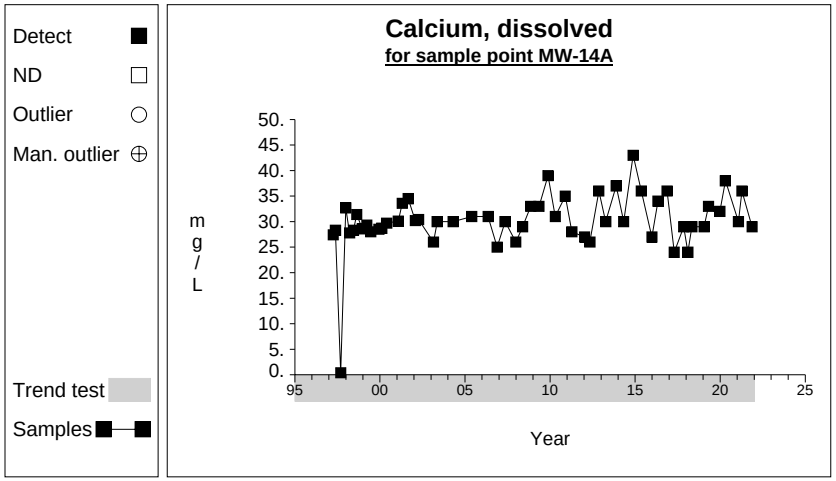
Time Series



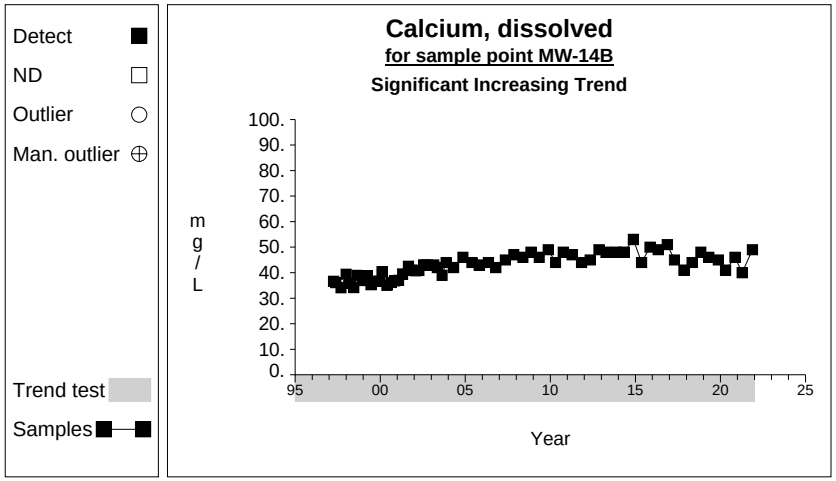
Graph 29



Graph 30

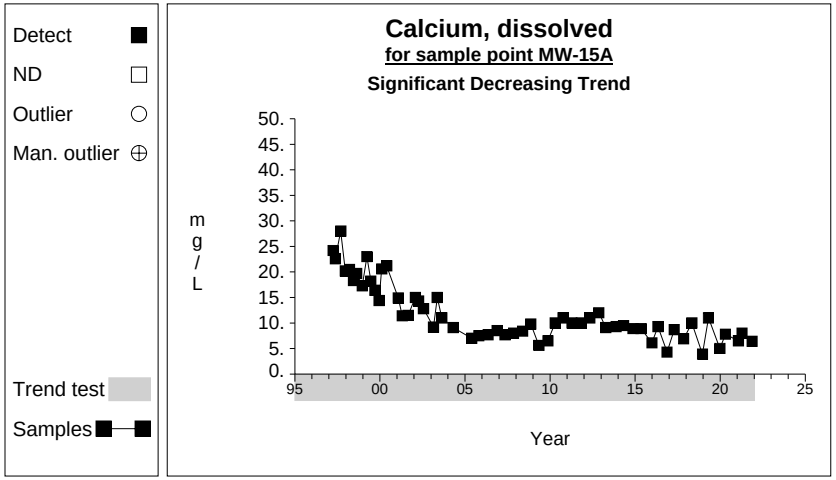


Graph 31

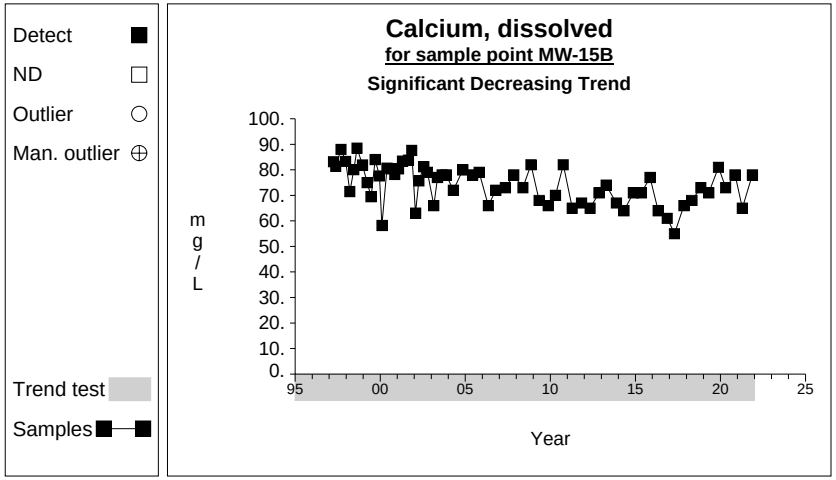


Graph 32

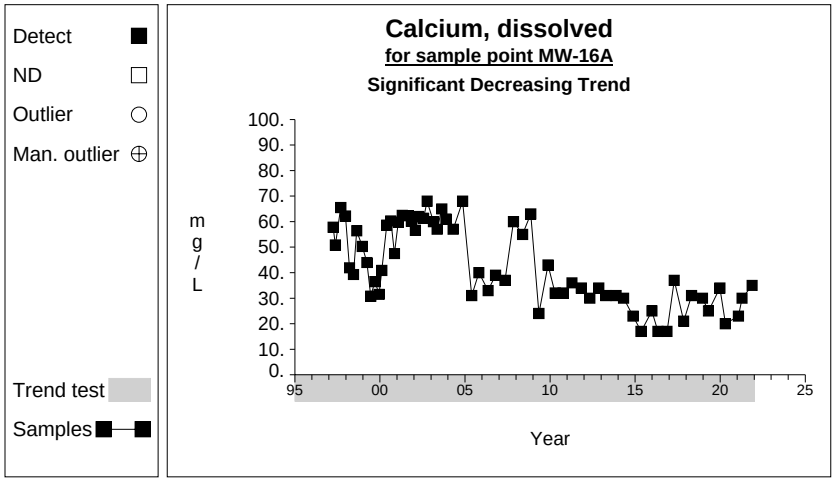
Time Series



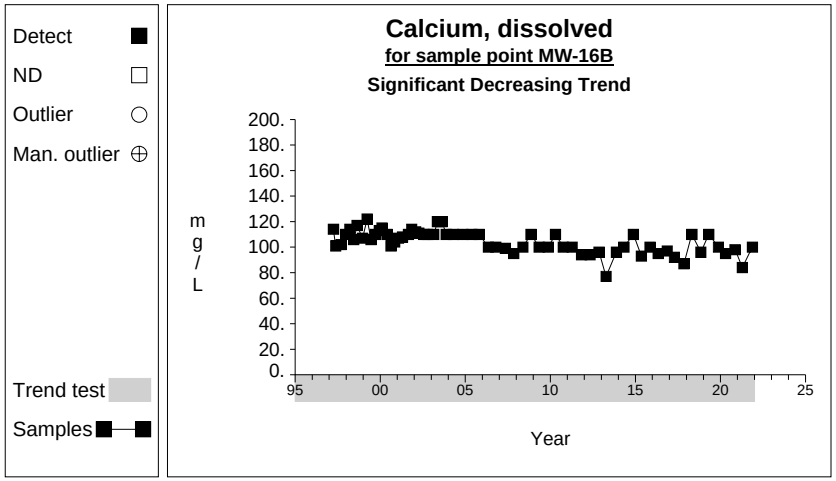
Graph 33



Graph 34

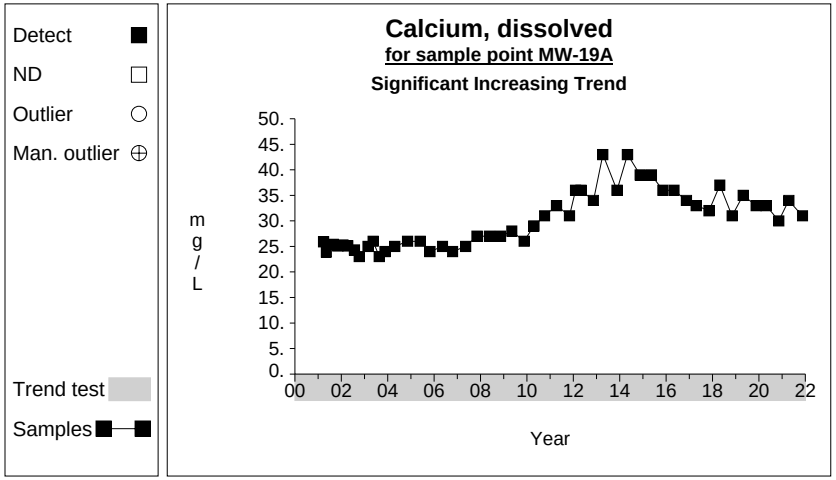


Graph 35

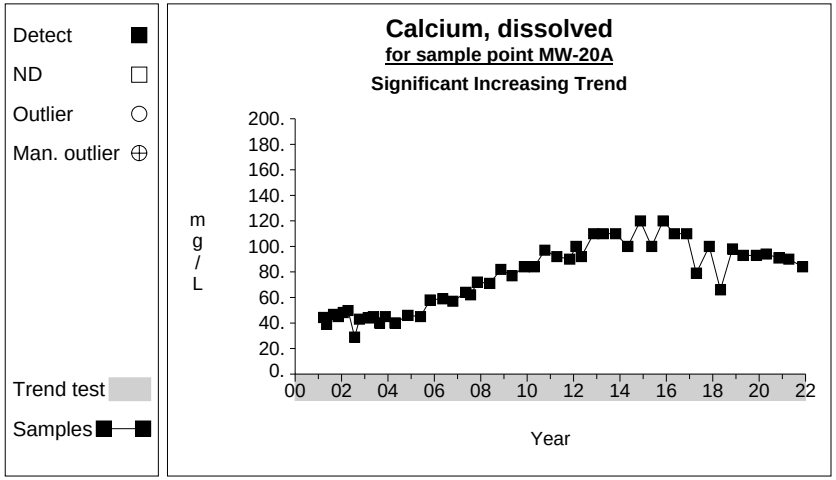


Graph 36

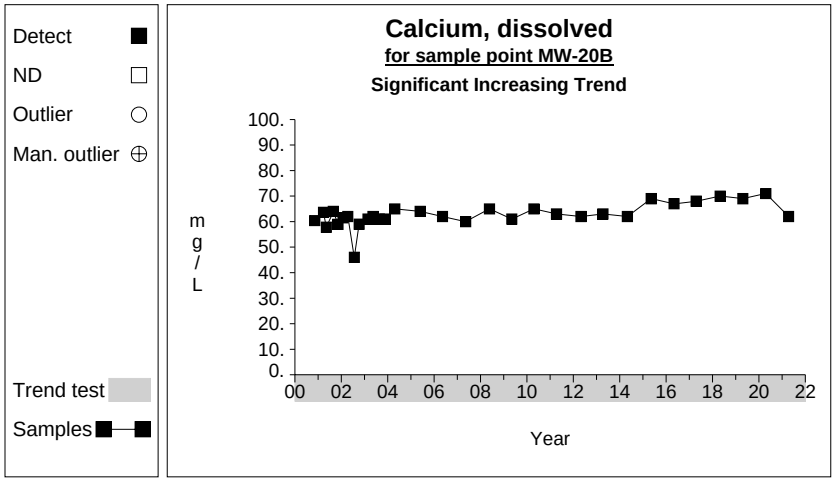
Time Series



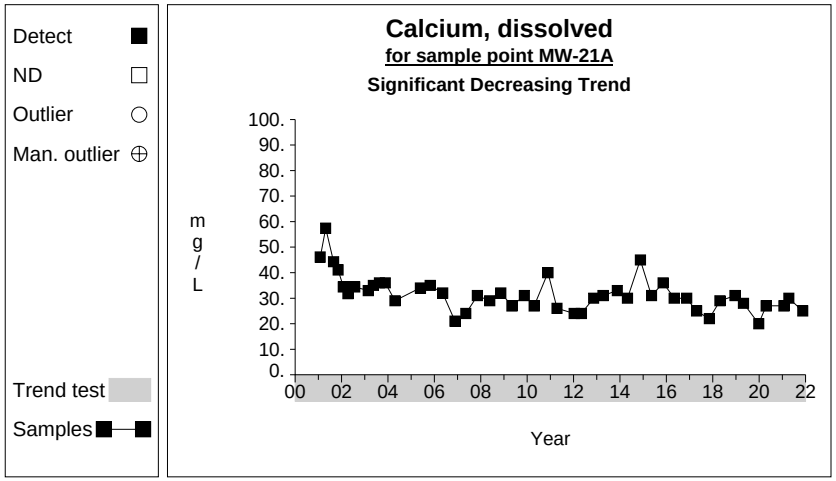
Graph 37



Graph 38

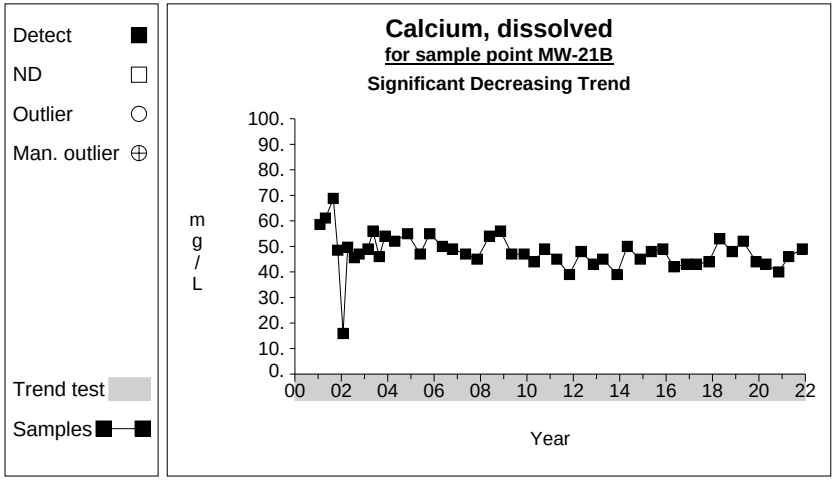


Graph 39

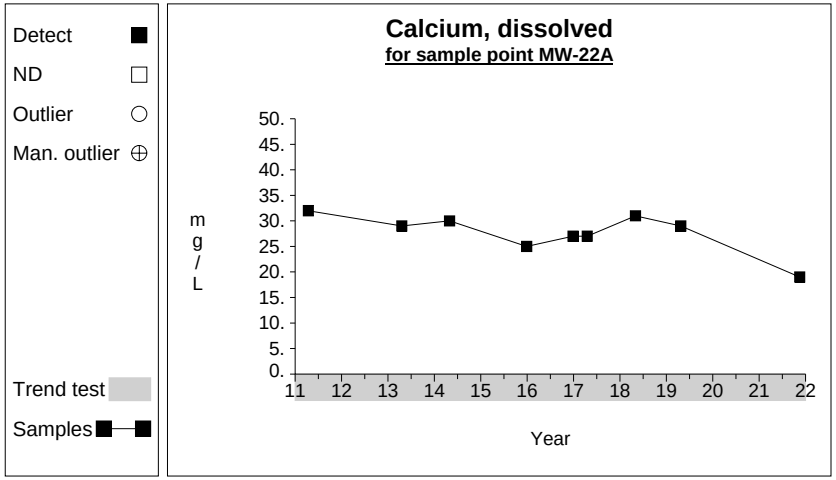


Graph 40

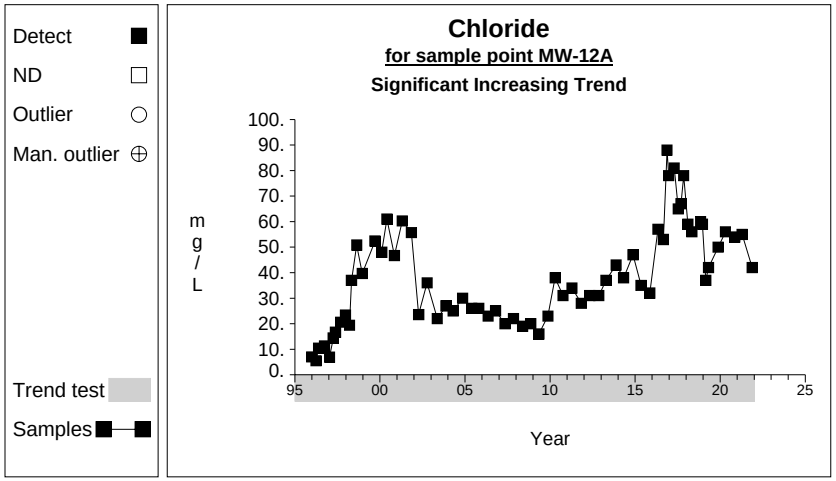
Time Series



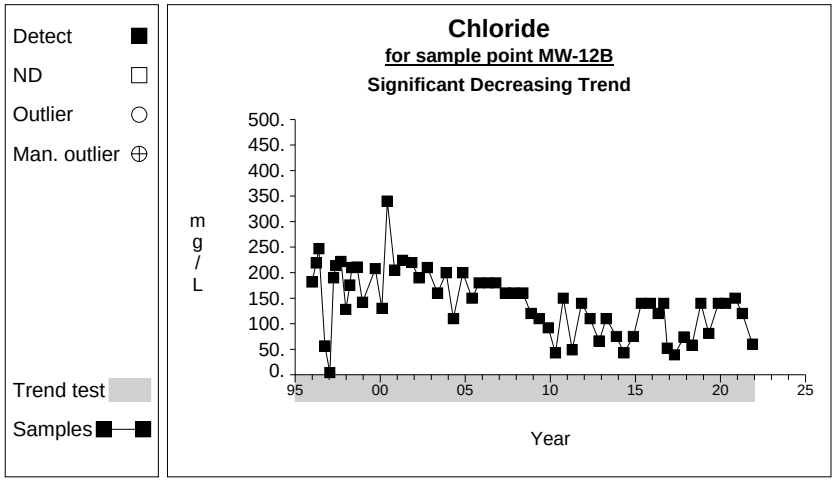
Graph 41



Graph 42

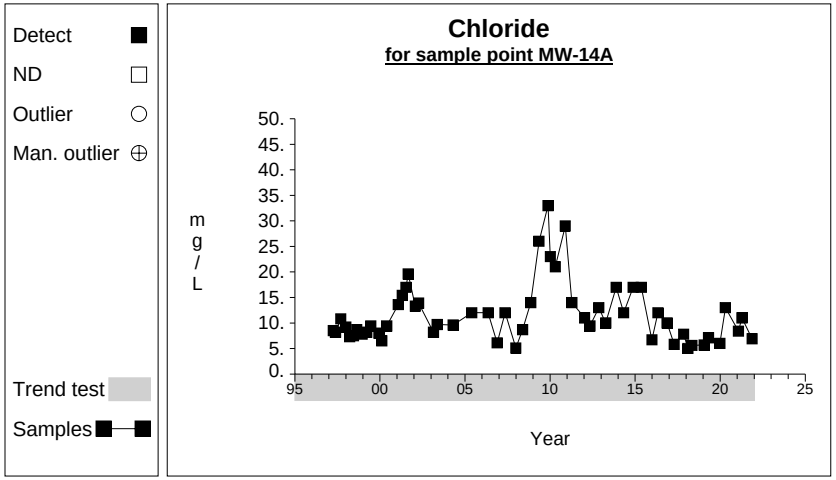


Graph 43

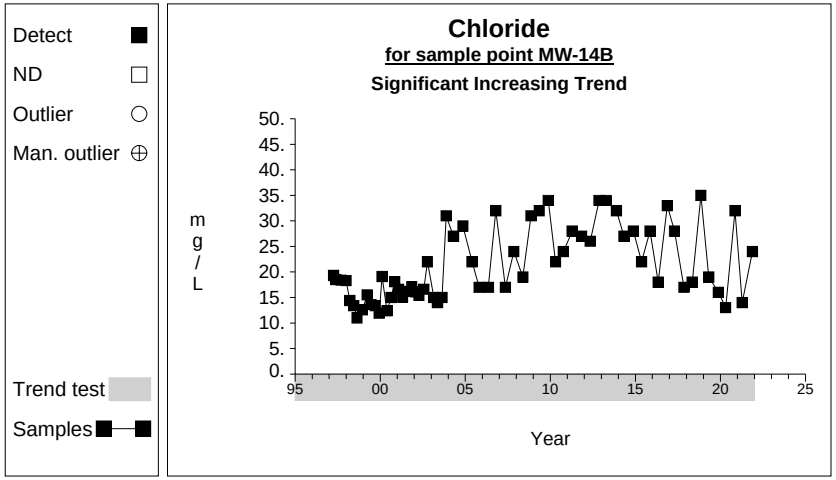


Graph 44

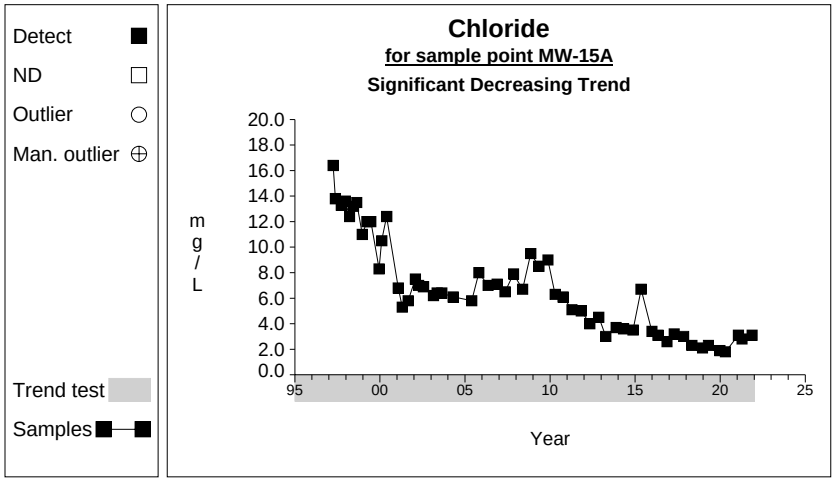
Time Series



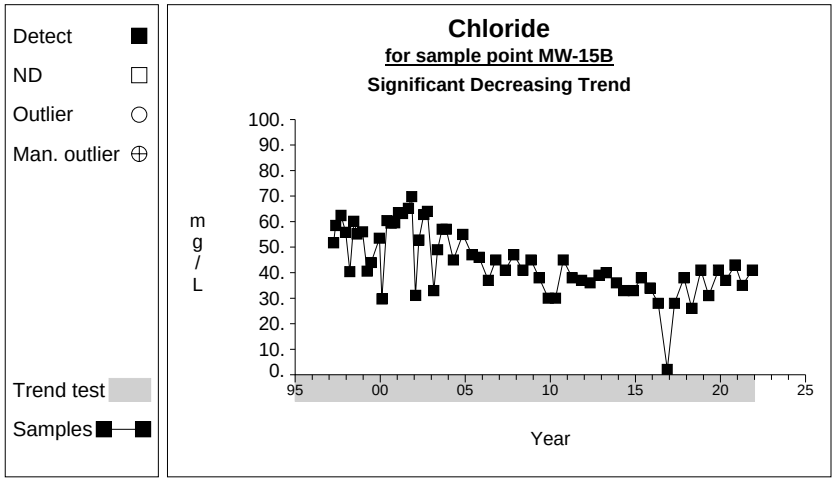
Graph 45



Graph 46

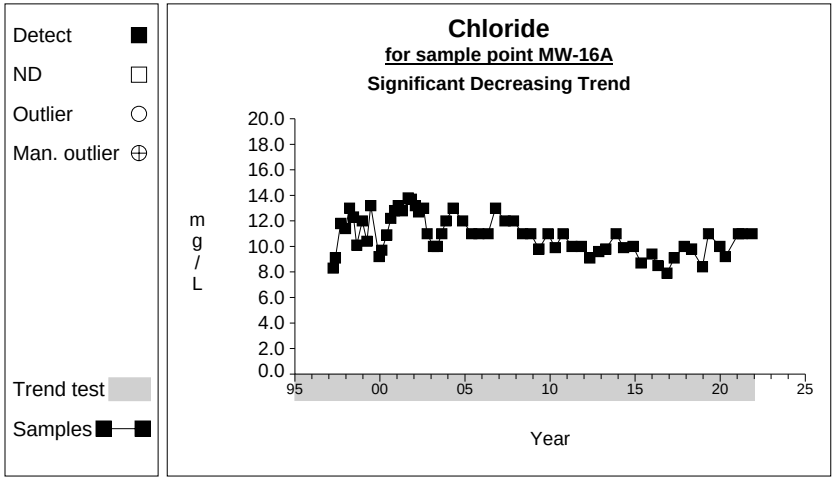


Graph 47

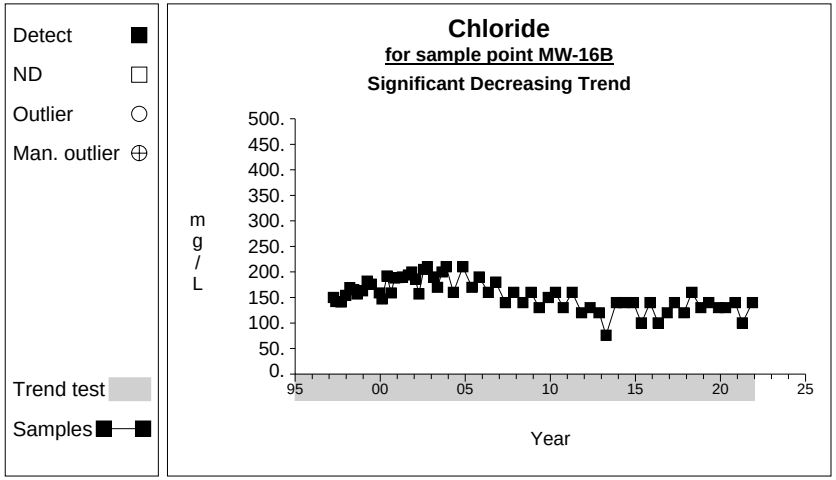


Graph 48

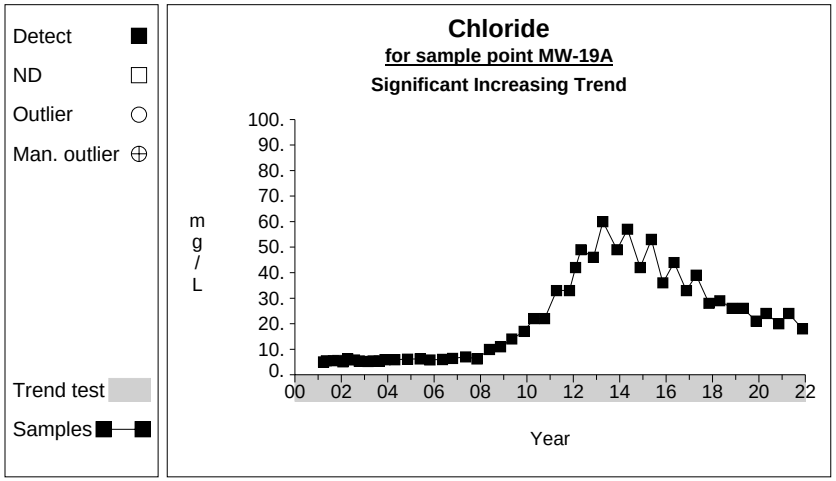
Time Series



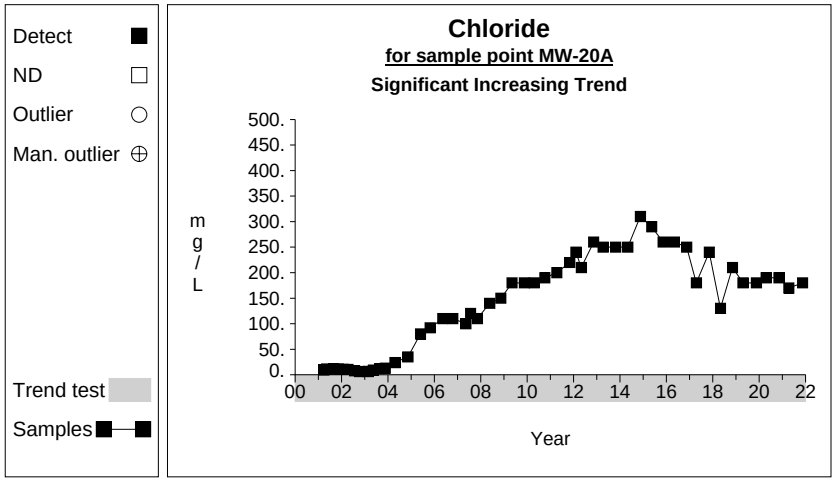
Graph 49



Graph 50

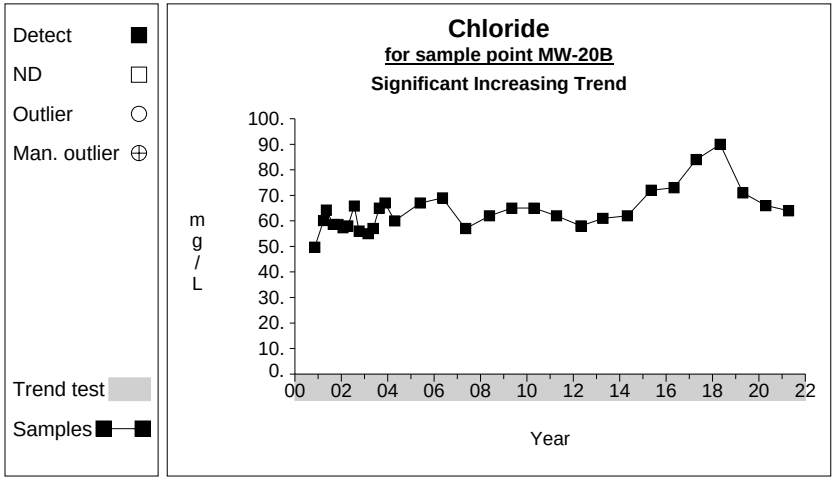


Graph 51

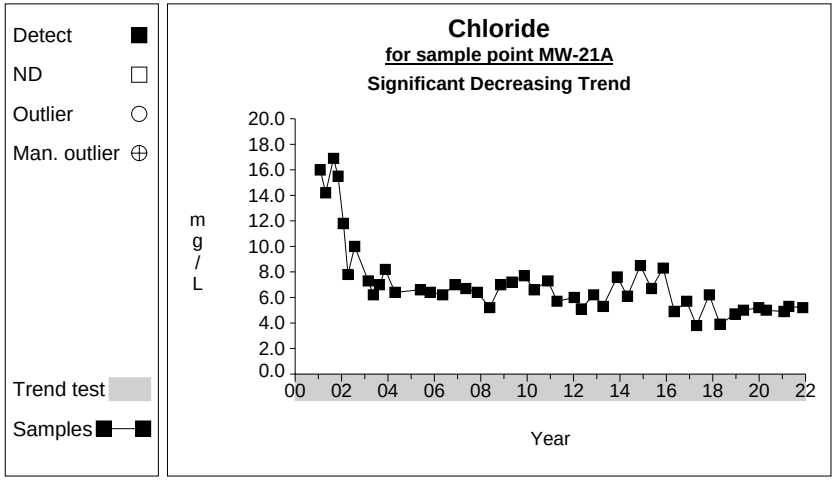


Graph 52

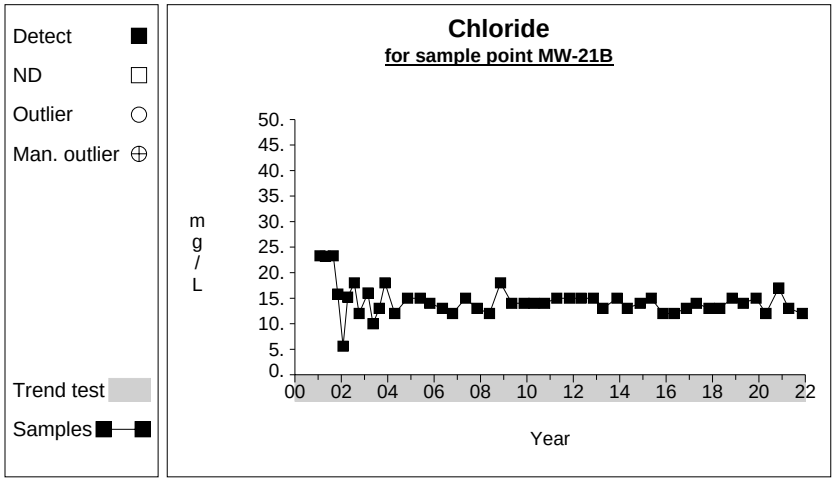
Time Series



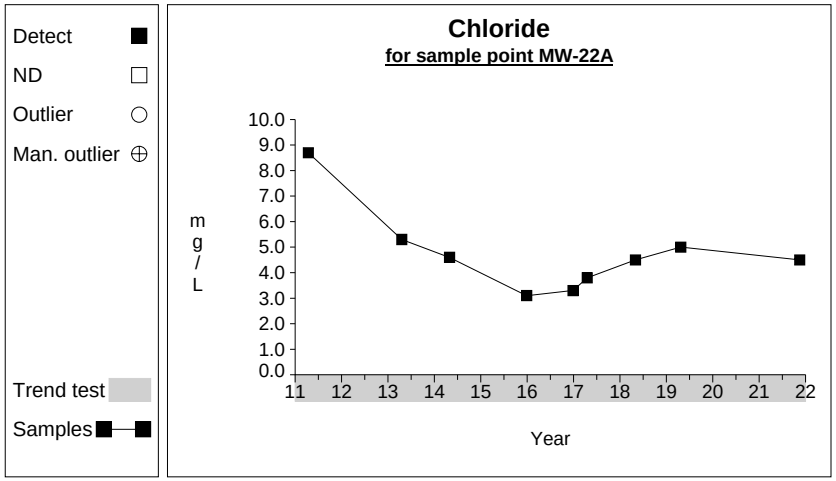
Graph 53



Graph 54

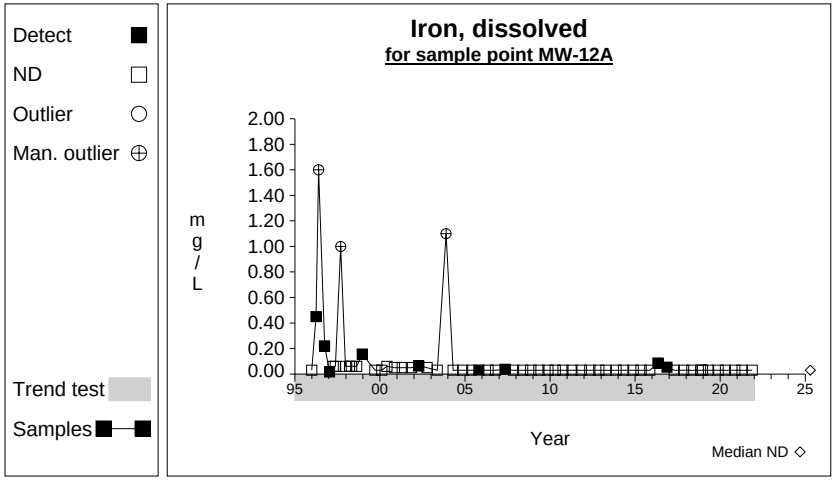


Graph 55

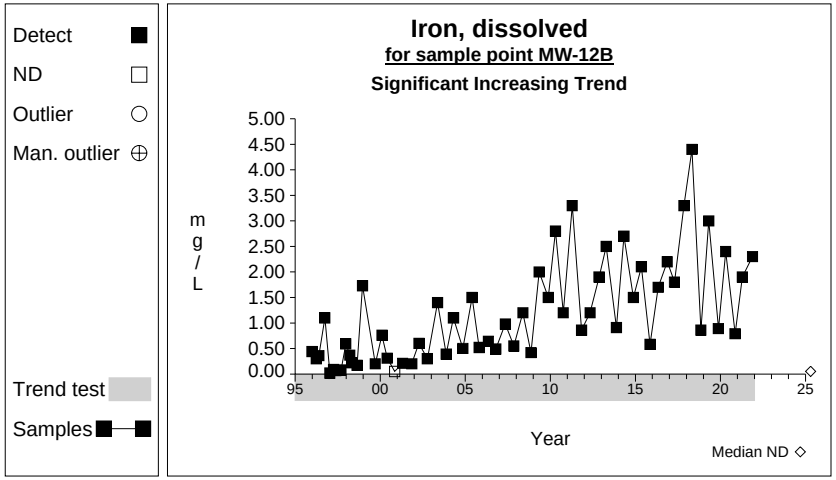


Graph 56

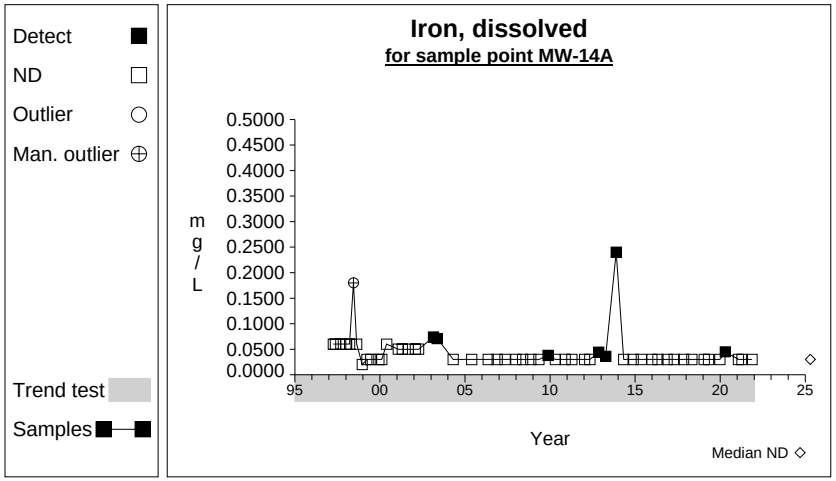
Time Series



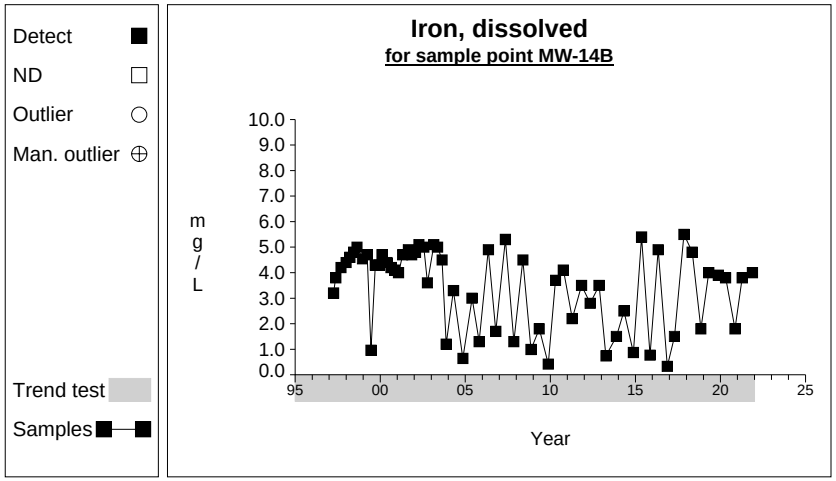
Graph 57



Graph 58

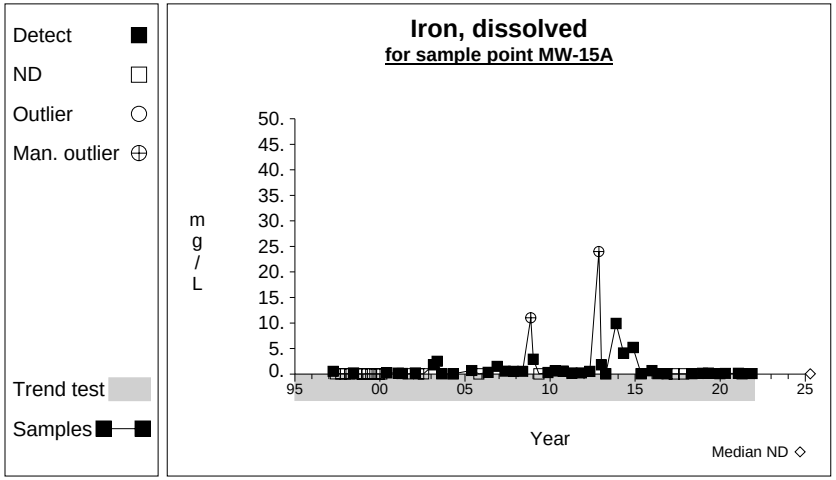


Graph 59

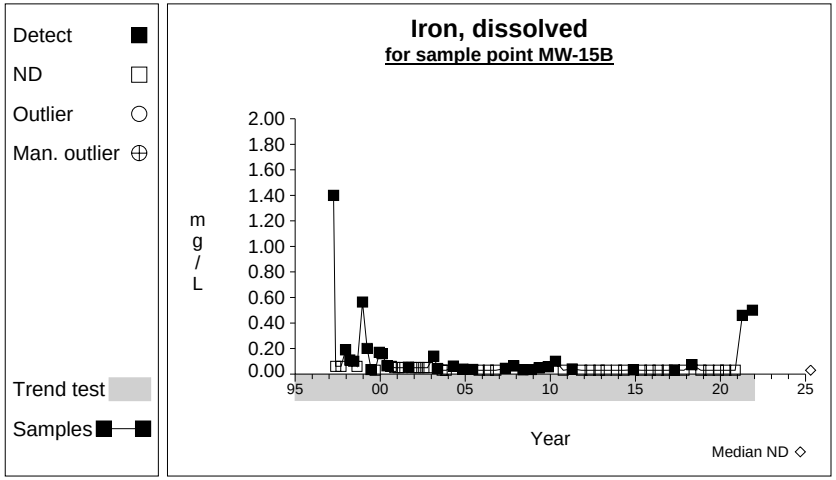


Graph 60

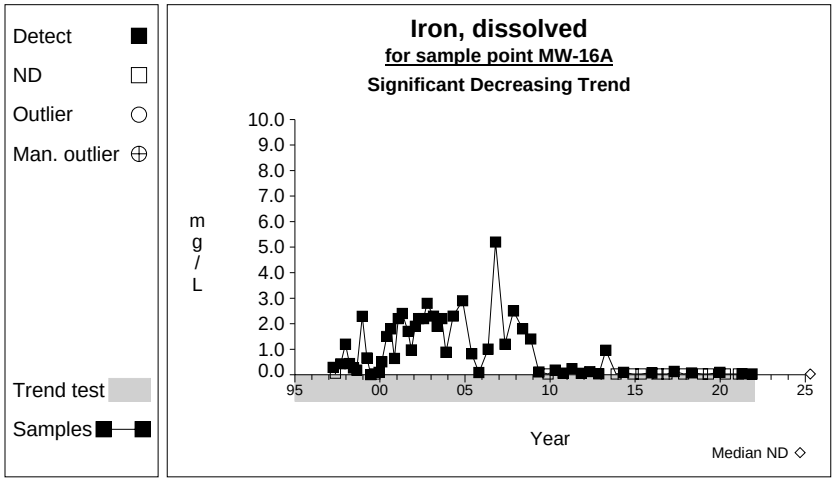
Time Series



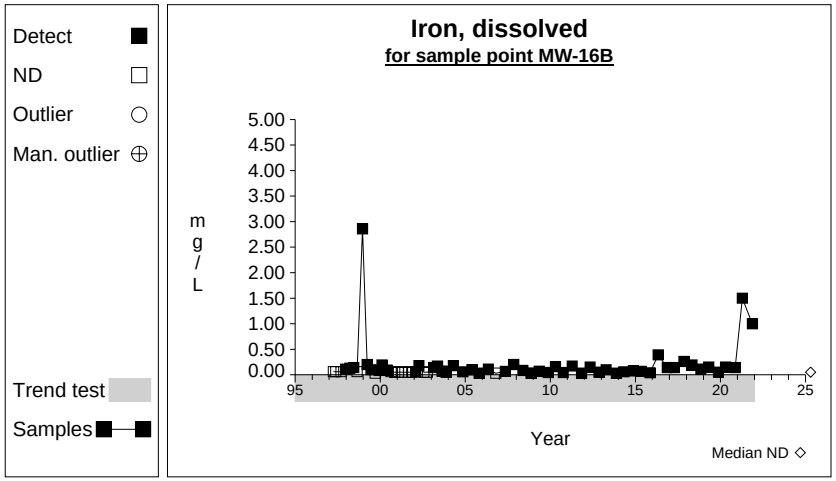
Graph 61



Graph 62

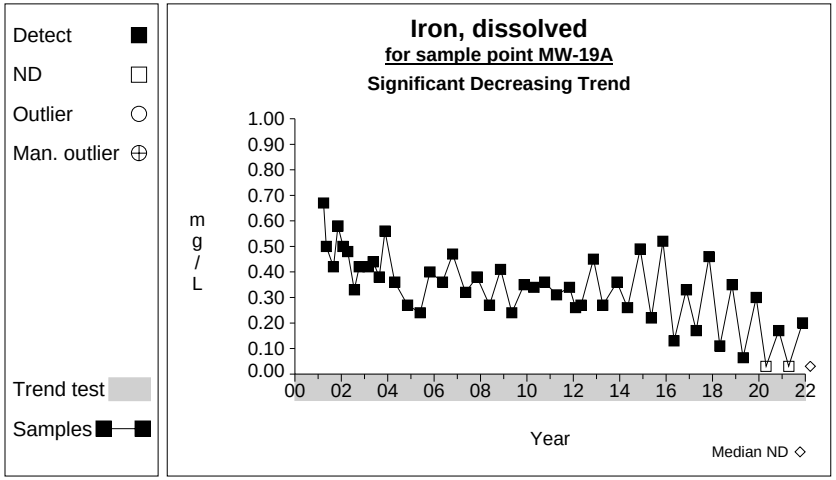


Graph 63

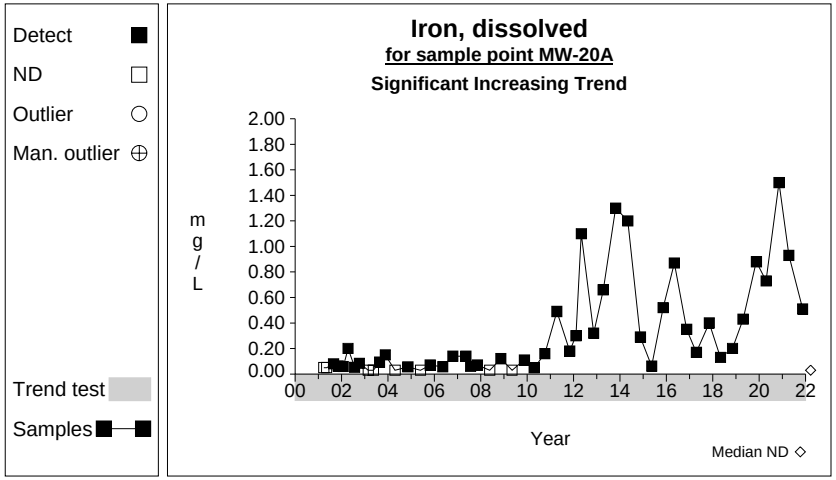


Graph 64

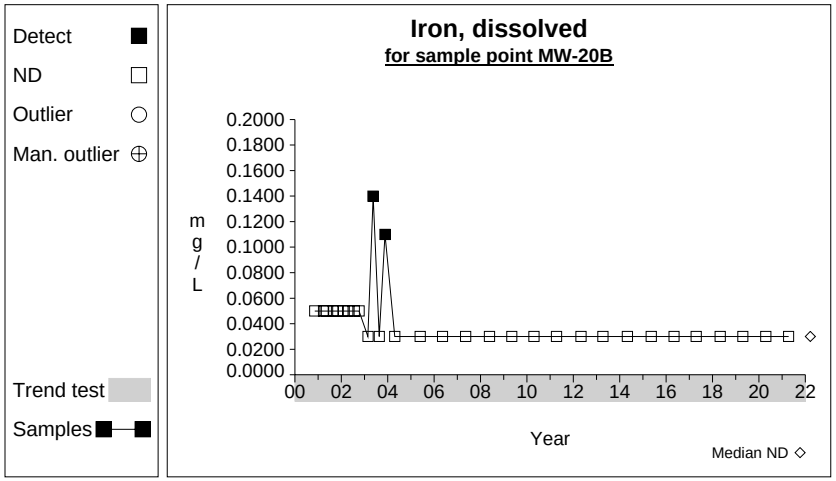
Time Series



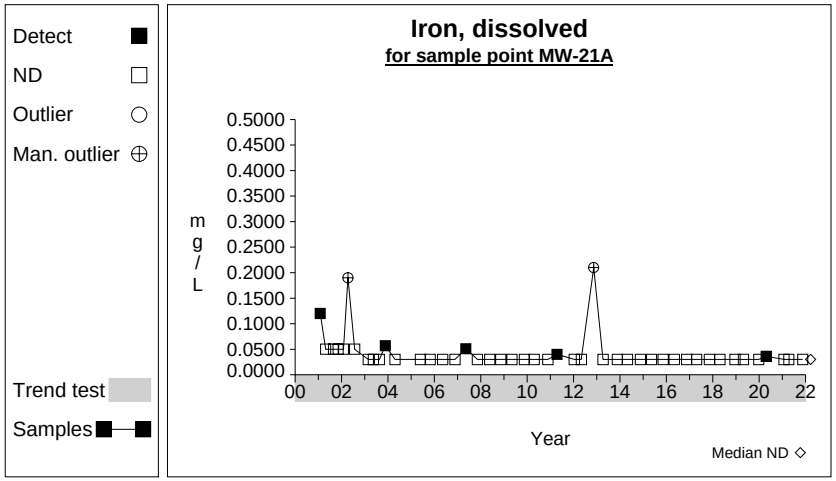
Graph 65



Graph 66

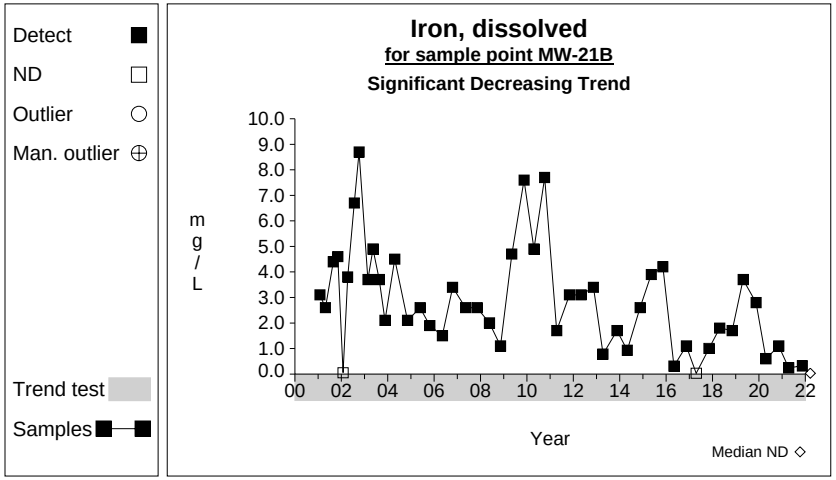


Graph 67

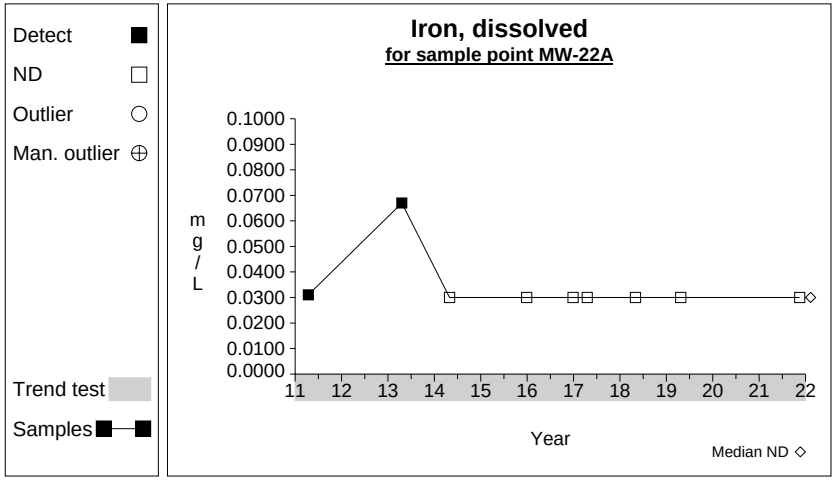


Graph 68

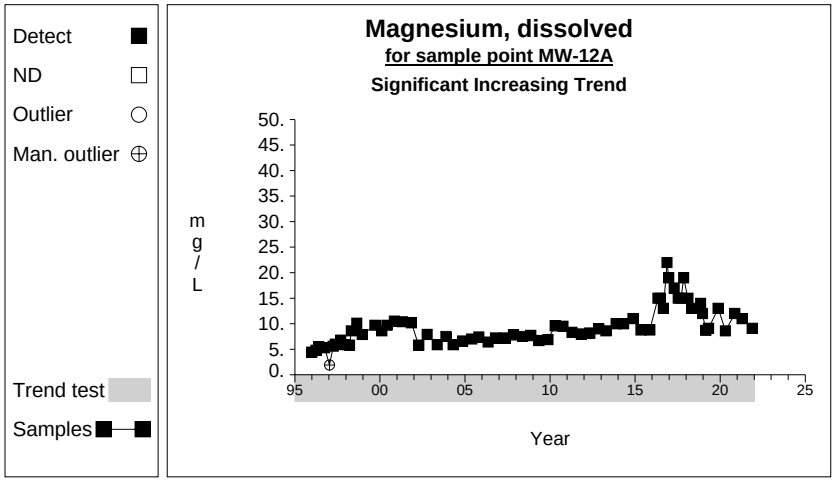
Time Series



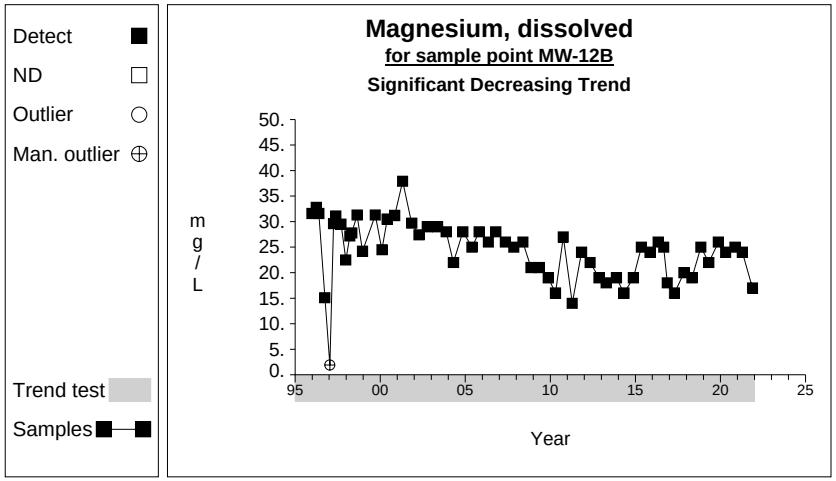
Graph 69



Graph 70

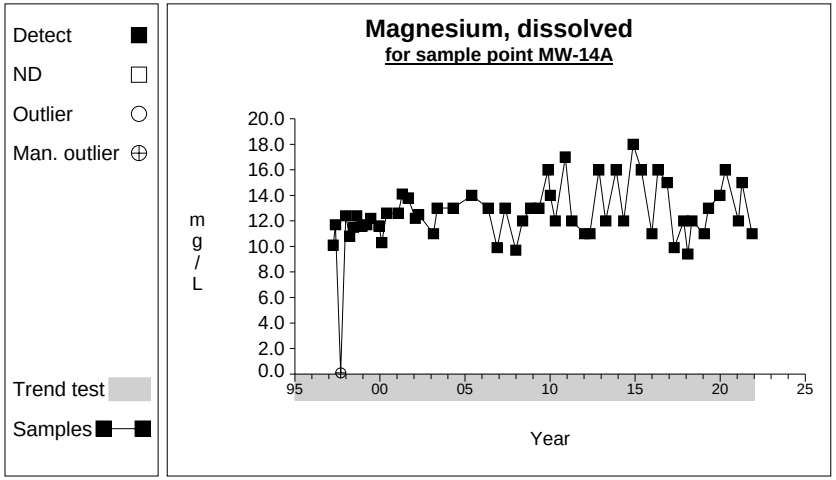


Graph 71

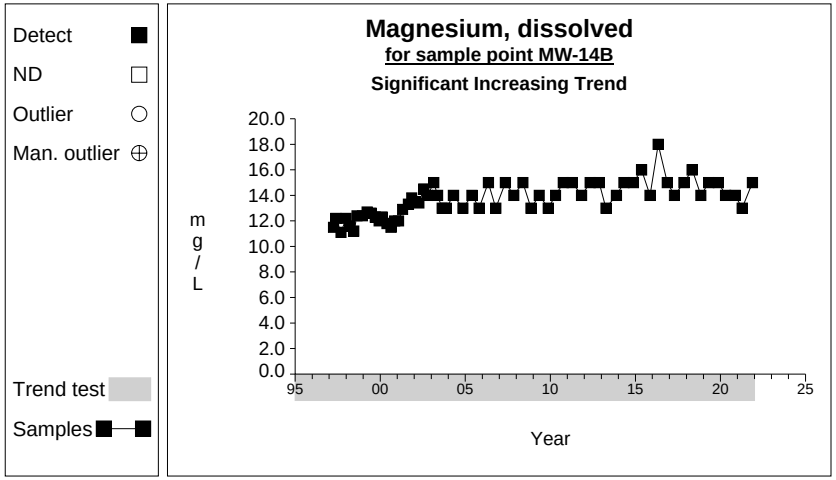


Graph 72

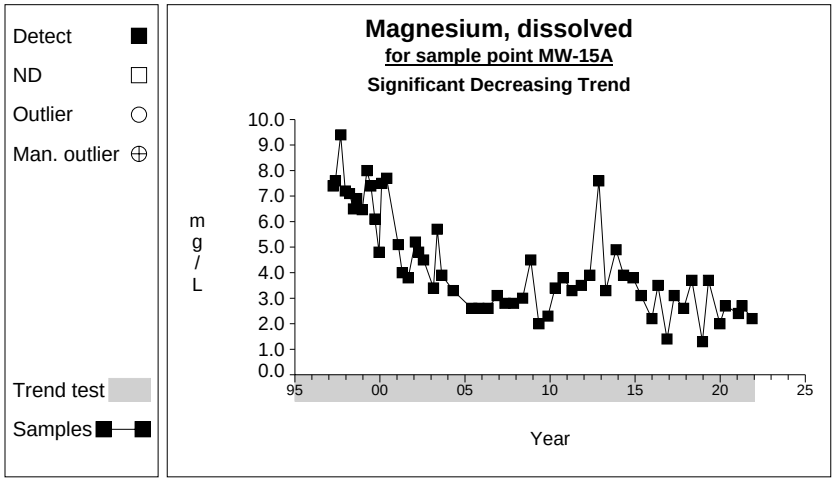
Time Series



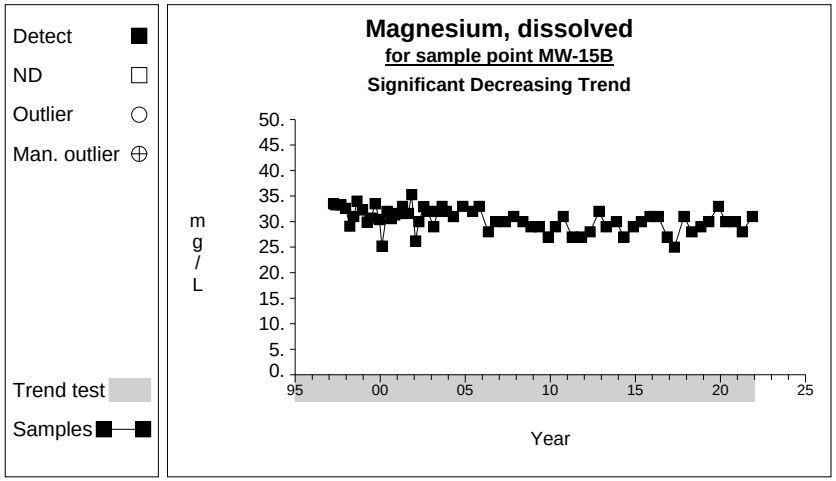
Graph 73



Graph 74

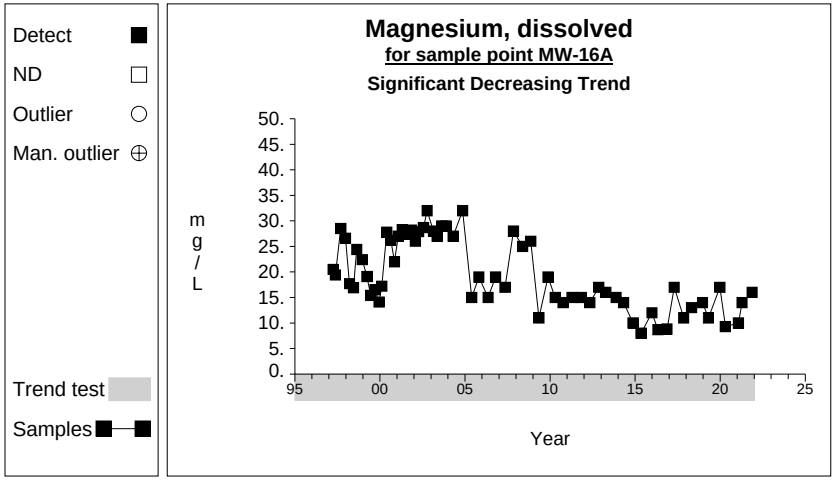


Graph 75

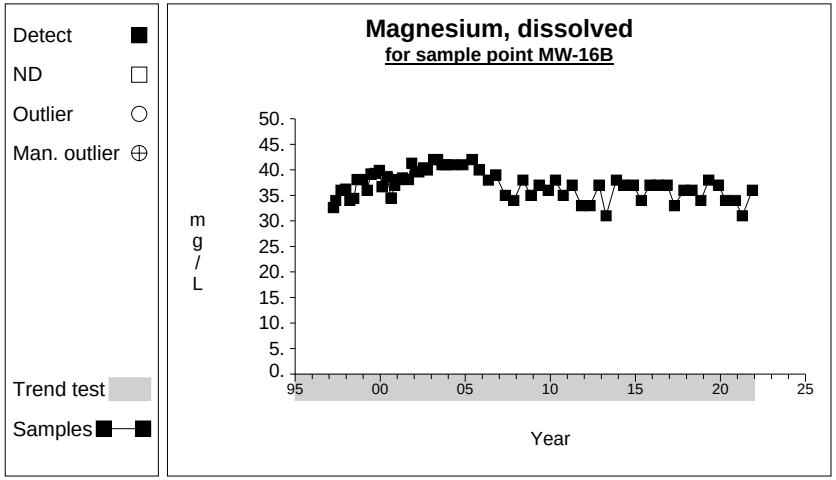


Graph 76

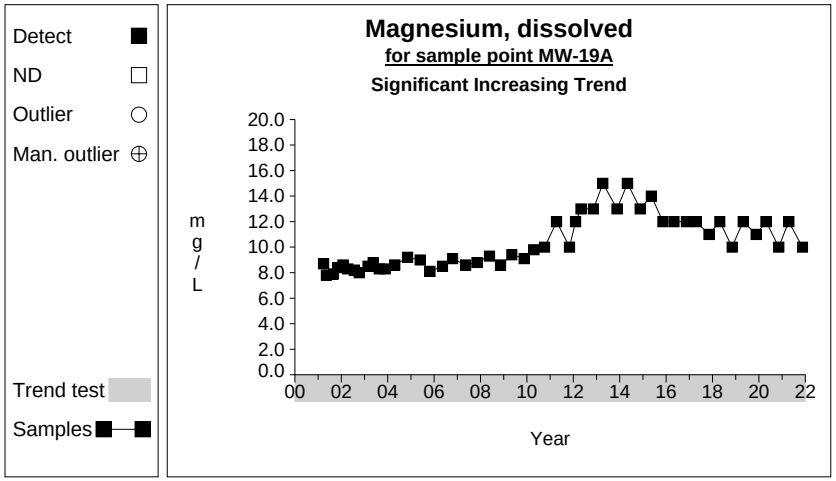
Time Series



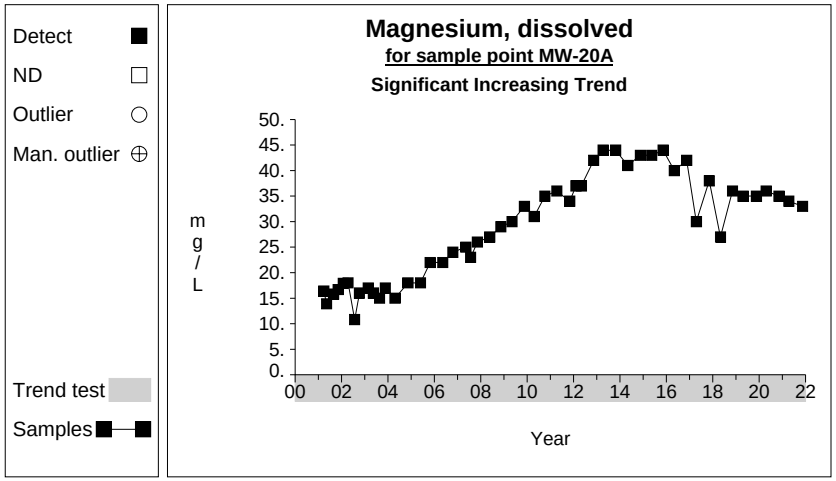
Graph 77



Graph 78

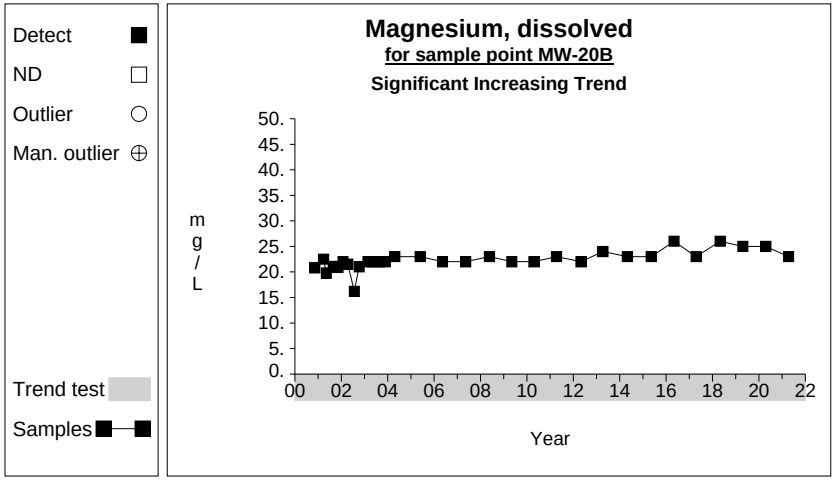


Graph 79

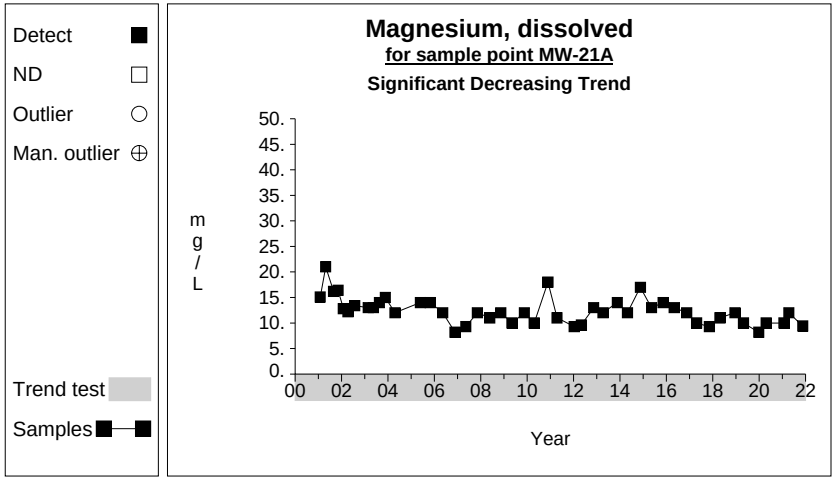


Graph 80

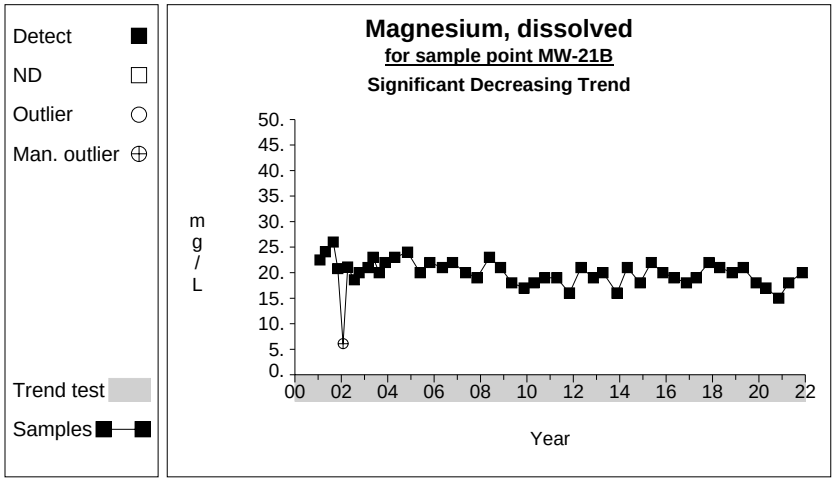
Time Series



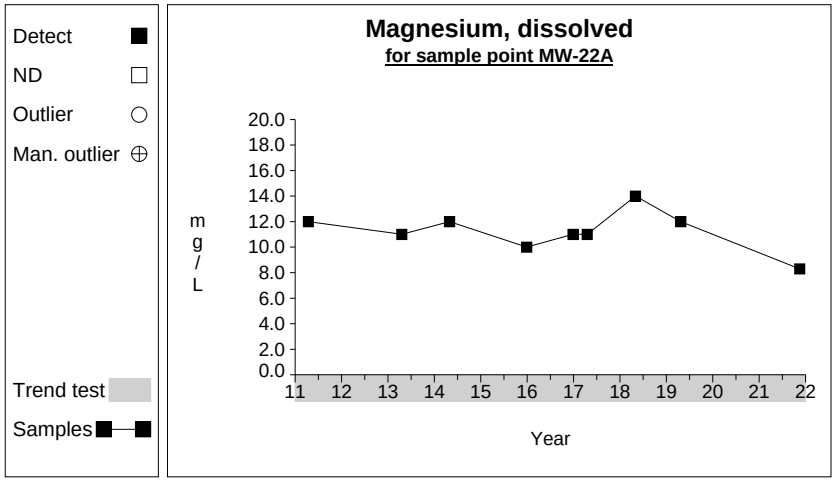
Graph 81



Graph 82

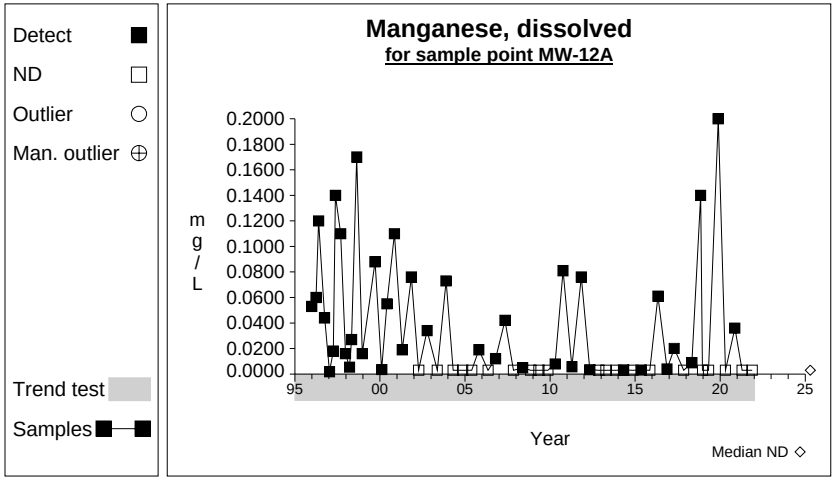


Graph 83

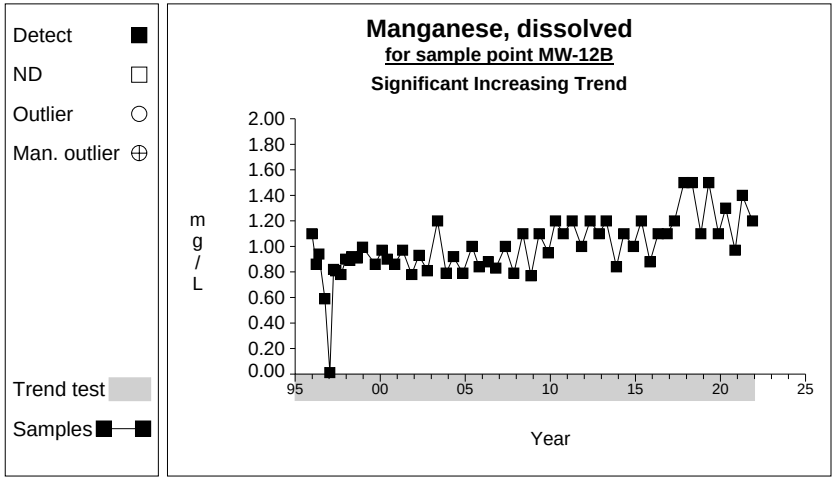


Graph 84

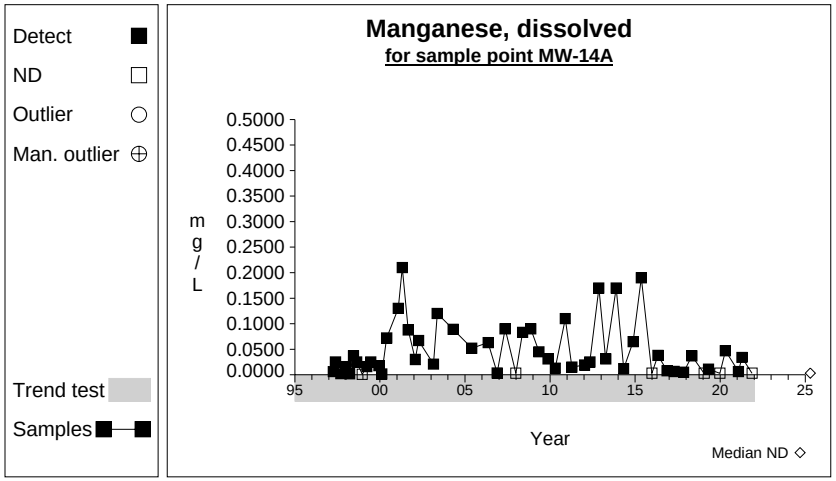
Time Series



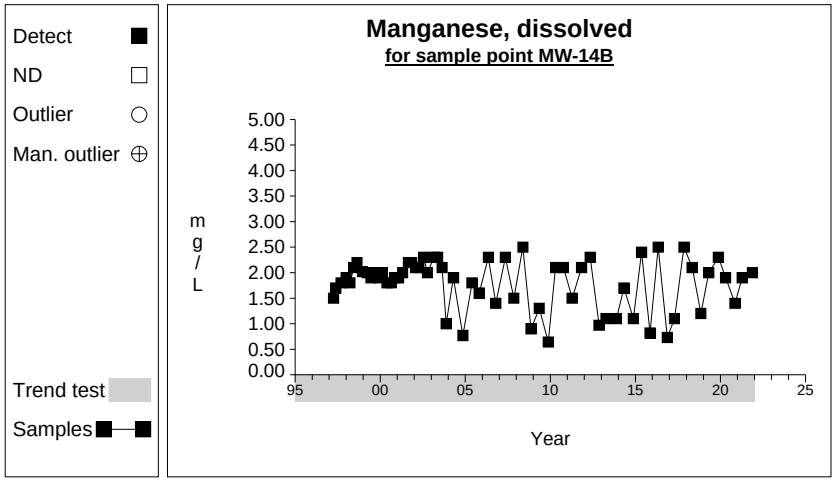
Graph 85



Graph 86

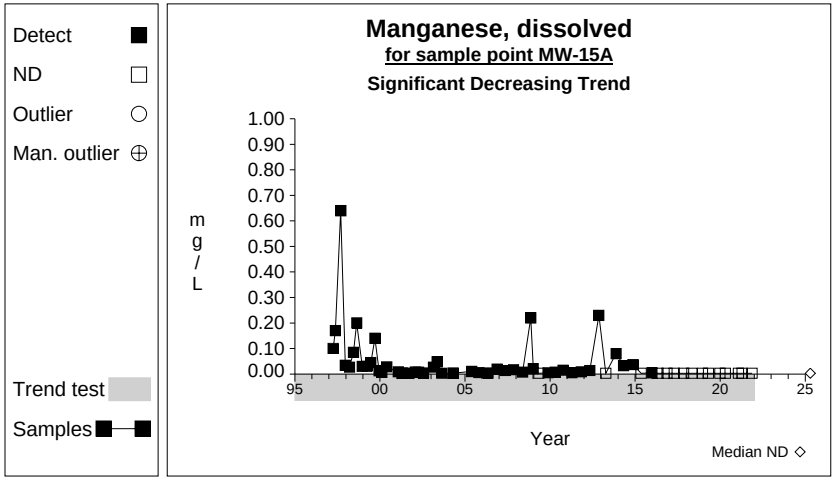


Graph 87

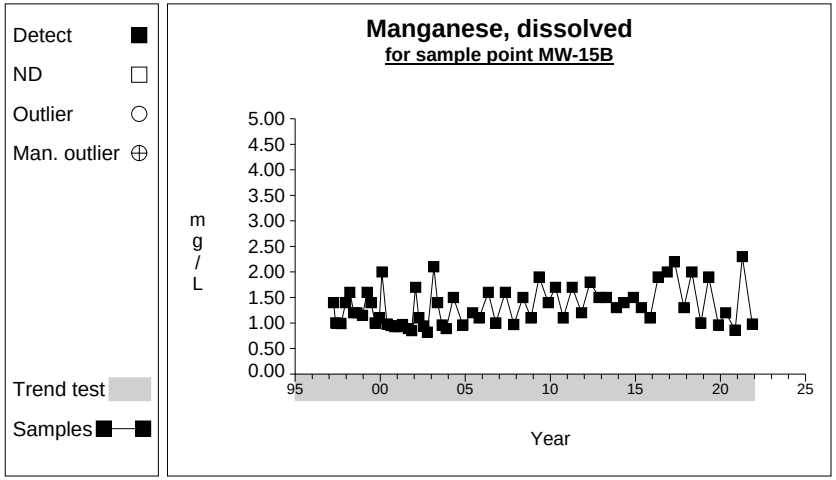


Graph 88

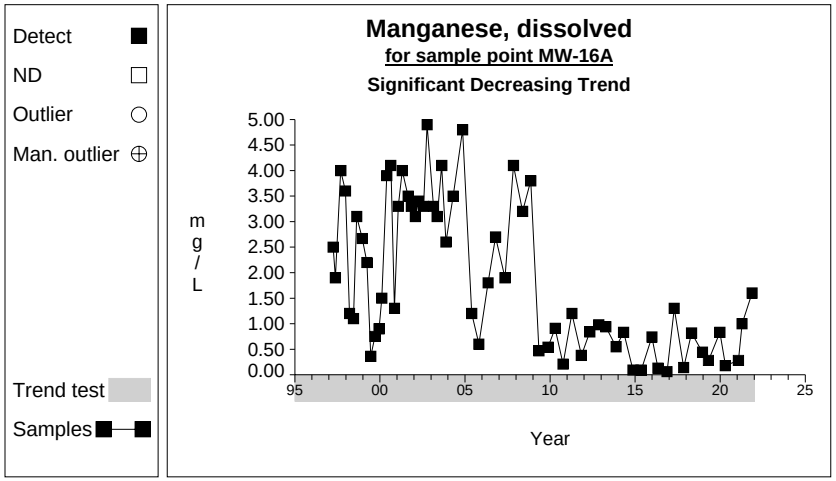
Time Series



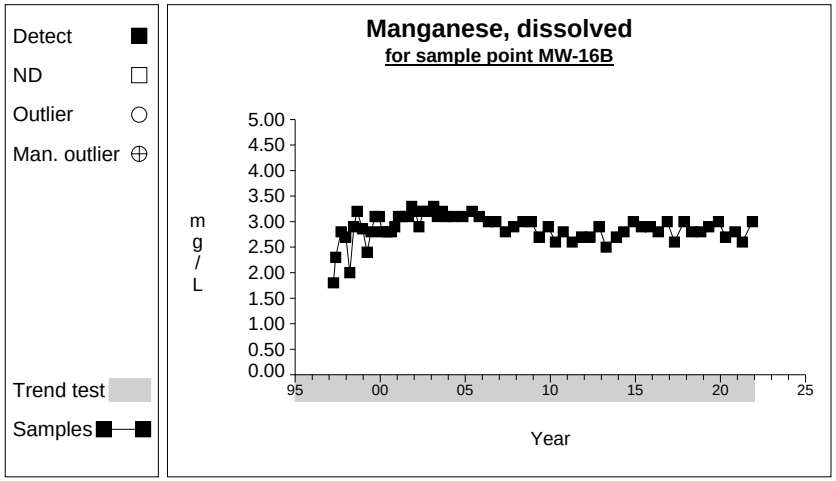
Graph 89



Graph 90

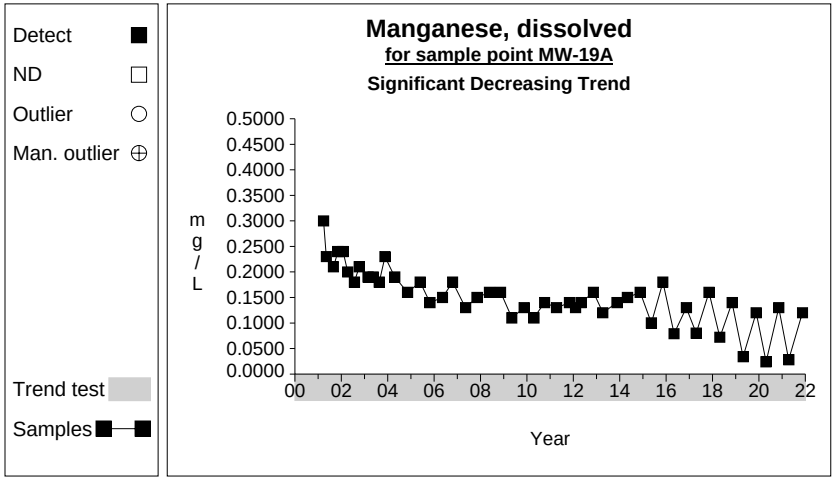


Graph 91

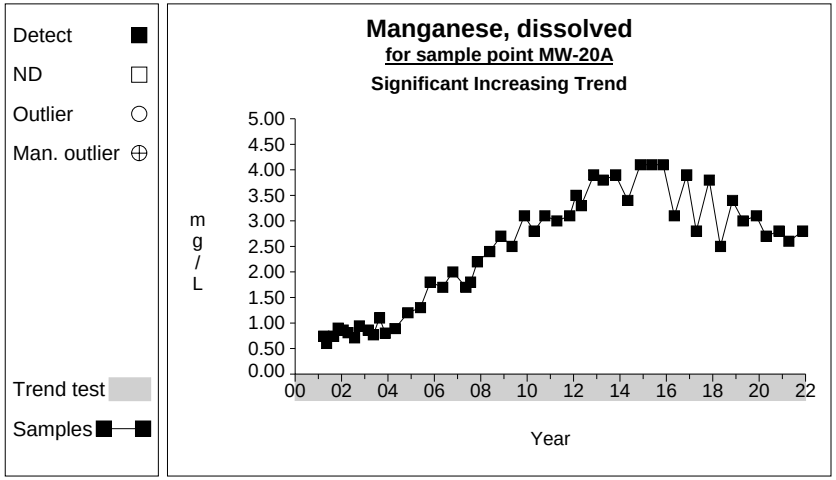


Graph 92

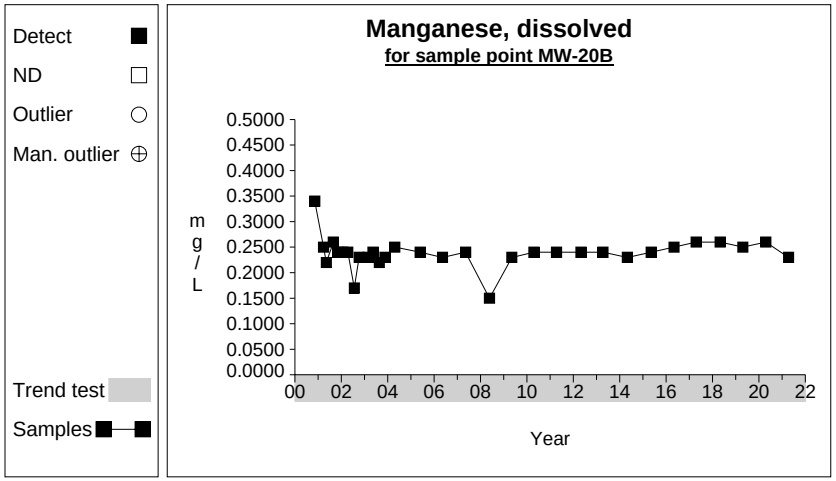
Time Series



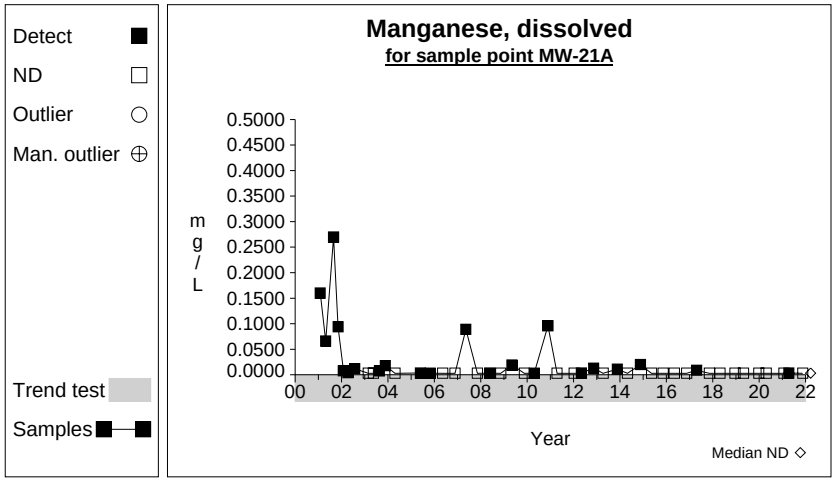
Graph 93



Graph 94

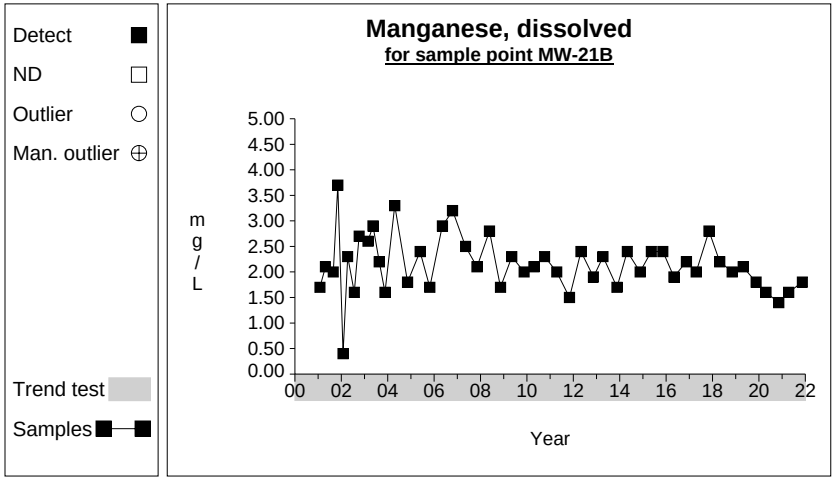


Graph 95

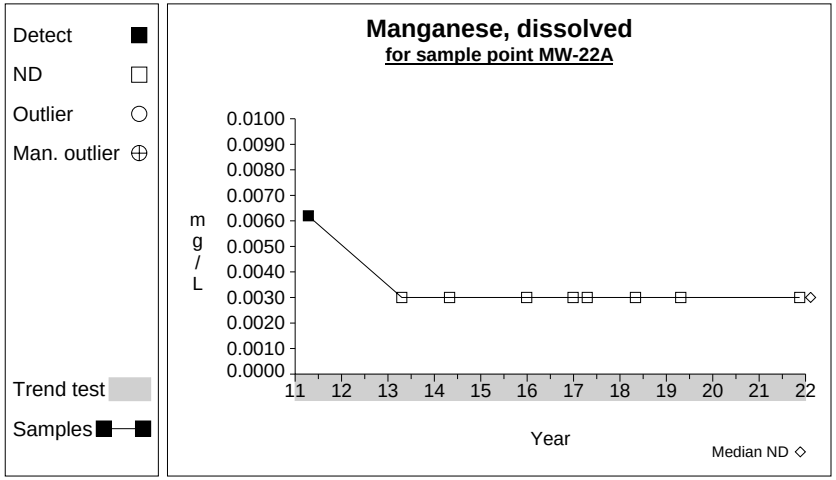


Graph 96

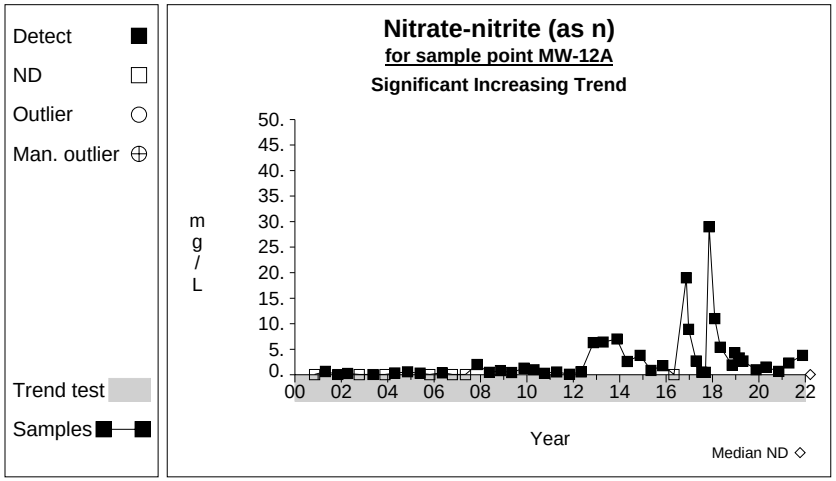
Time Series



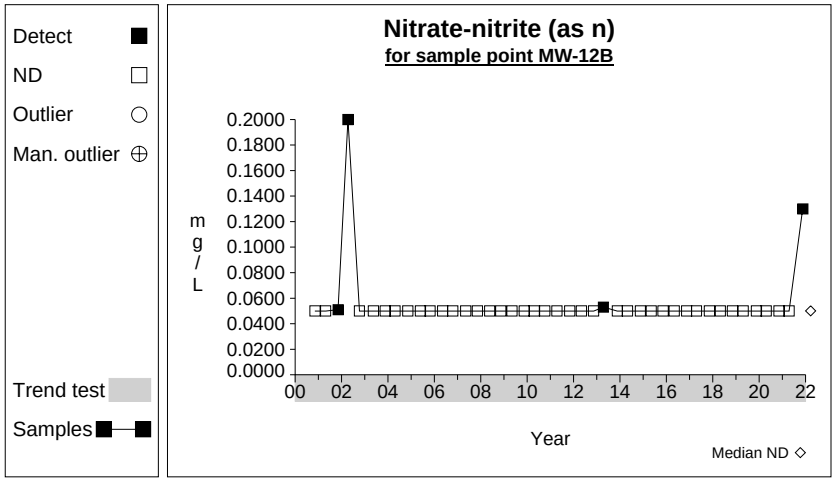
Graph 97



Graph 98

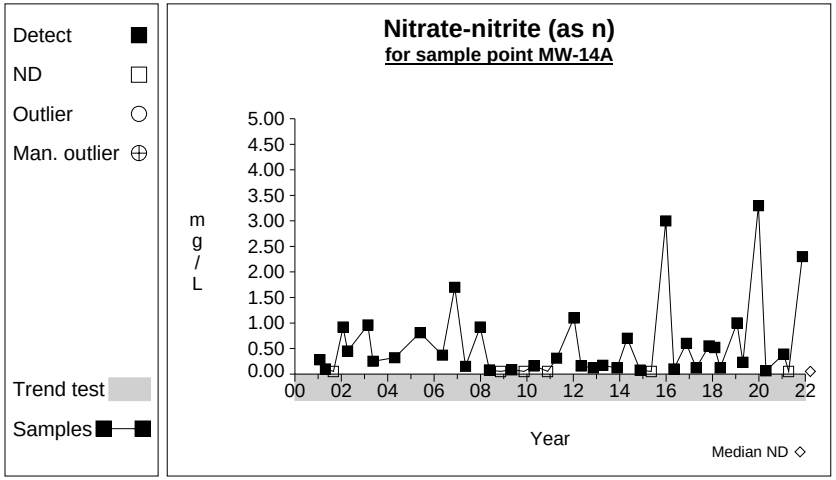


Graph 99

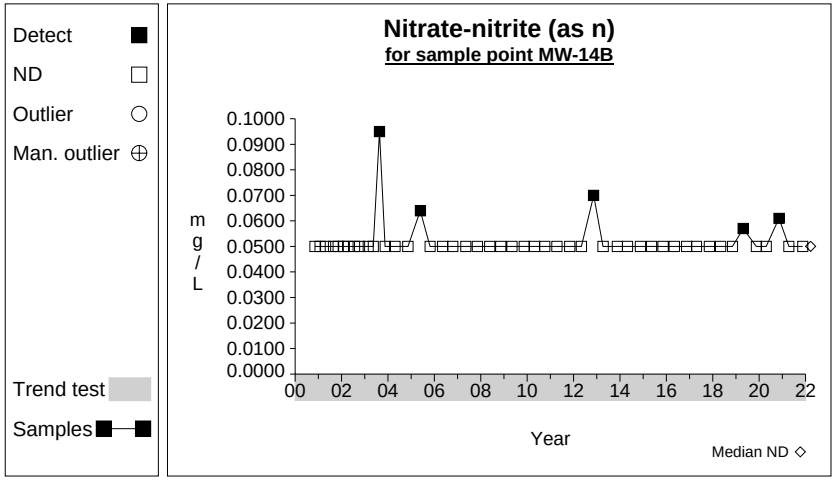


Graph 100

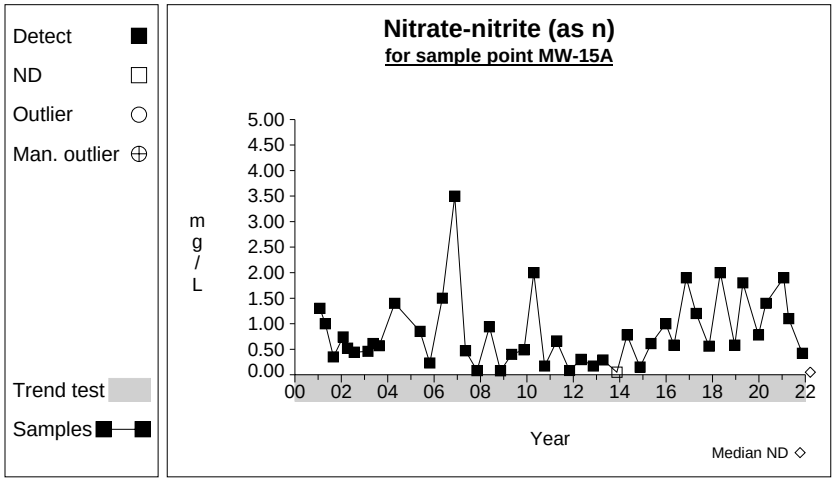
Time Series



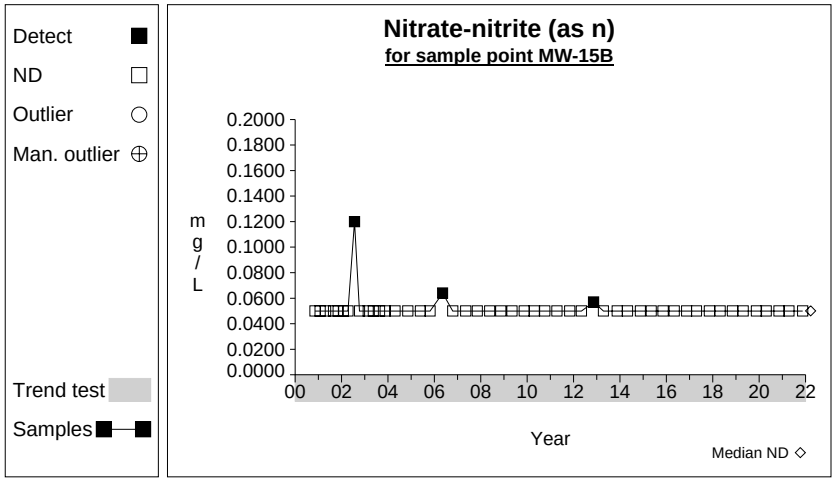
Graph 101



Graph 102

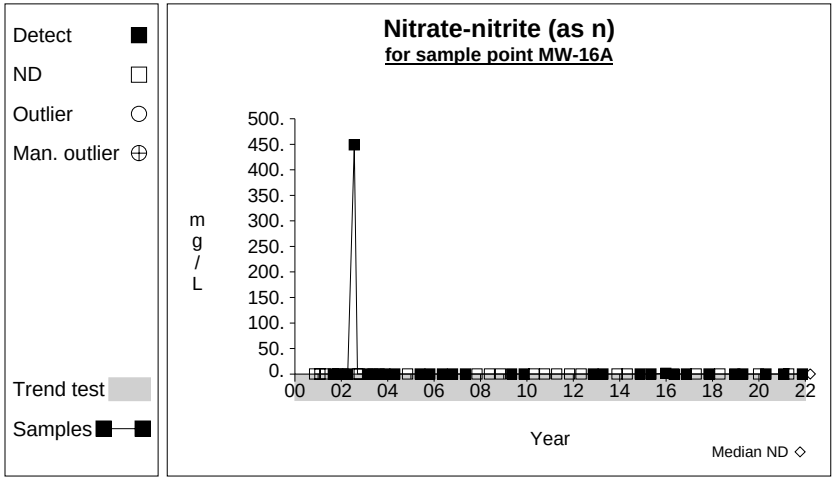


Graph 103

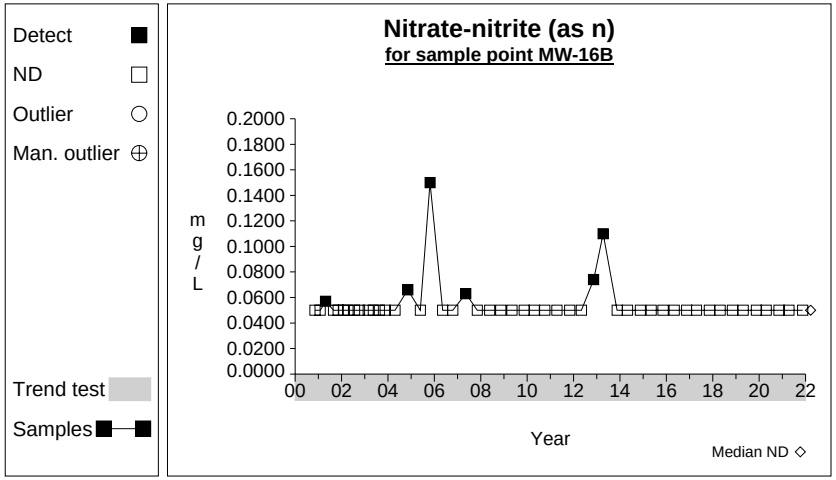


Graph 104

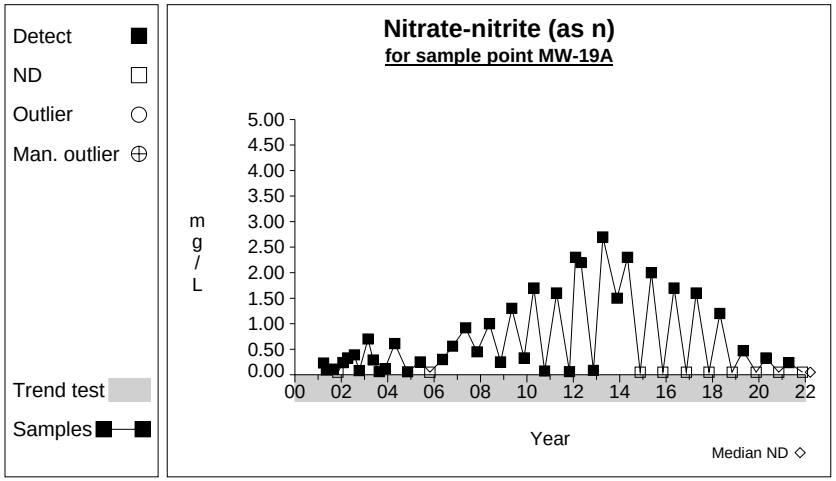
Time Series



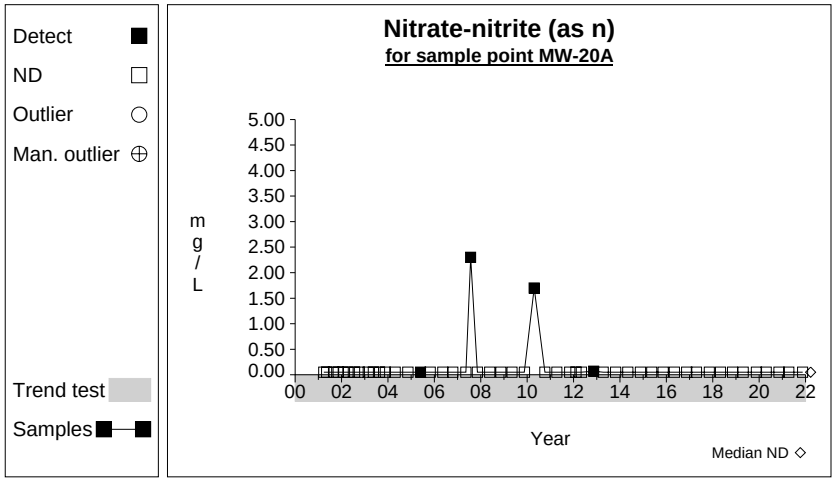
Graph 105



Graph 106

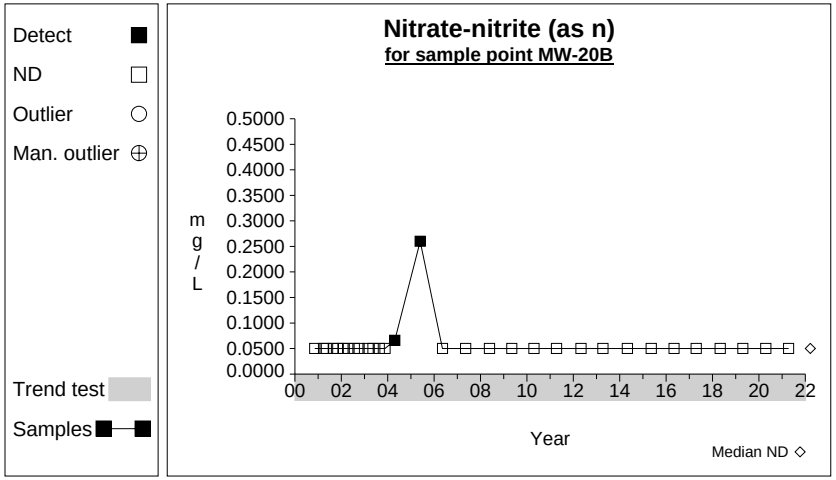


Graph 107

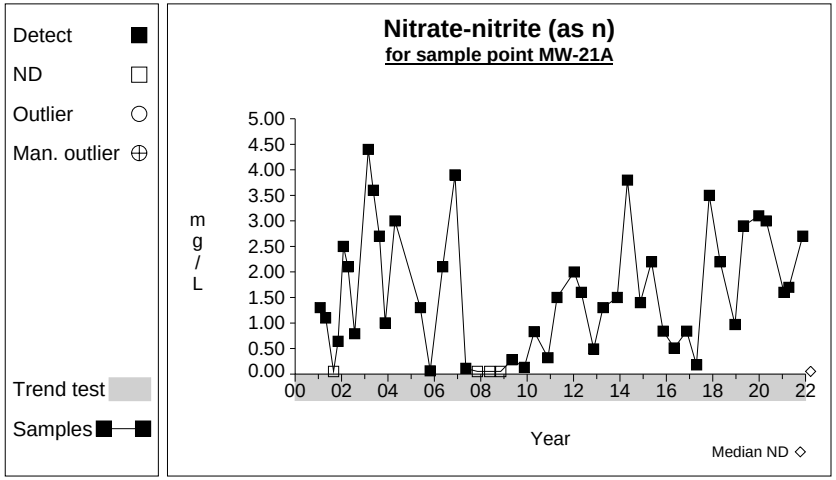


Graph 108

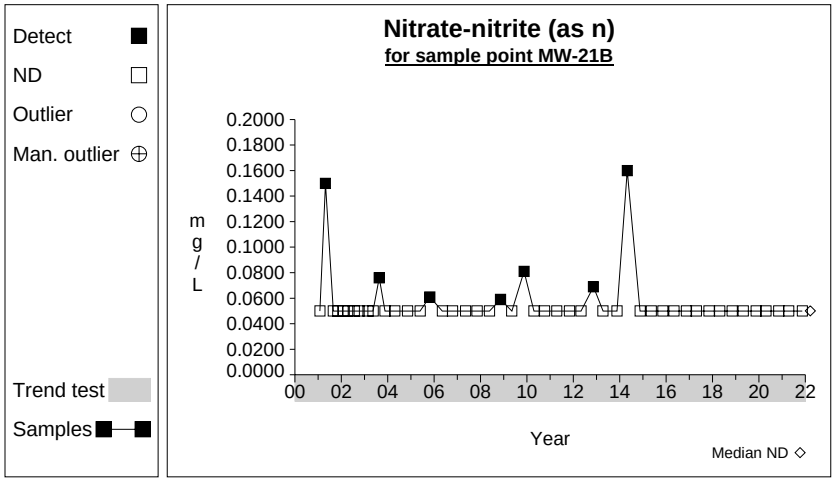
Time Series



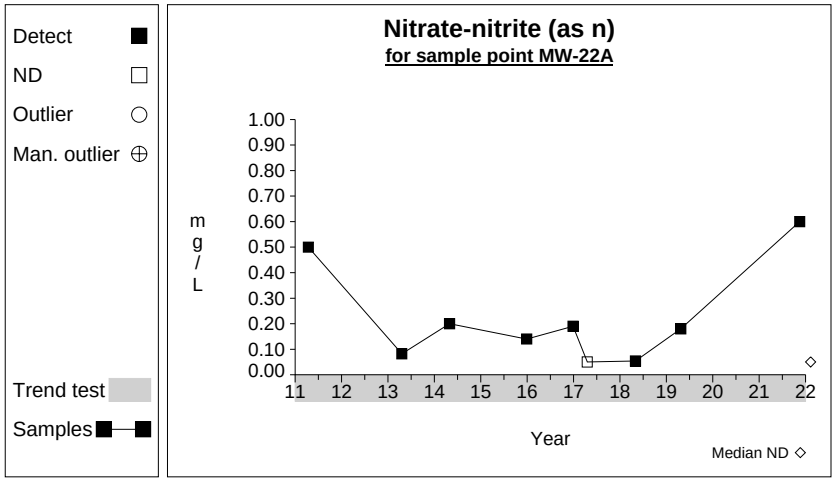
Graph 109



Graph 110

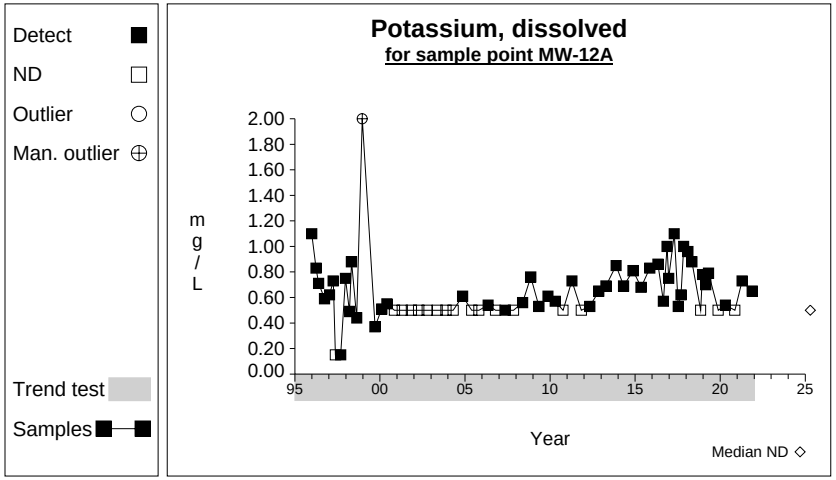


Graph 111

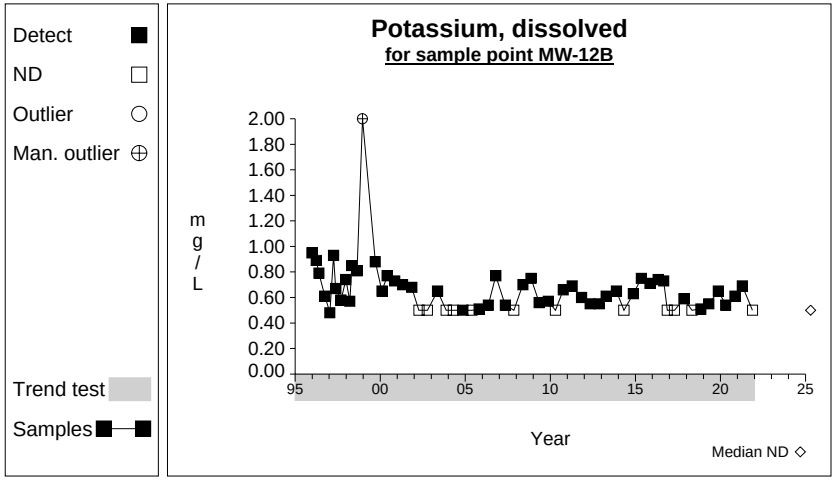


Graph 112

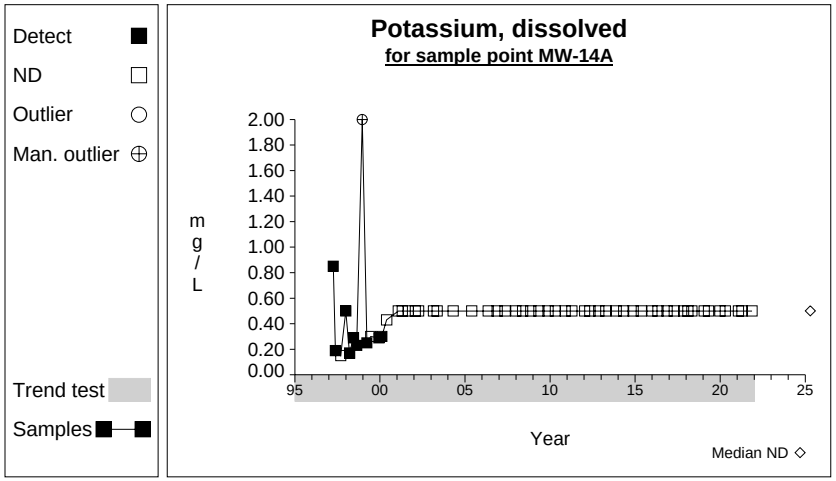
Time Series



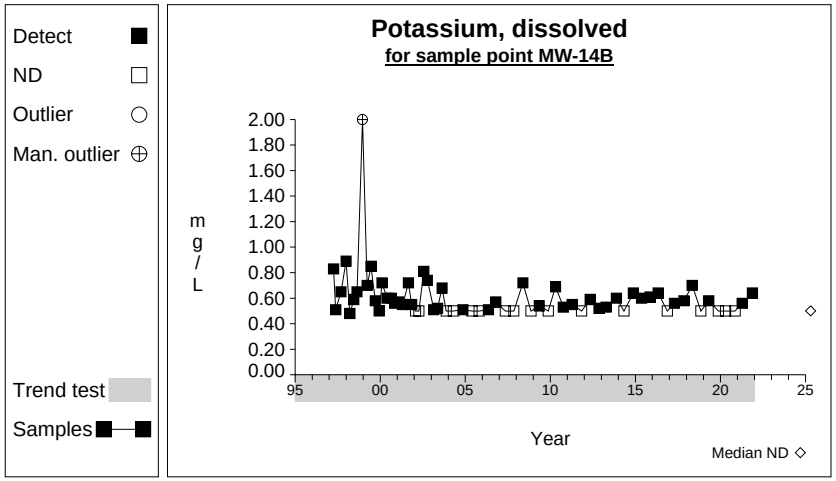
Graph 113



Graph 114

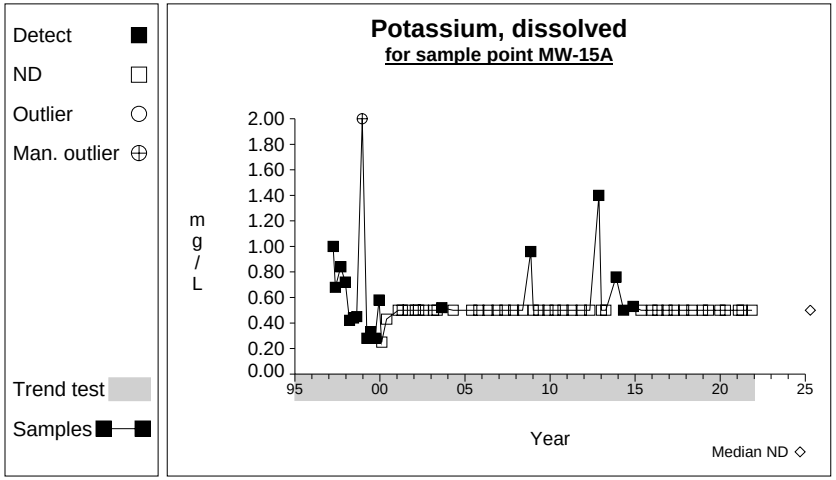


Graph 115

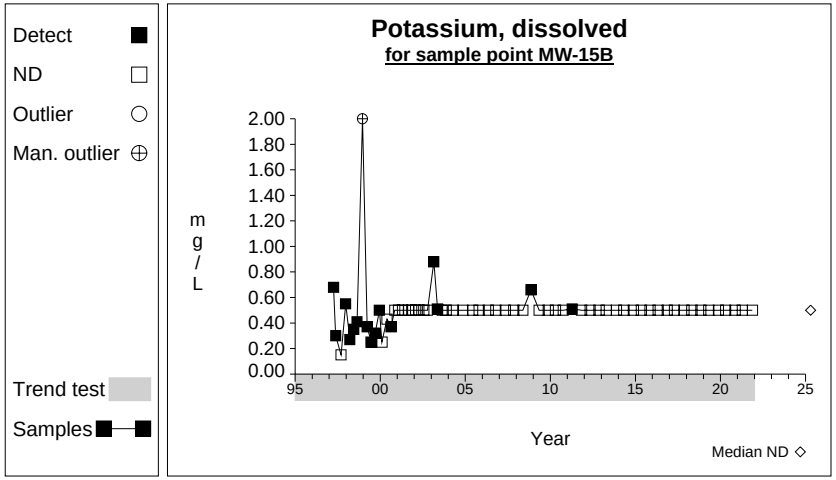


Graph 116

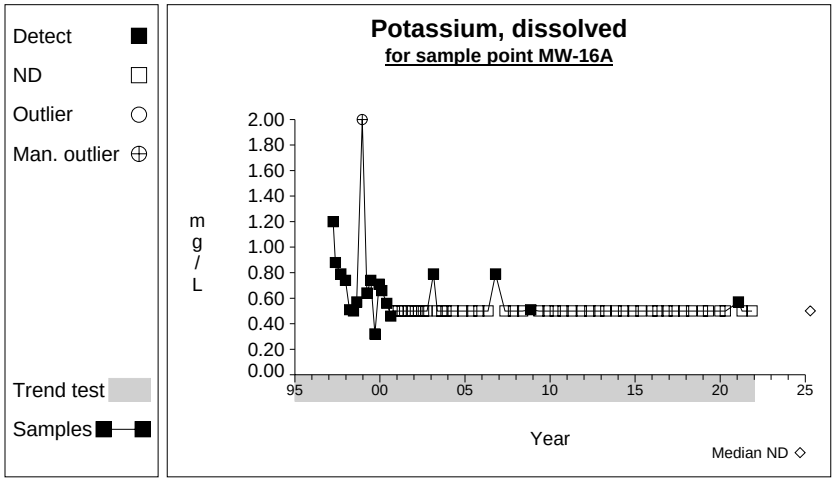
Time Series



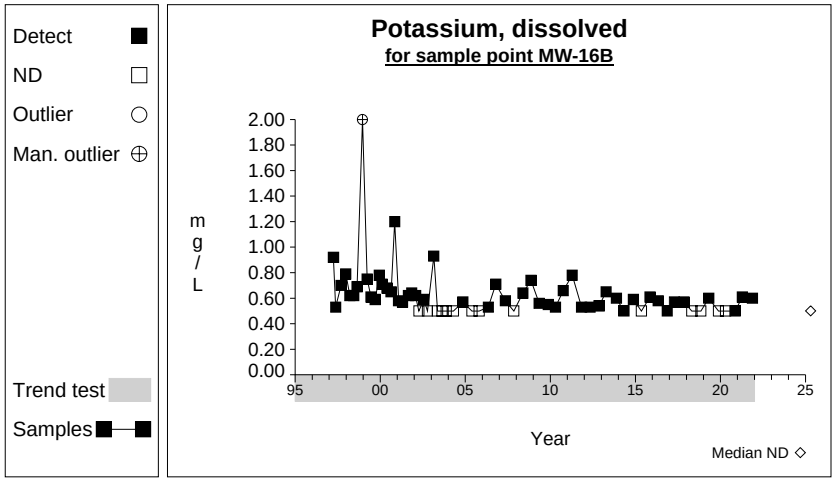
Graph 117



Graph 118

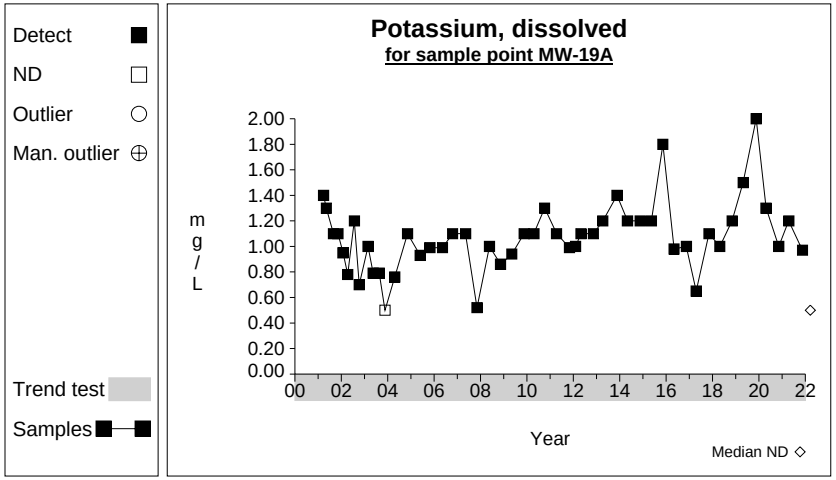


Graph 119

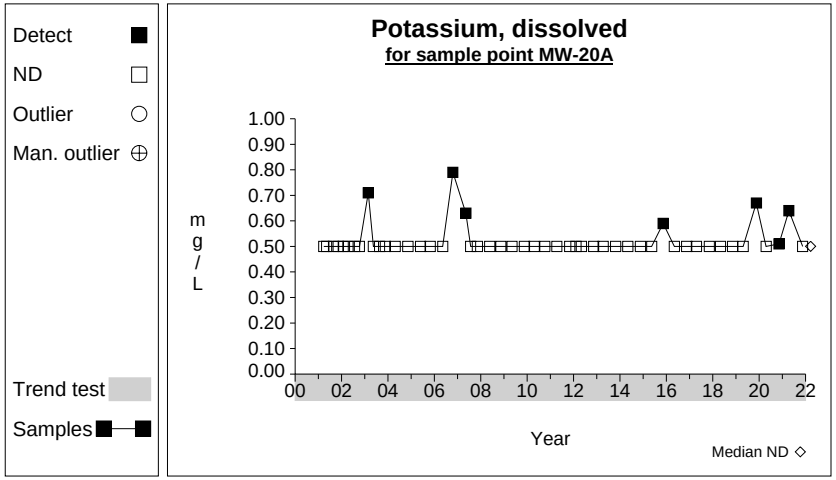


Graph 120

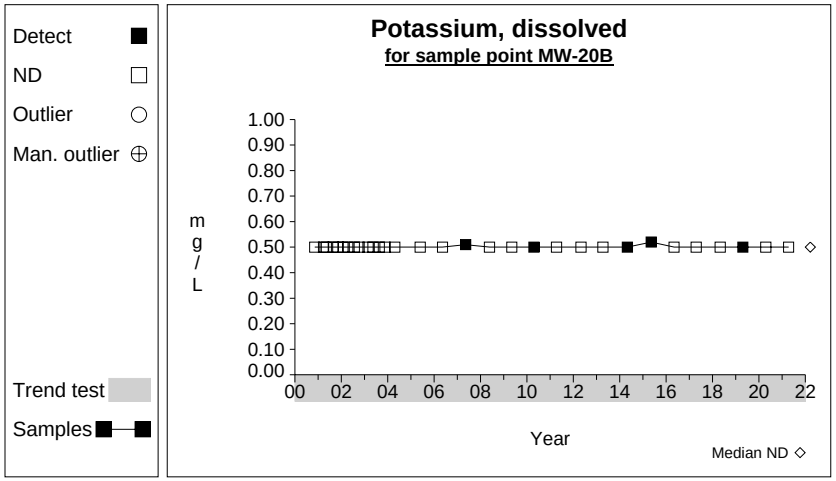
Time Series



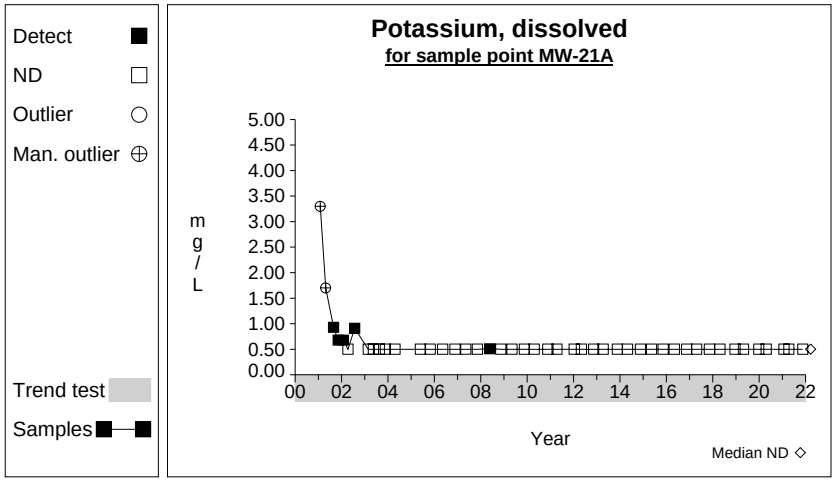
Graph 121



Graph 122

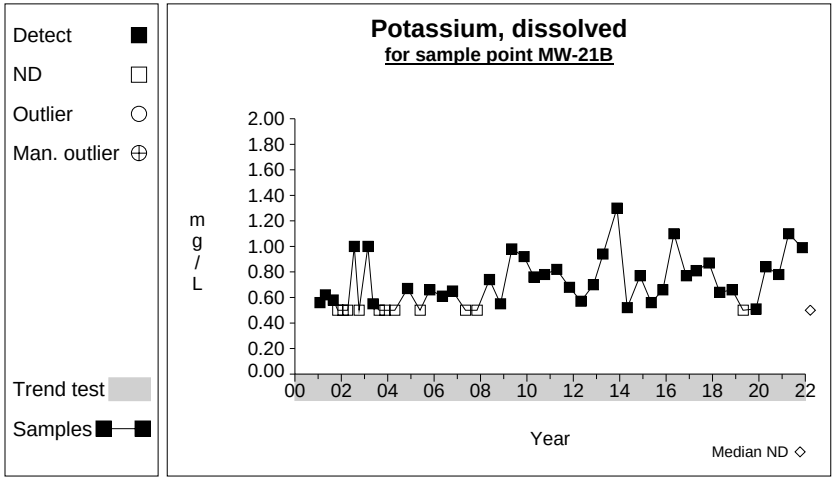


Graph 123

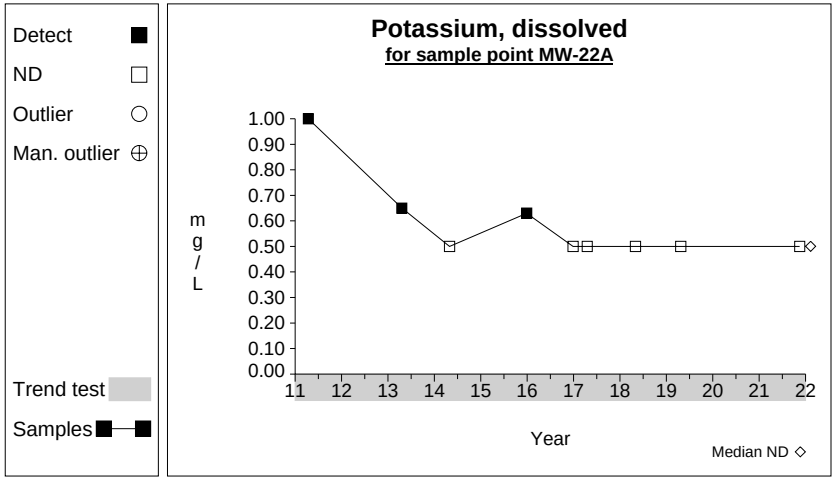


Graph 124

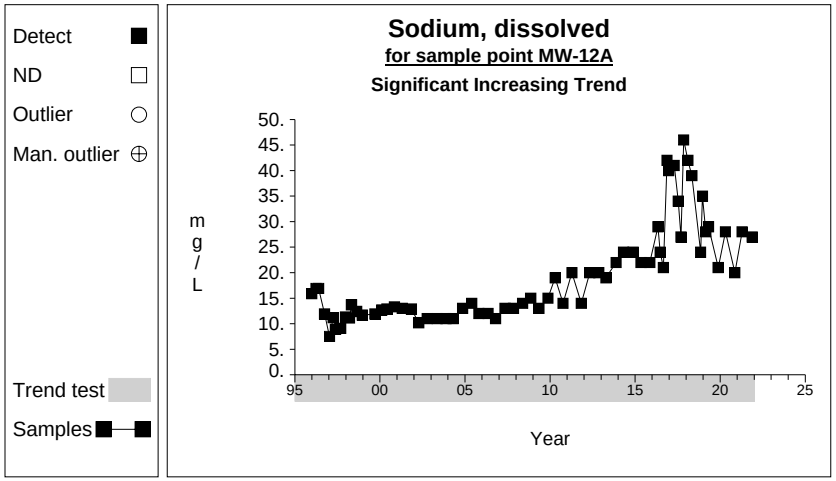
Time Series



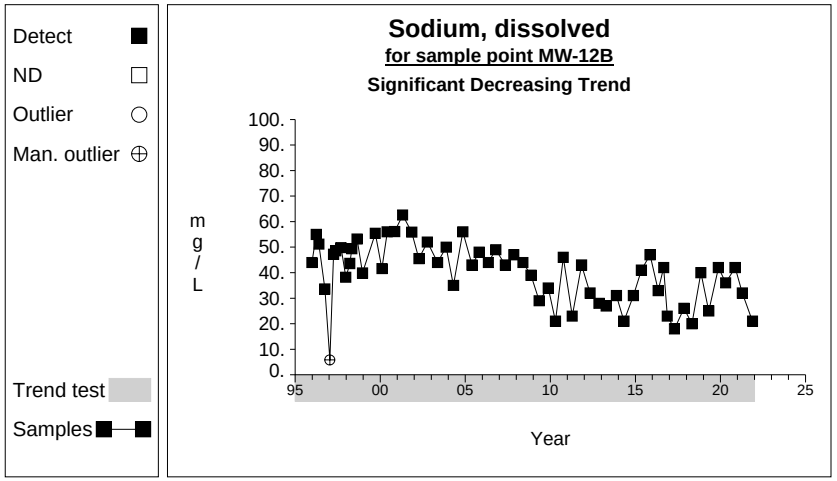
Graph 125



Graph 126

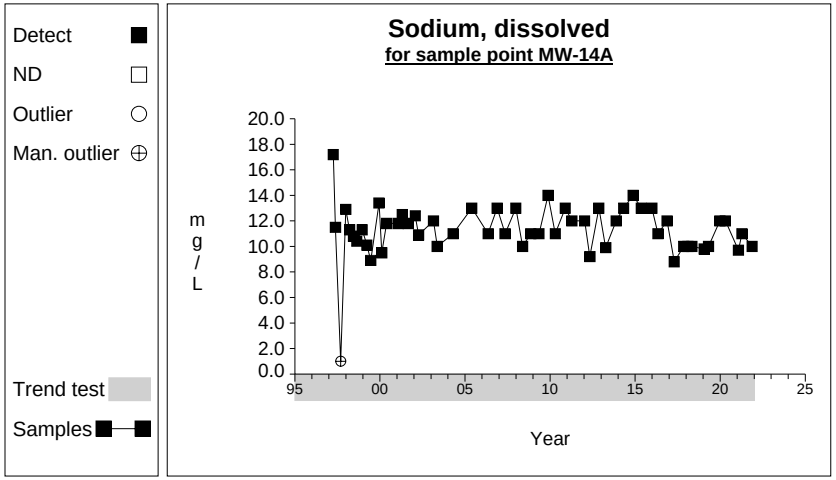


Graph 127

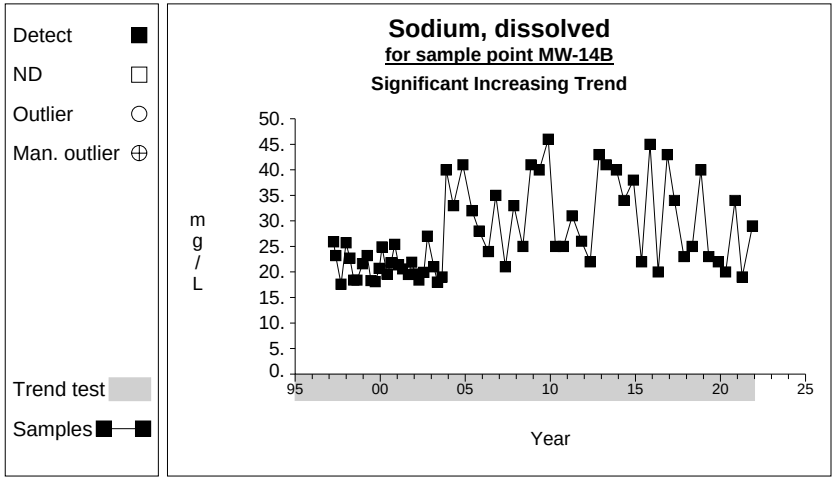


Graph 128

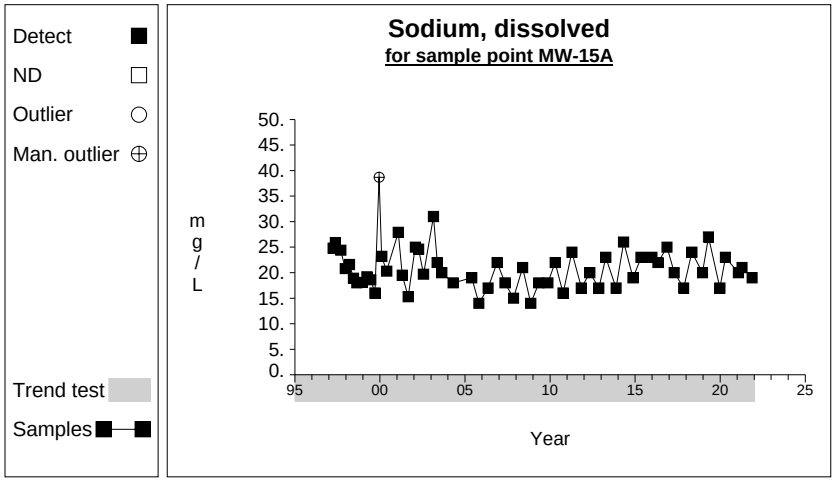
Time Series



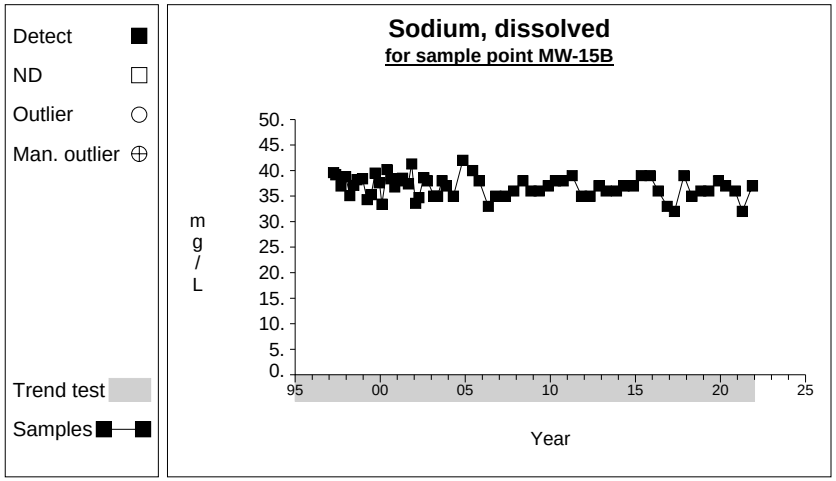
Graph 129



Graph 130

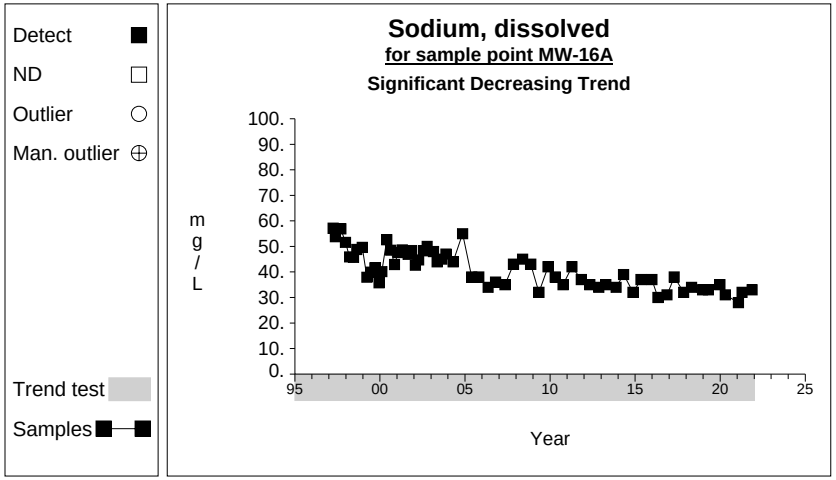


Graph 131



Graph 132

Time Series



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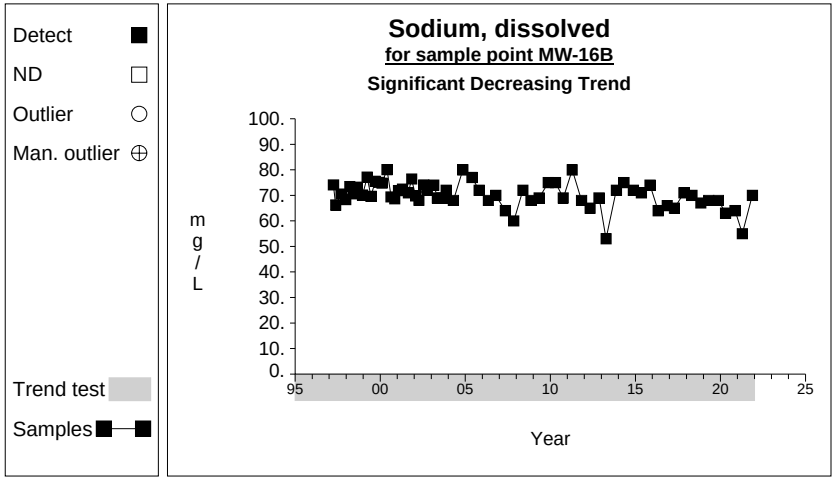
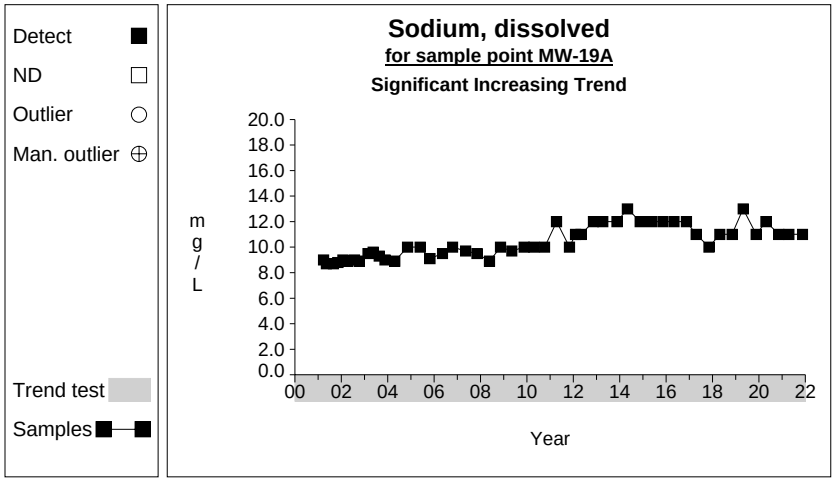


Graph 134



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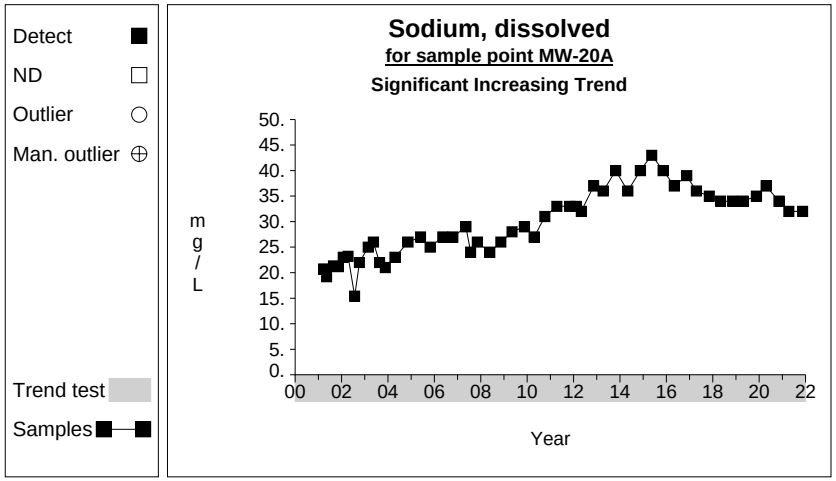
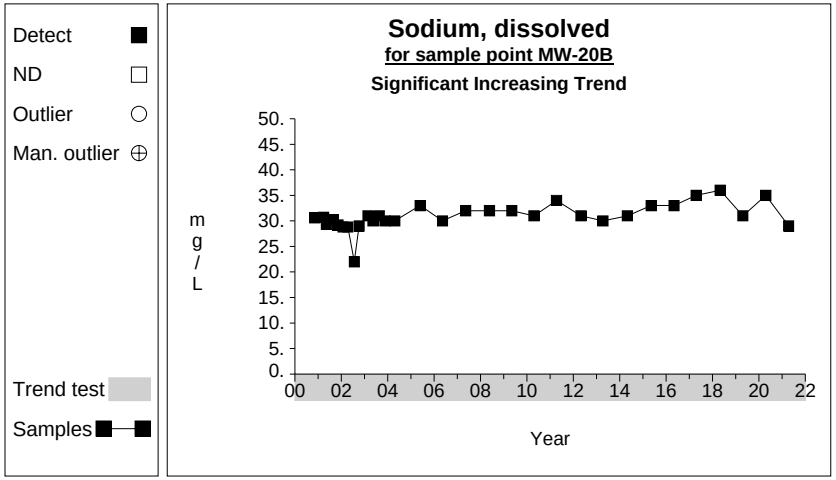


Graph 136

Time Series



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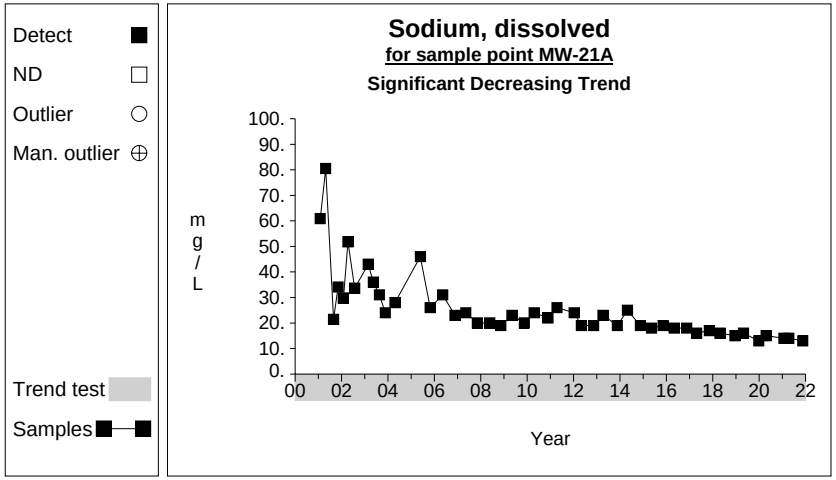

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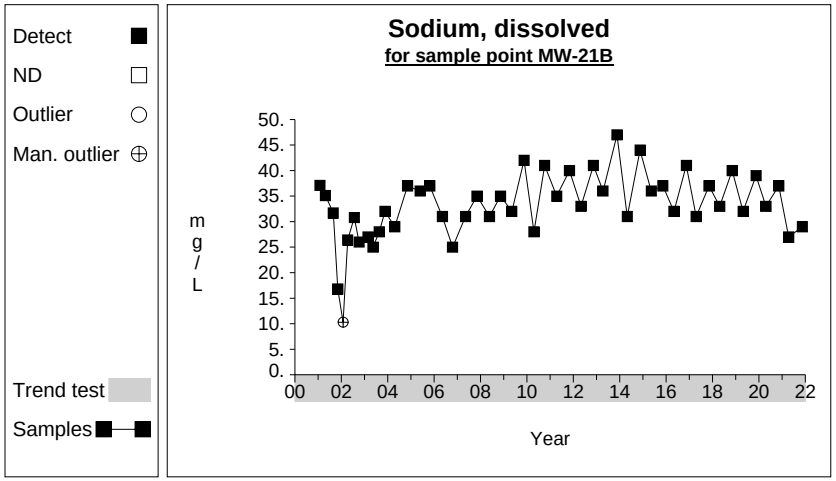

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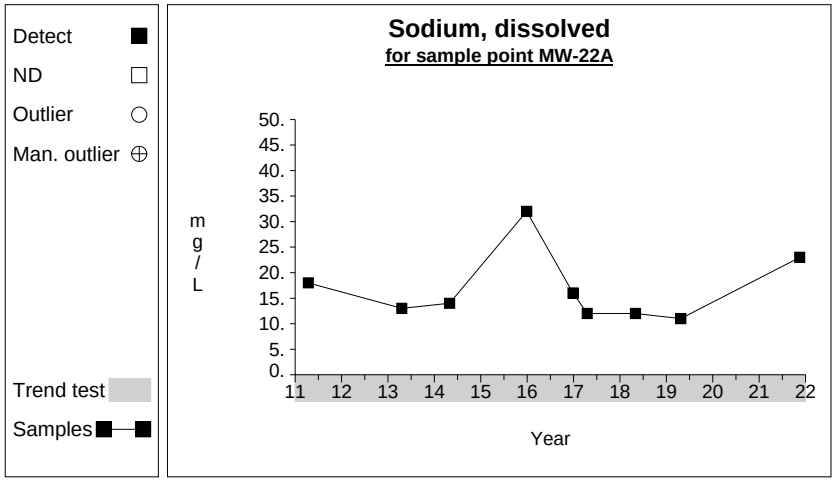
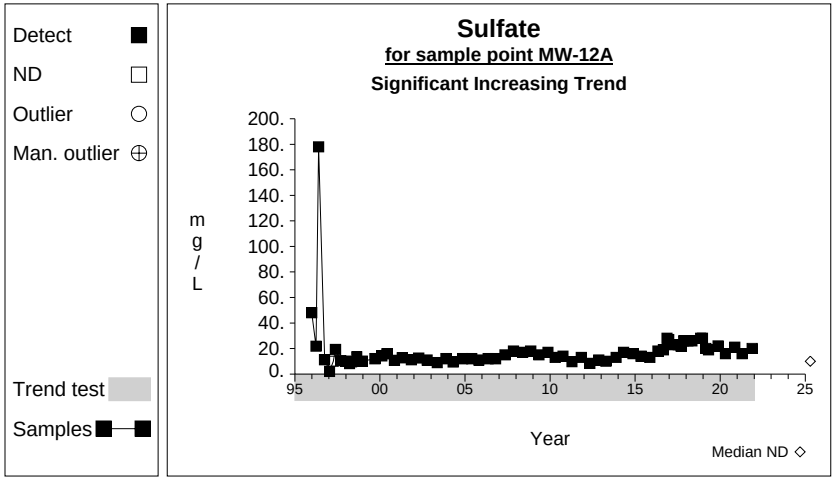


Graph 140

Time Series



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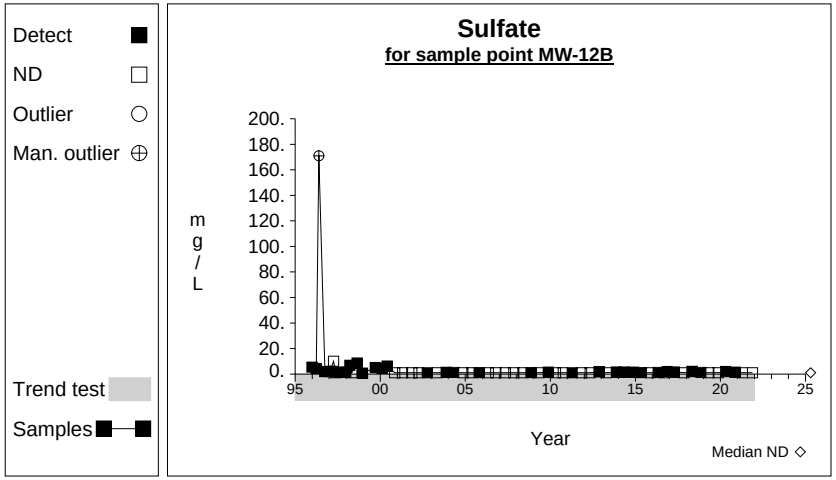

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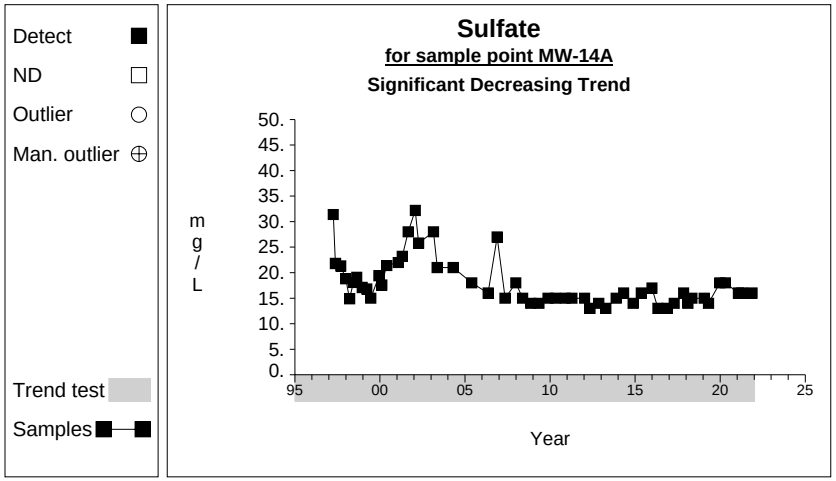

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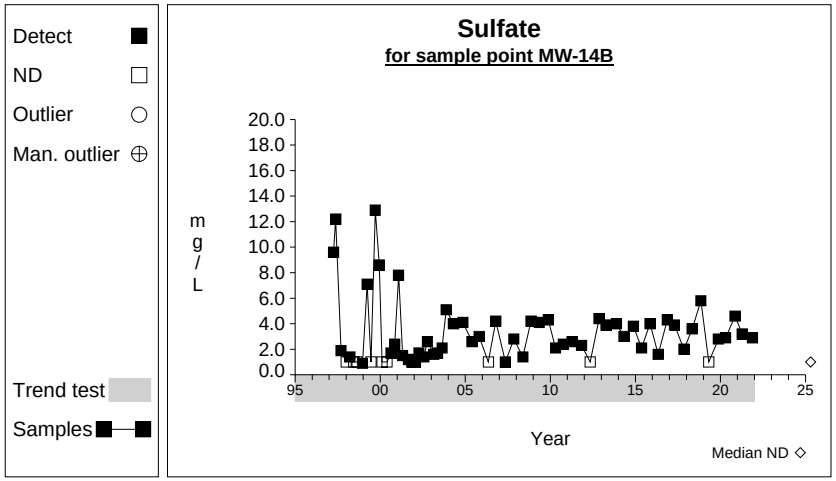

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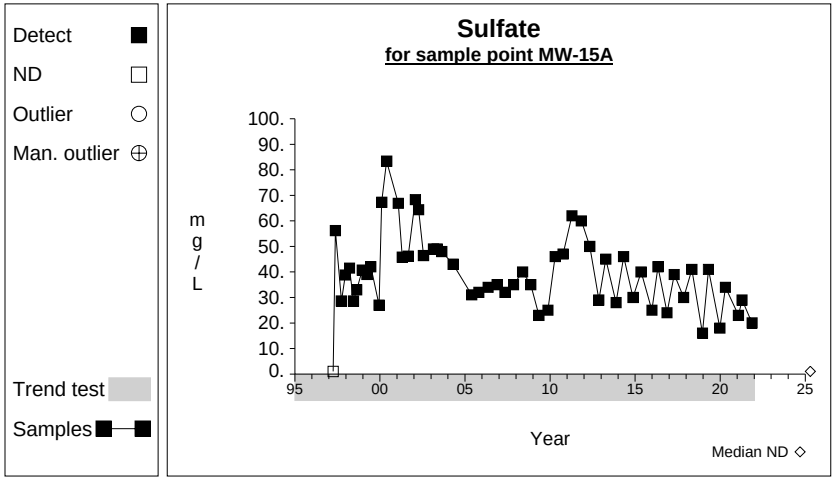
Time Series



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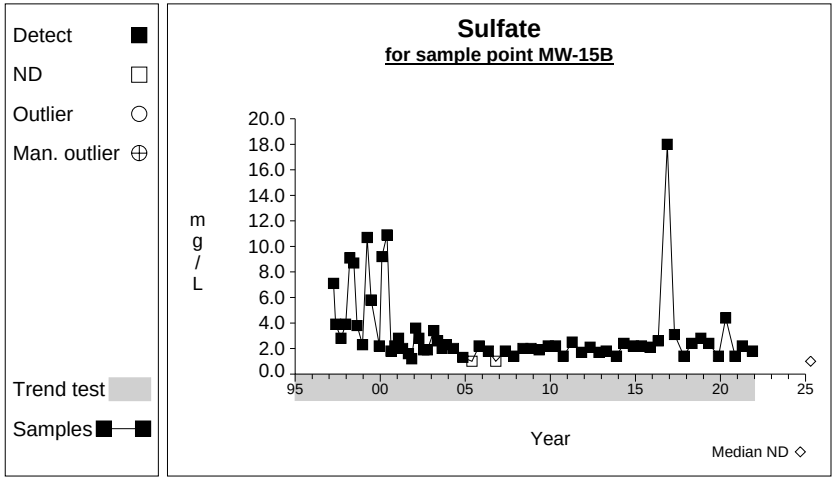

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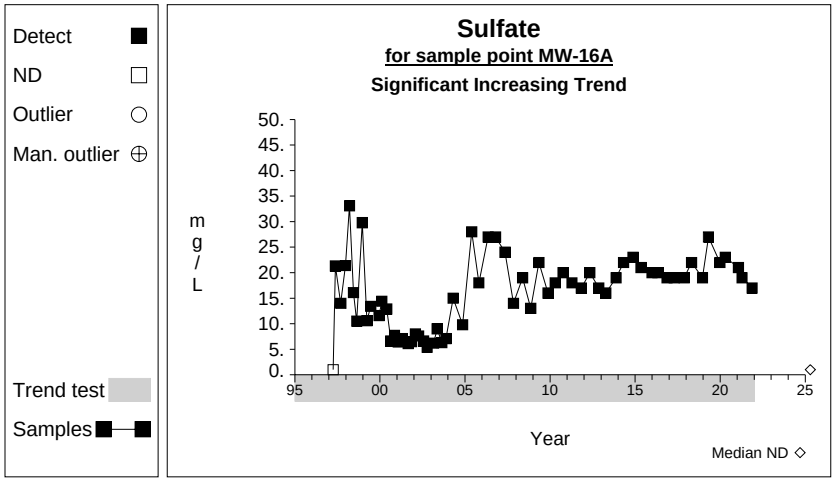

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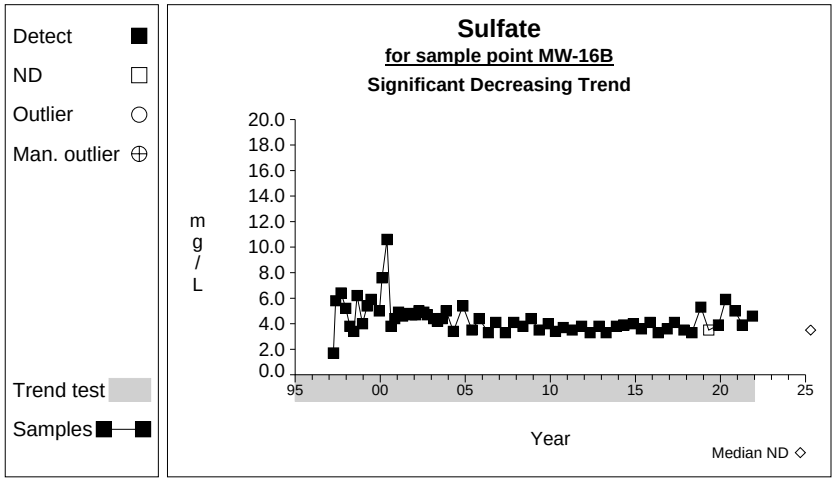
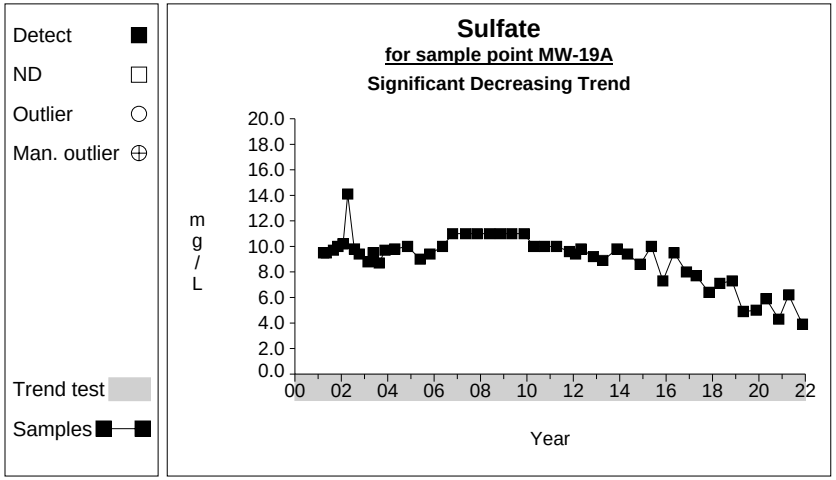
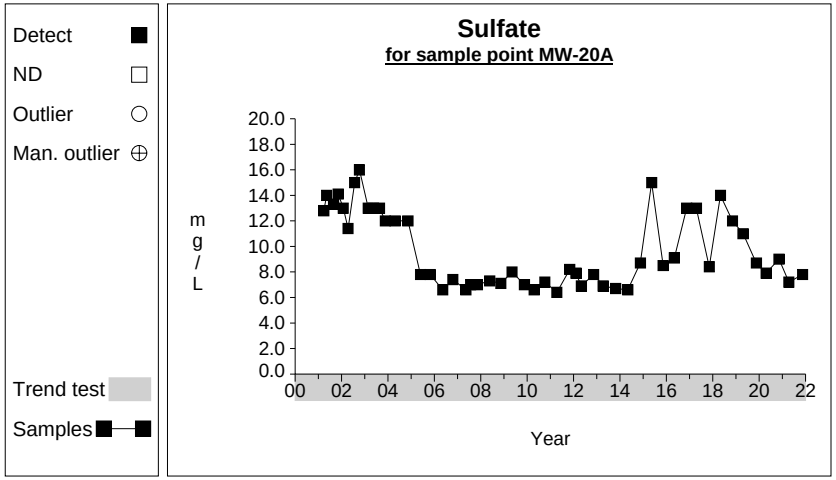


Graph 148

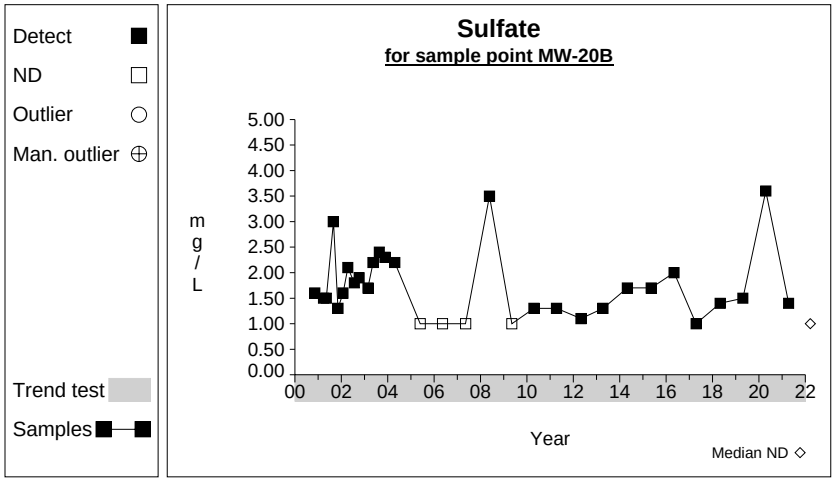
Time Series



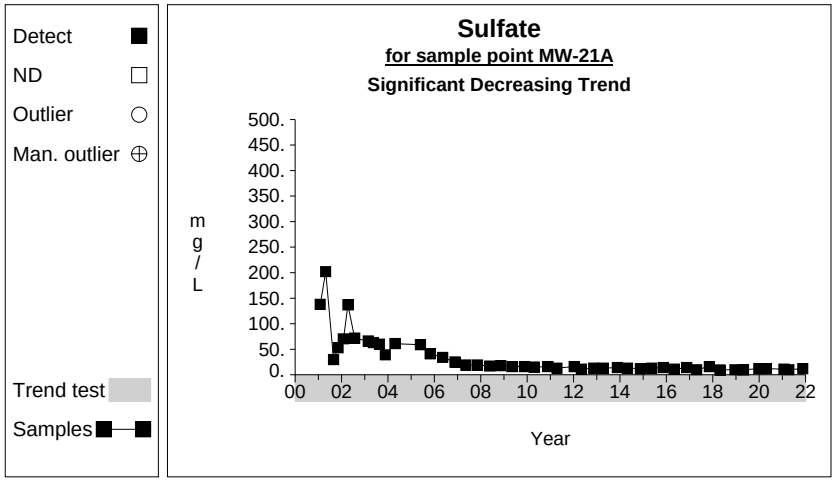
Graph 149



Graph 150

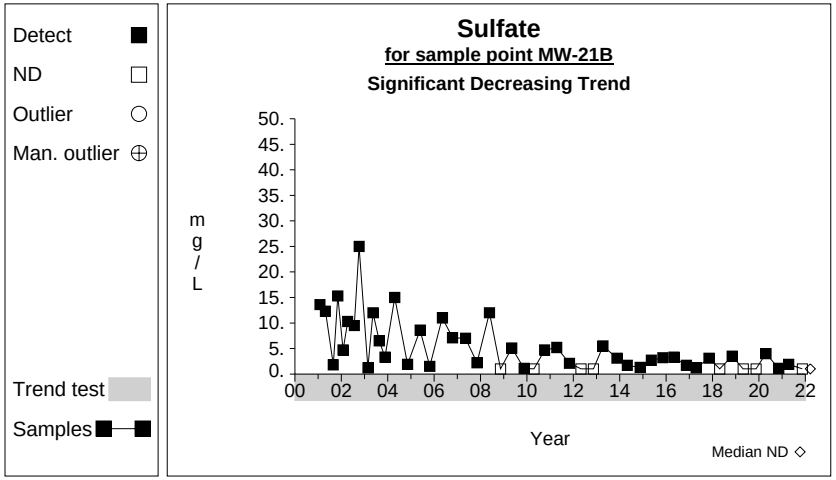


Graph 151



Graph 152

Time Series



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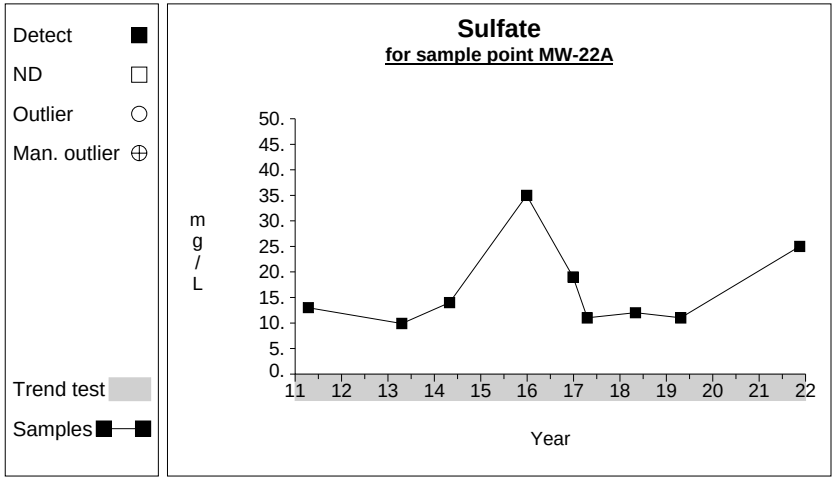

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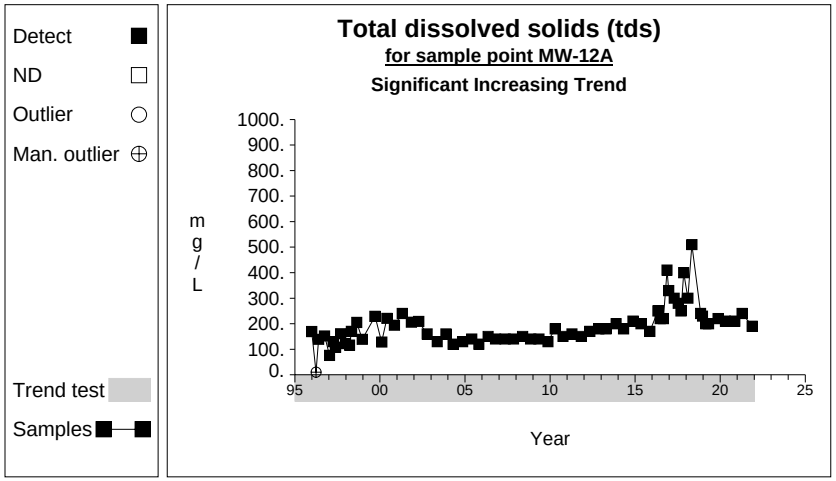

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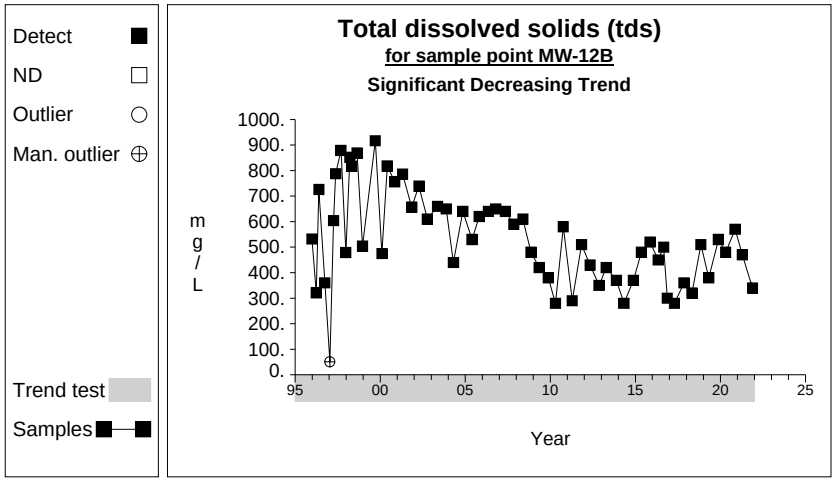
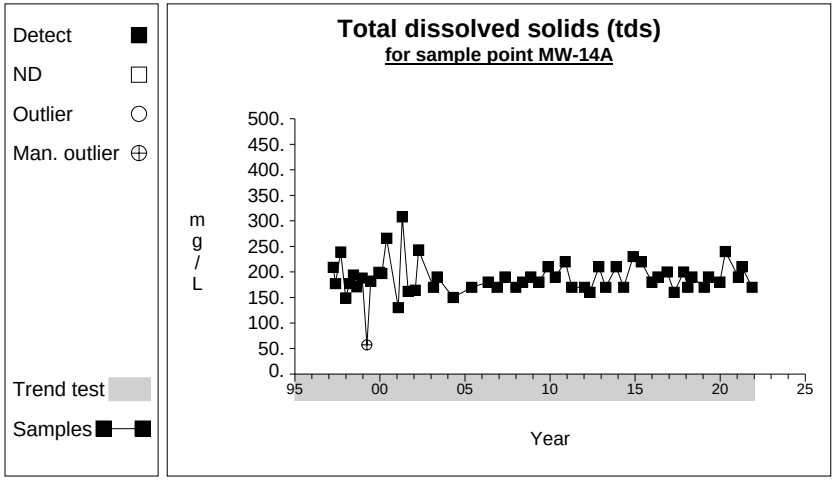


Graph 156

Time Series



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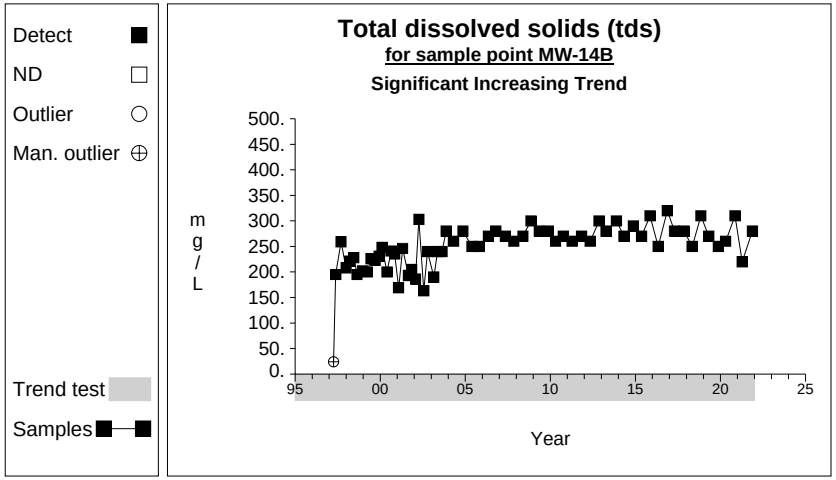

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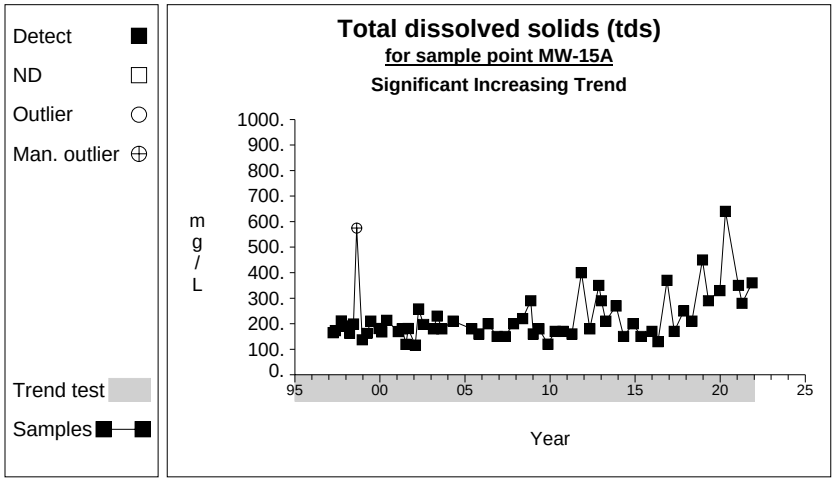

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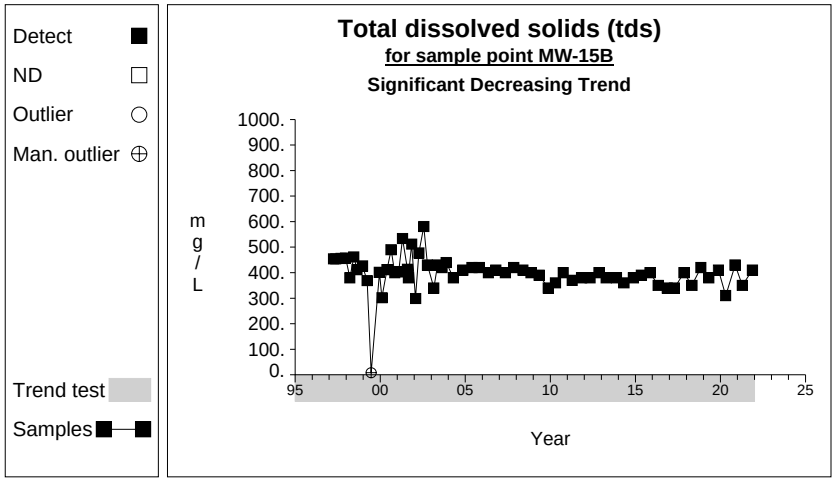

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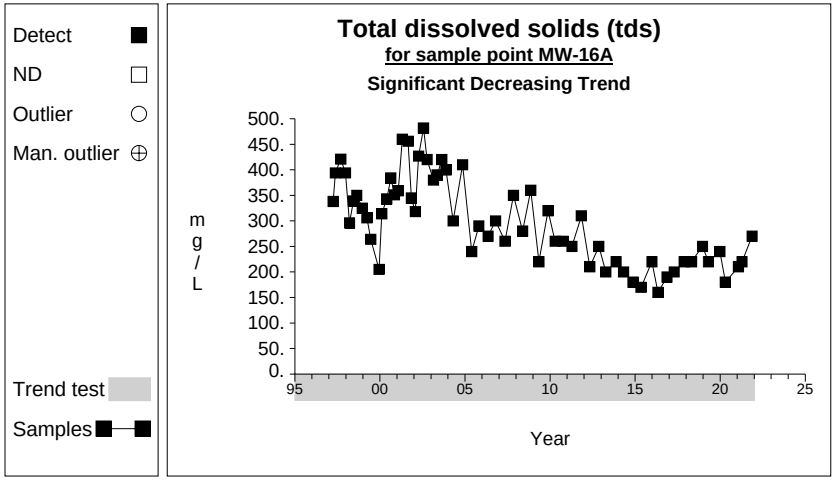
Time Series



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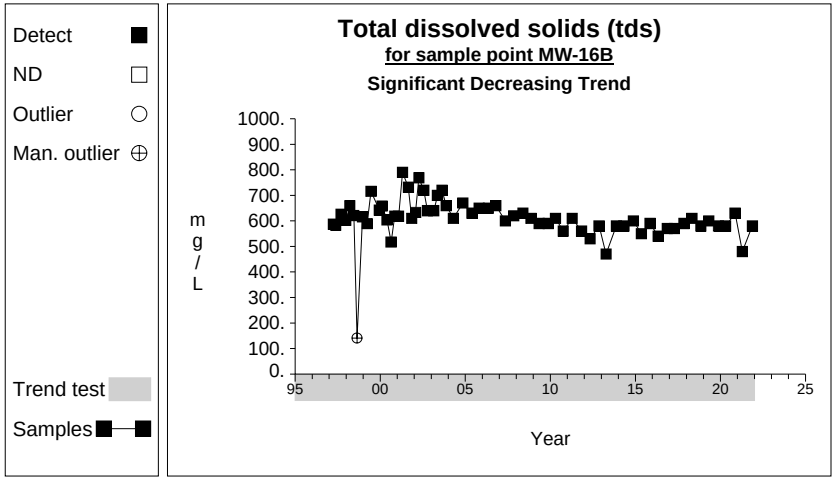

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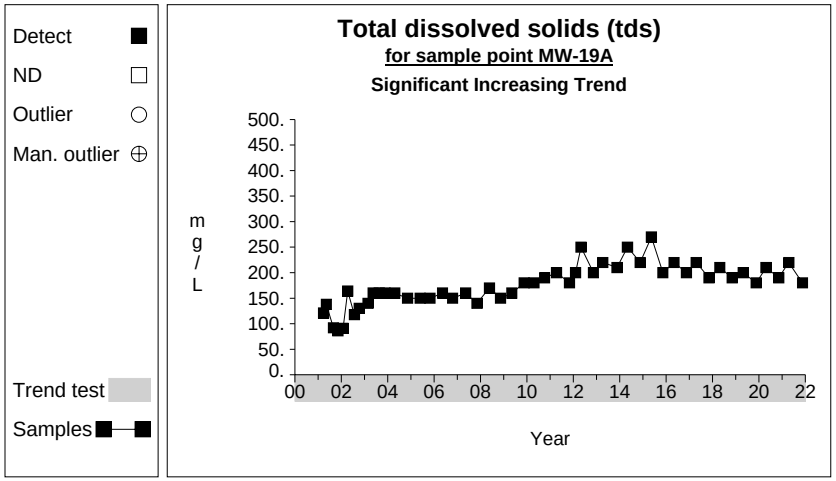

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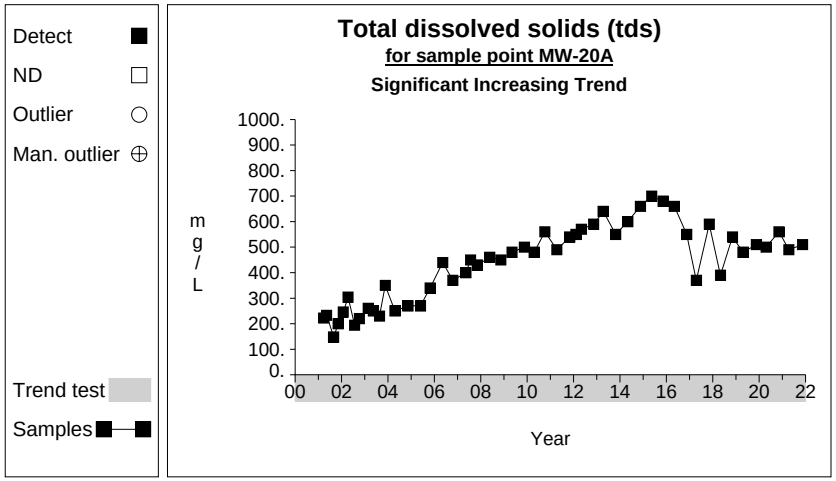
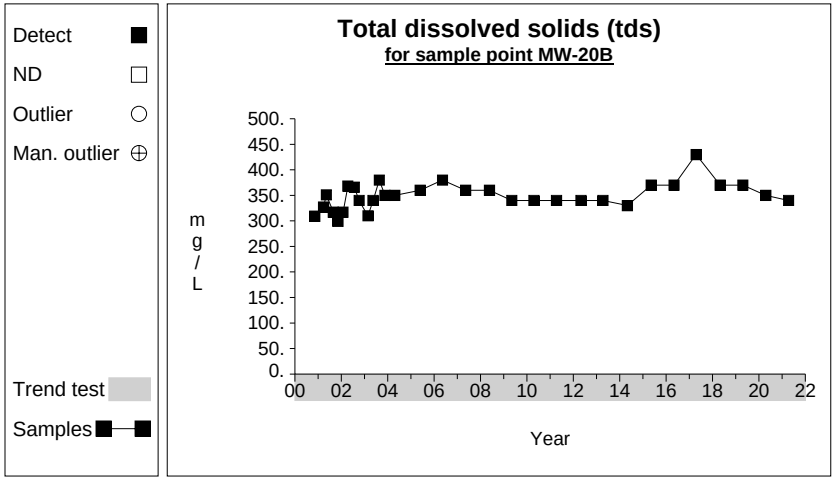


Graph 164

Time Series



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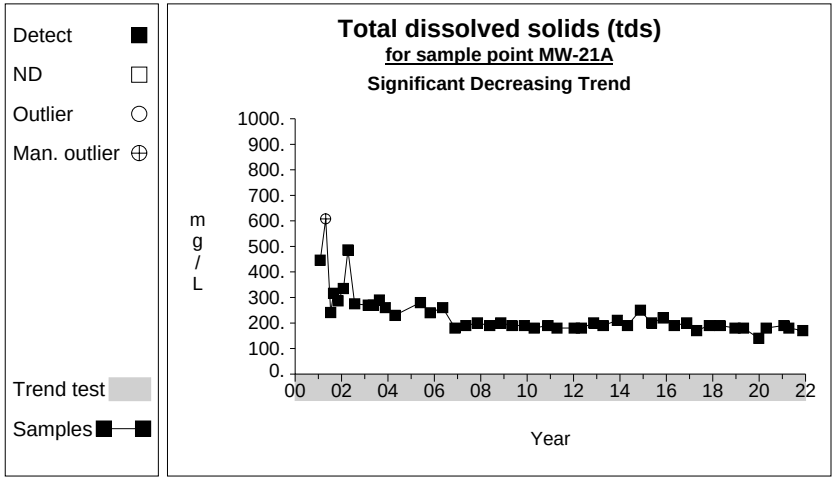

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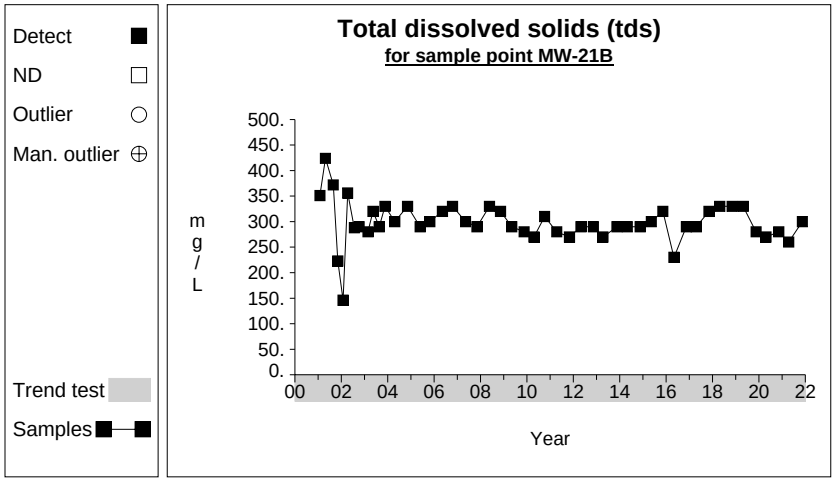

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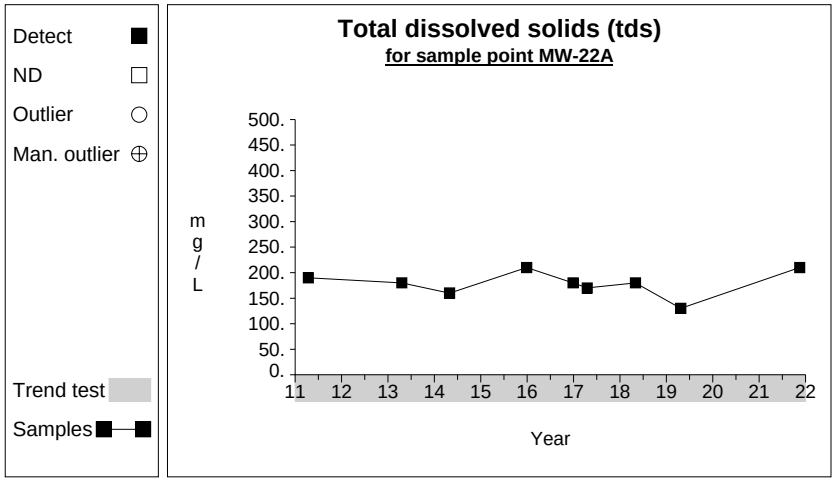
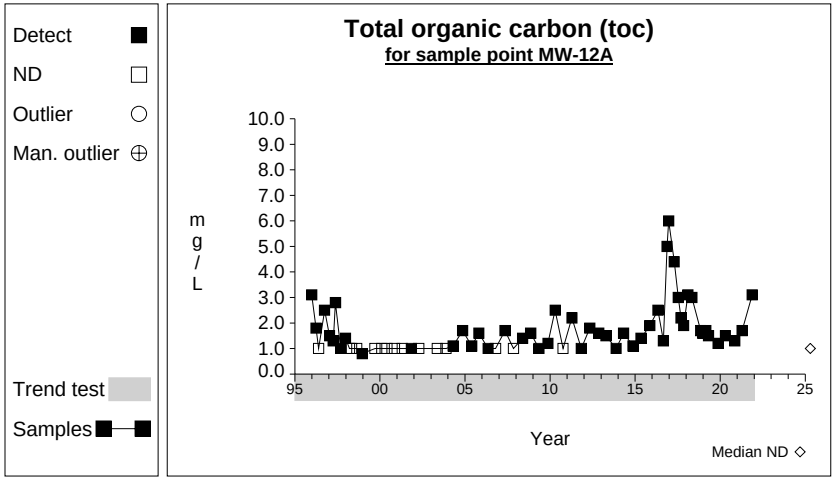


Graph 168

Time Series



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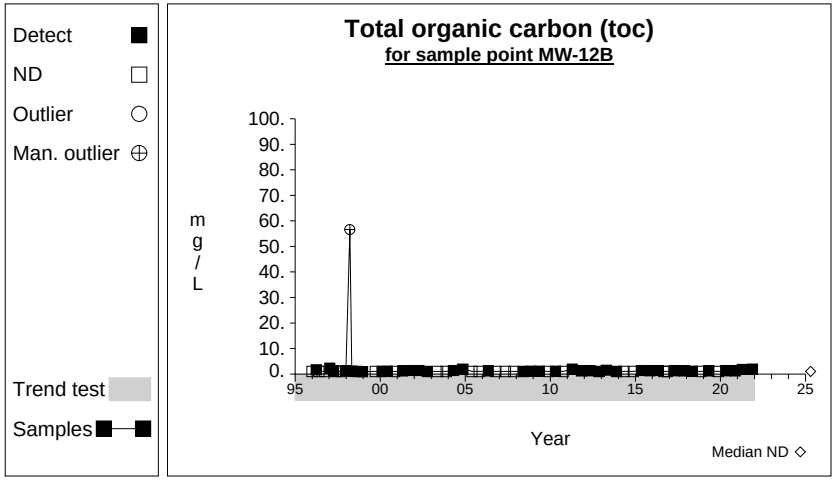

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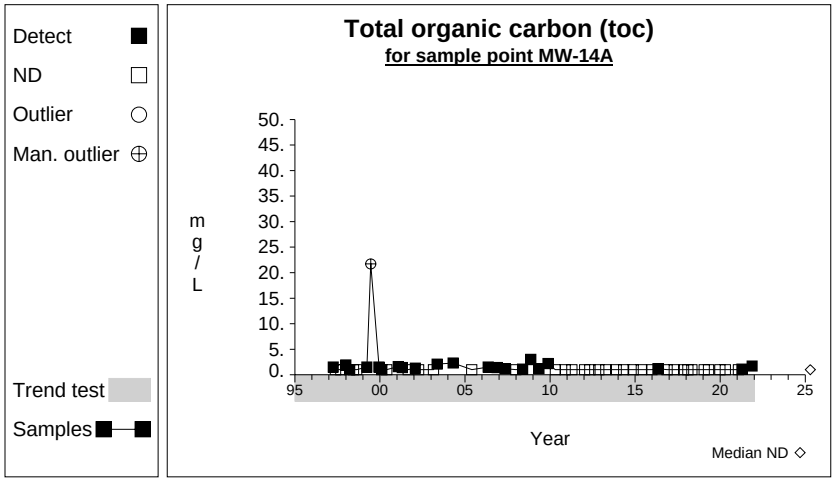

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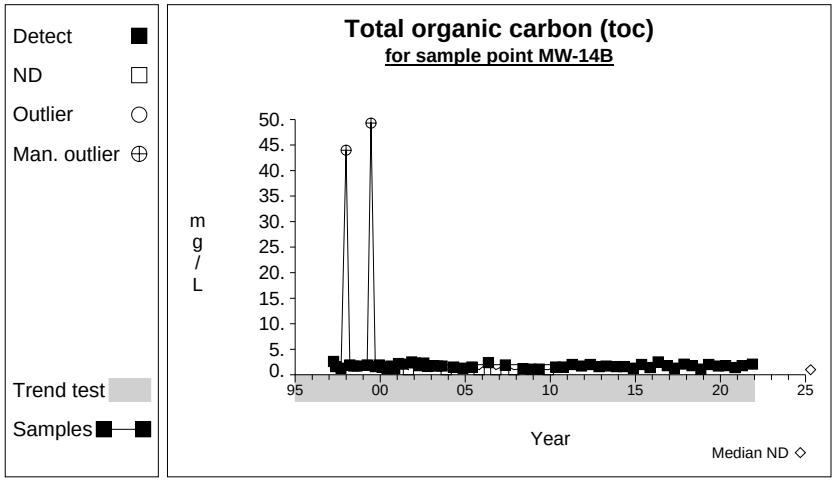
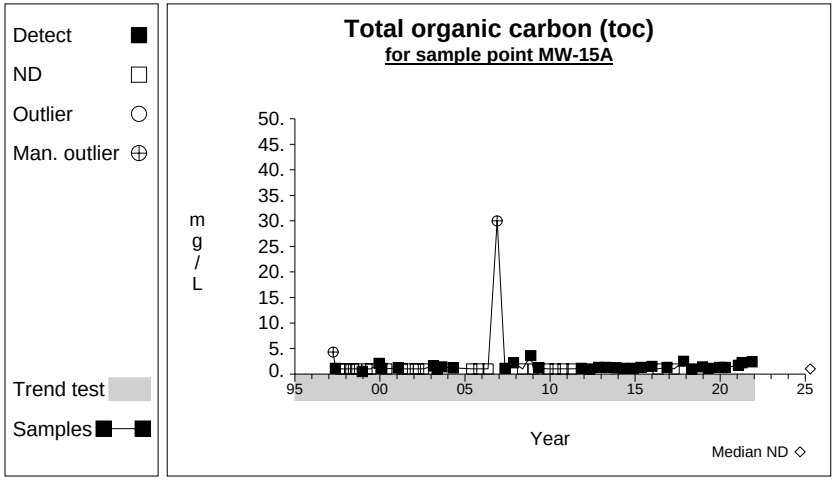


Graph 172

Time Series



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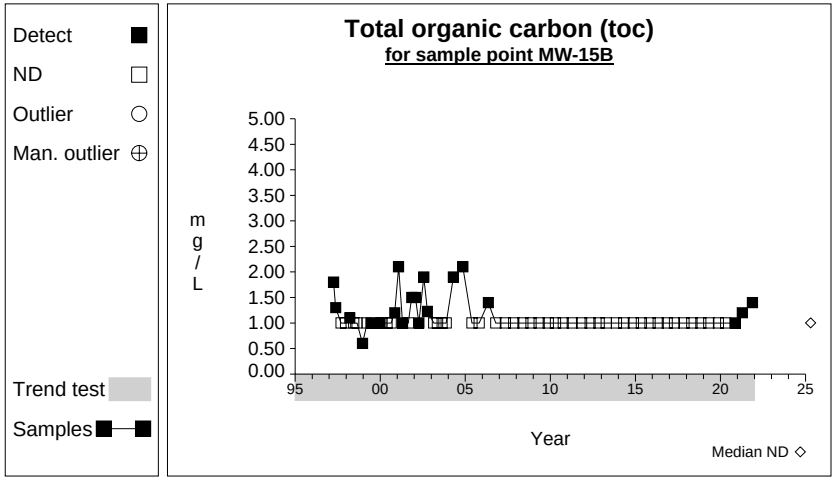

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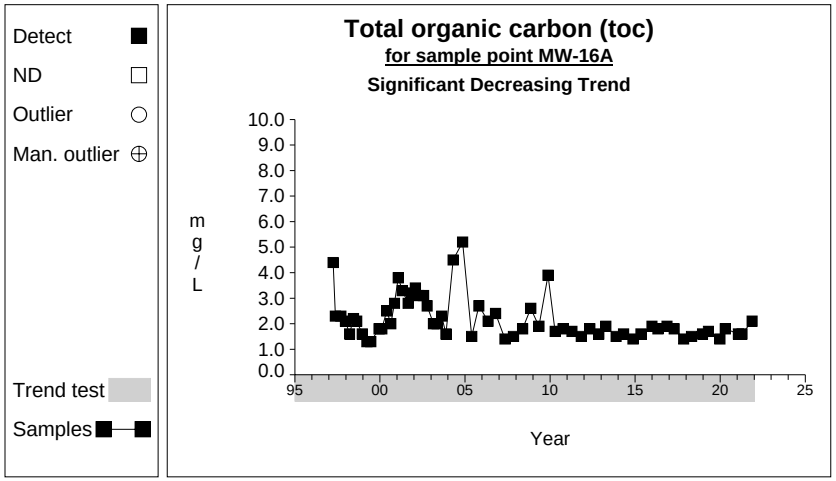

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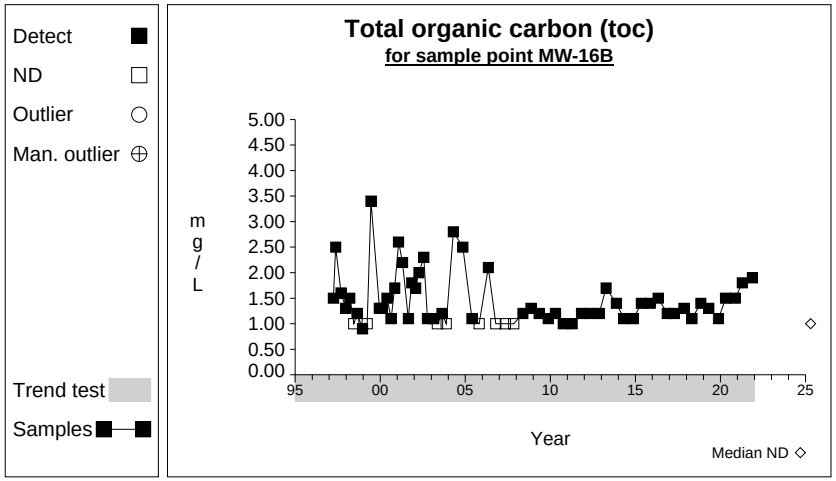
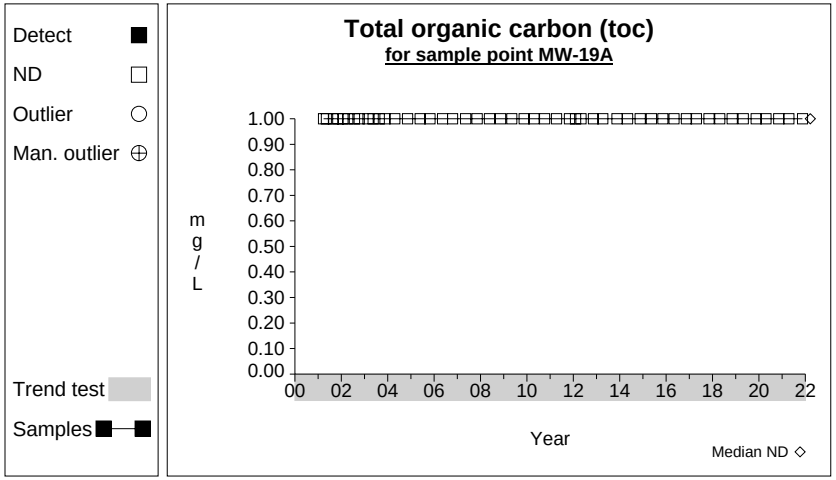


Graph 176

Time Series



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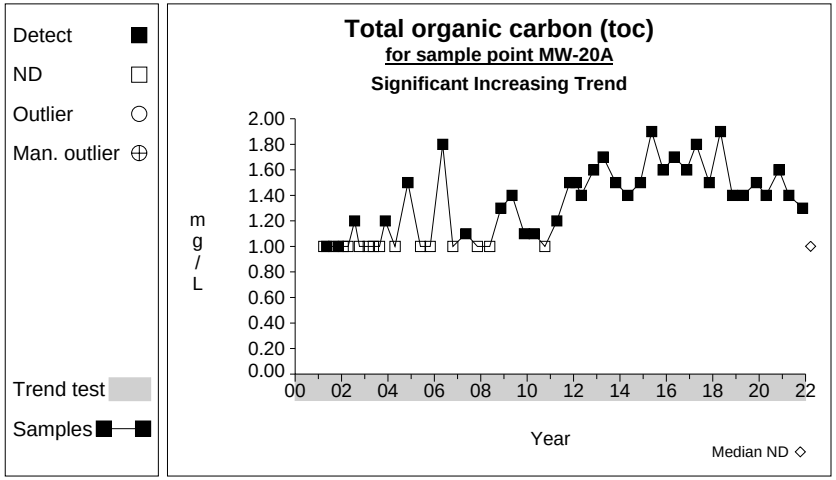
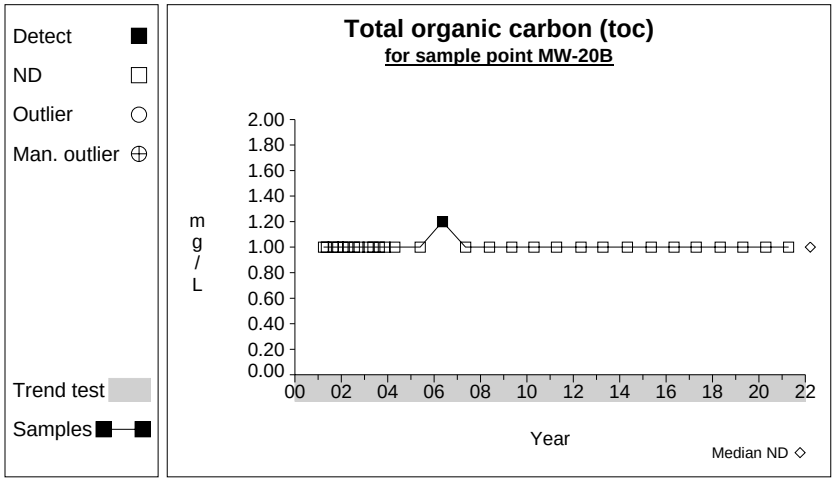


Graph 178



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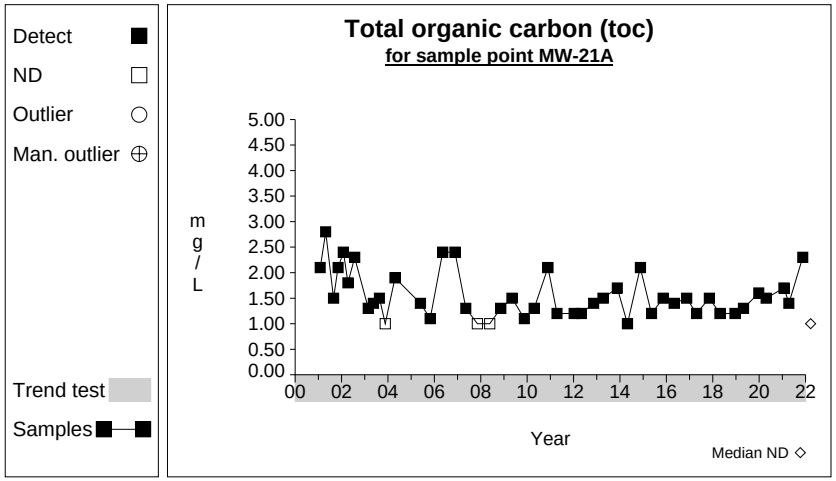
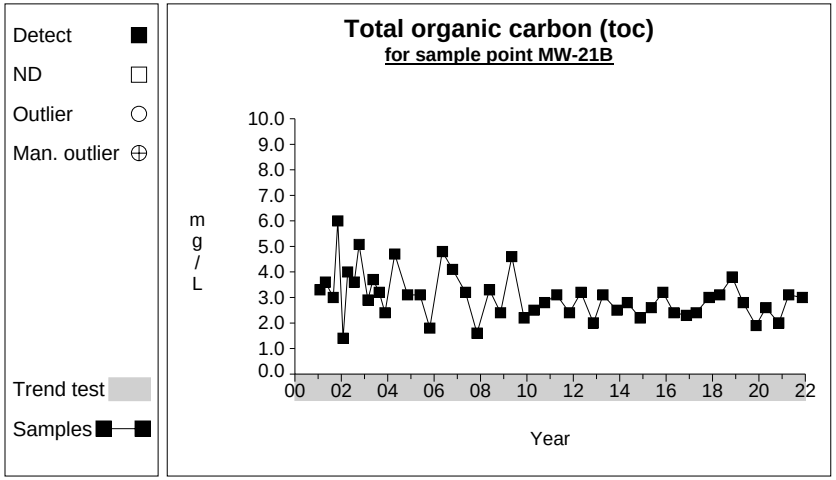


Graph 180

Time Series



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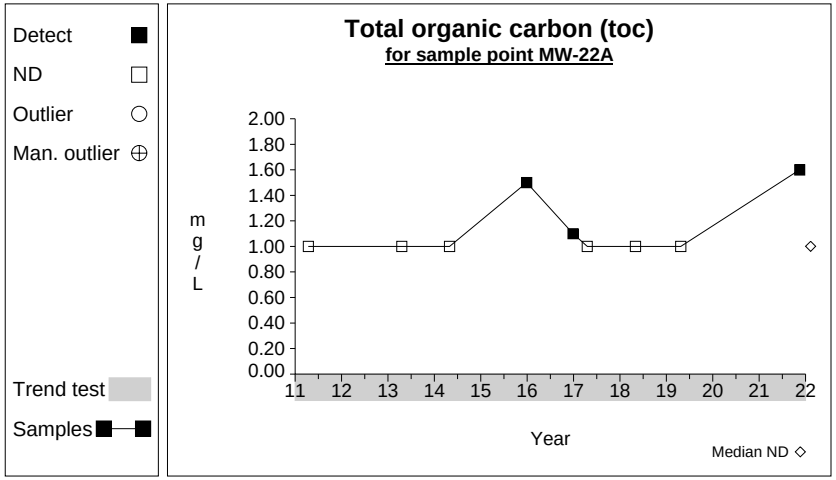


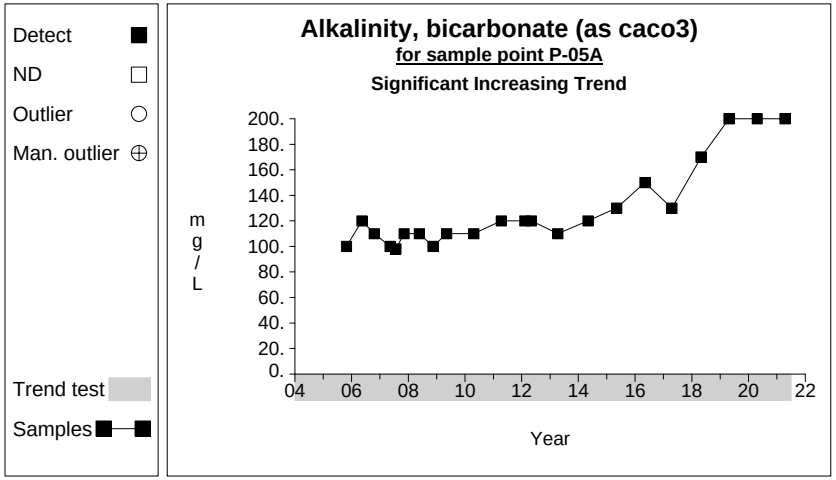
Graph 182

Poplar Tree Farm Area Supplemental Piezometers

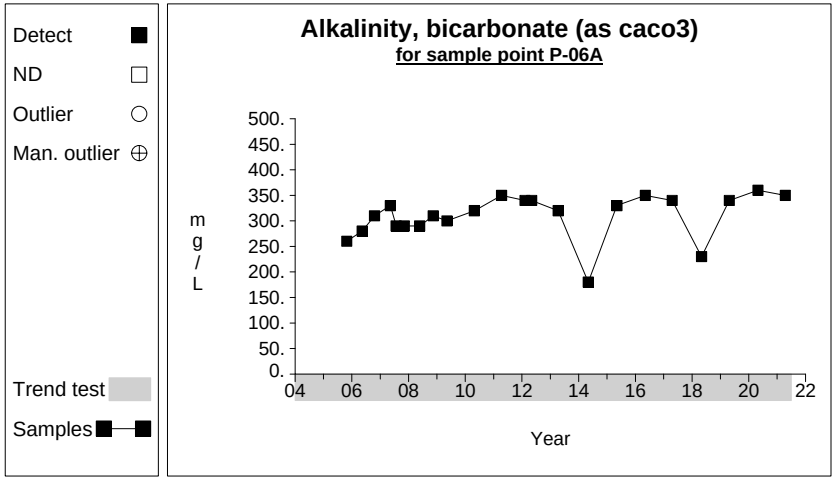
Shallow (Silt-Clay) Water-Bearing Zone

Time-Concentration Graphs

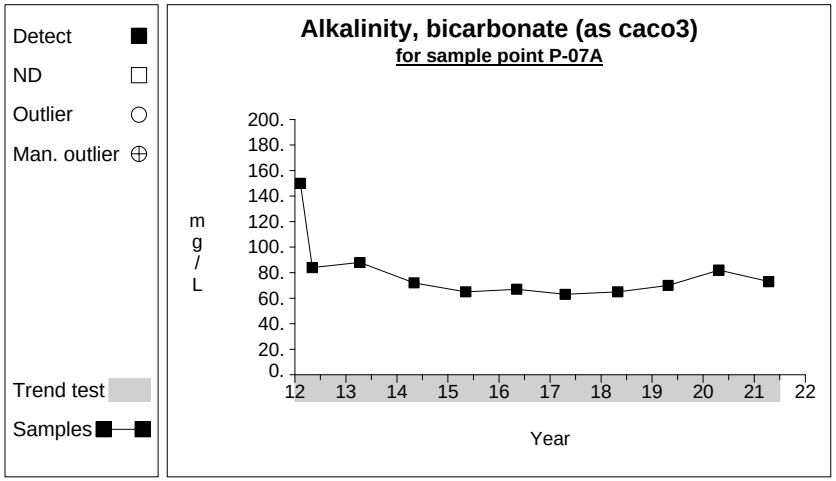
Time Series



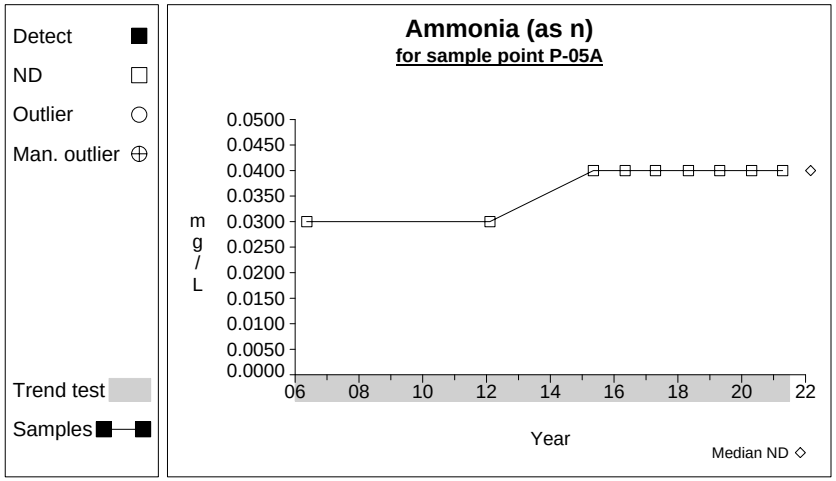
Graph 1



Graph 2

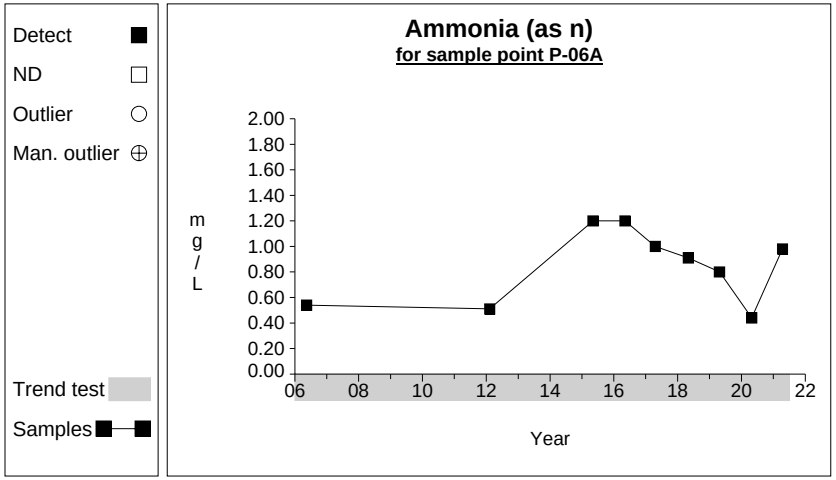


Graph 3

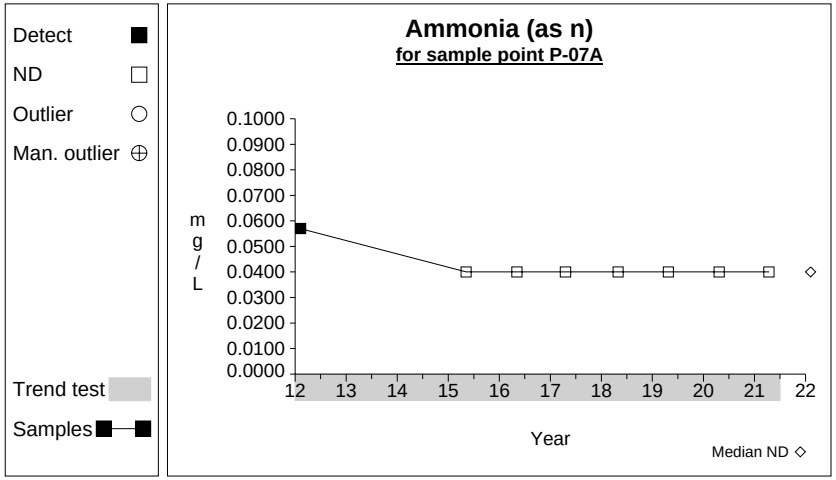


Graph 4

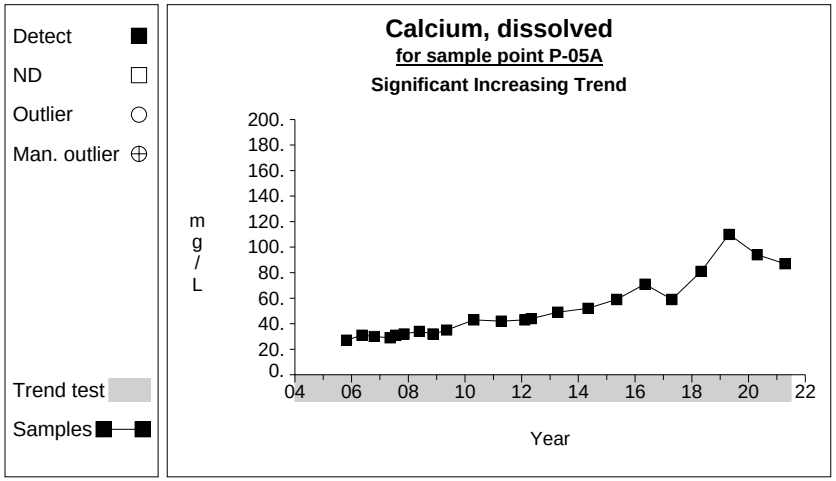
Time Series



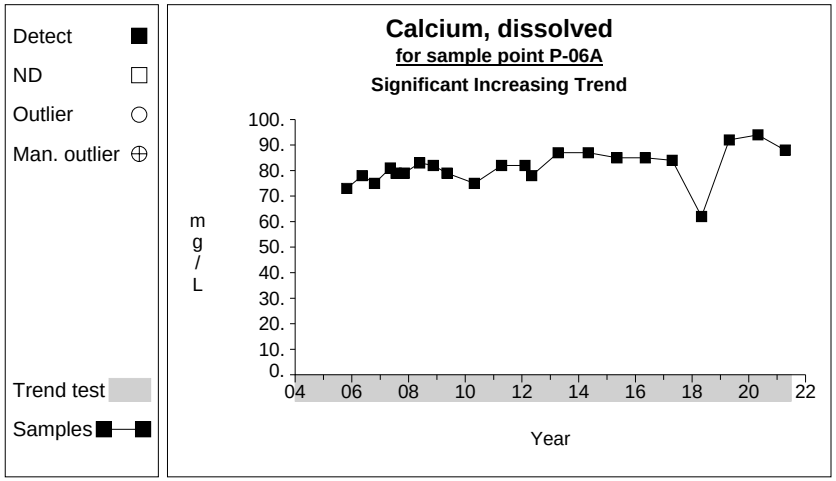
Graph 5



Graph 6

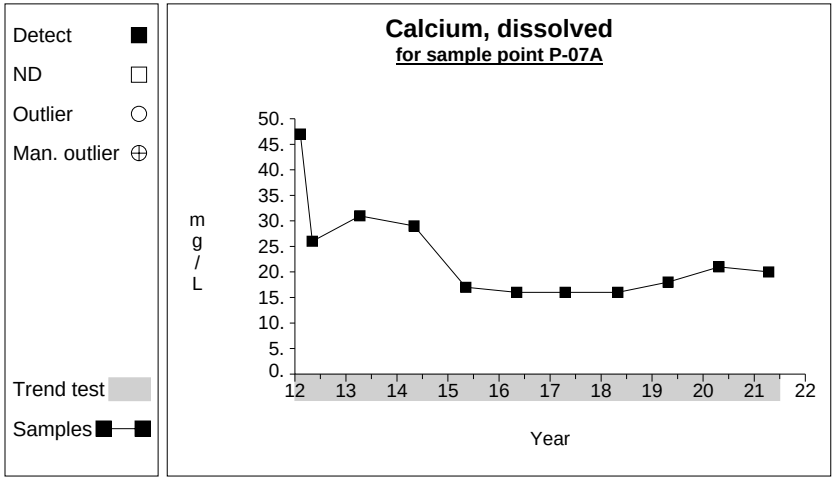


Graph 7

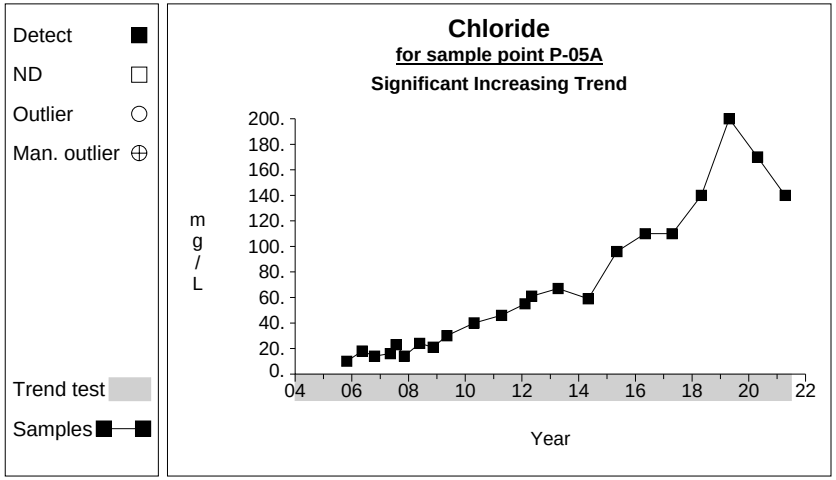


Graph 8

Time Series



Graph 9



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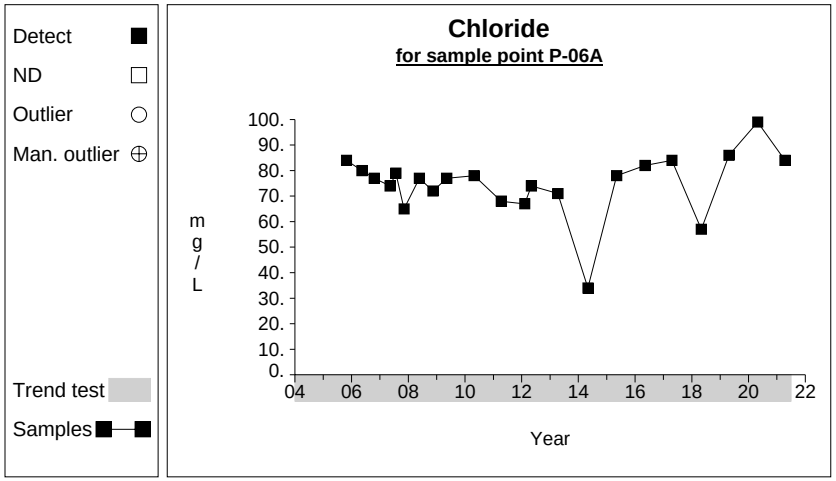
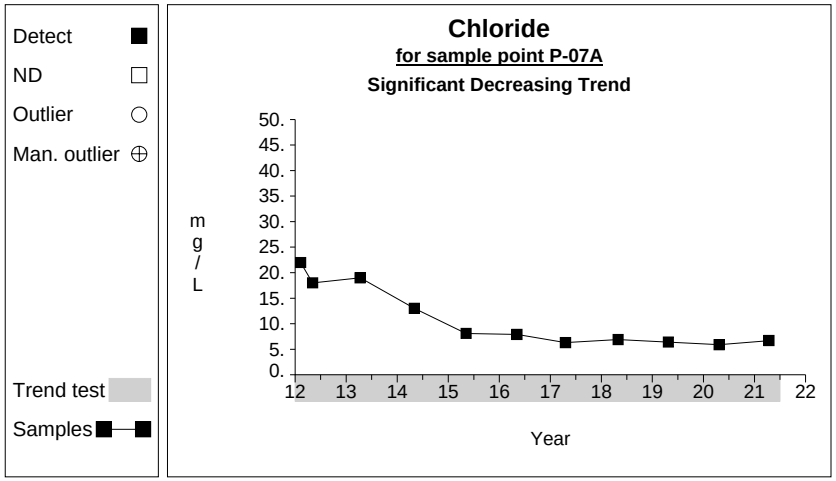
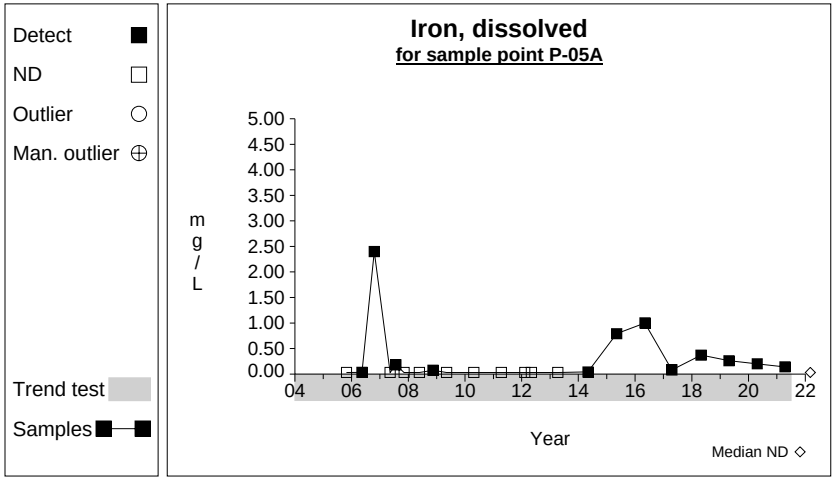


Graph 11

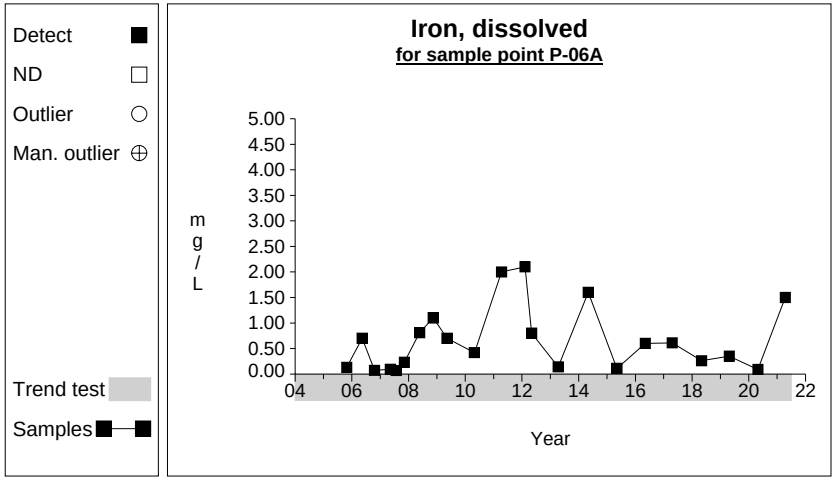


Graph 12

Time Series



Graph 13



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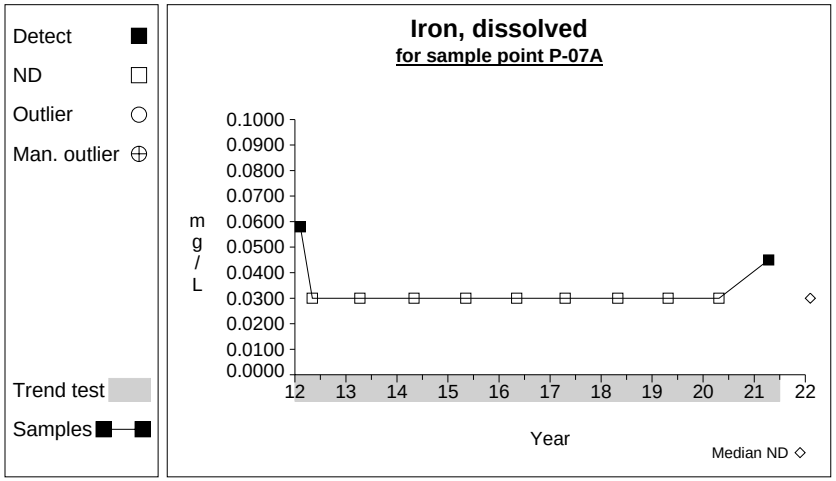

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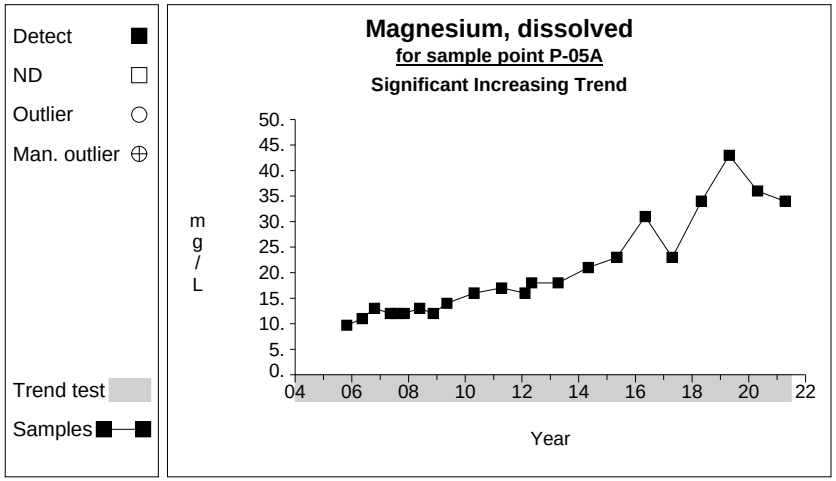
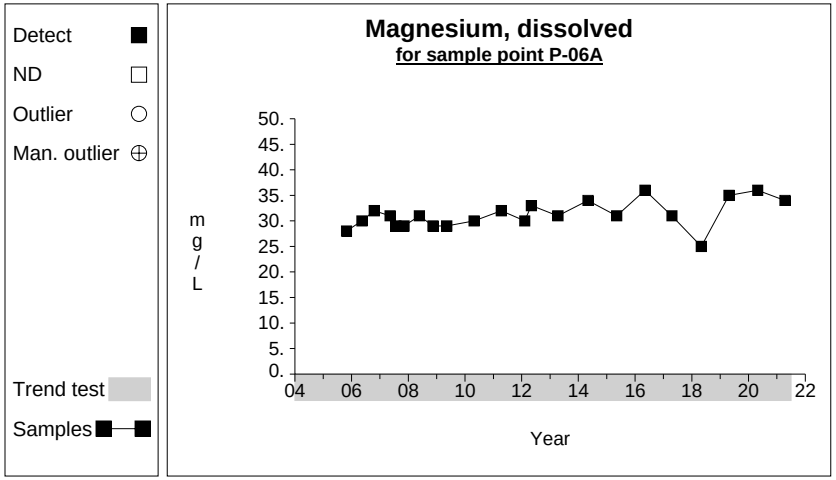
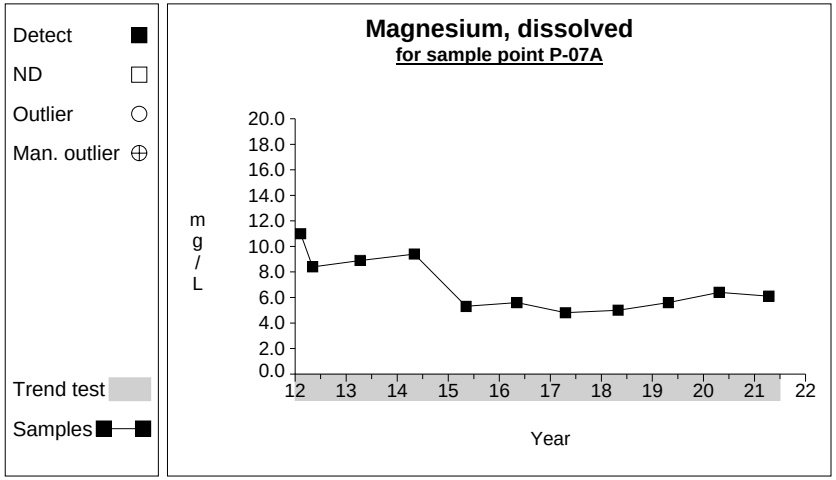


Graph 16

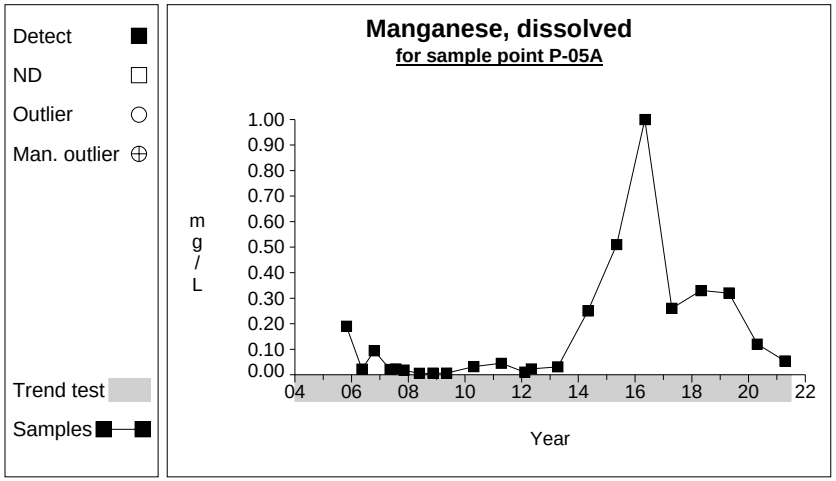
Time Series



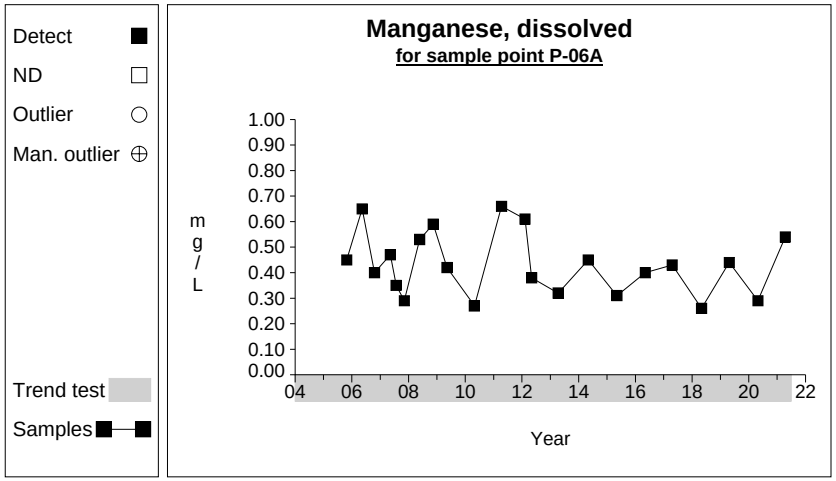
Graph 17



Graph 18

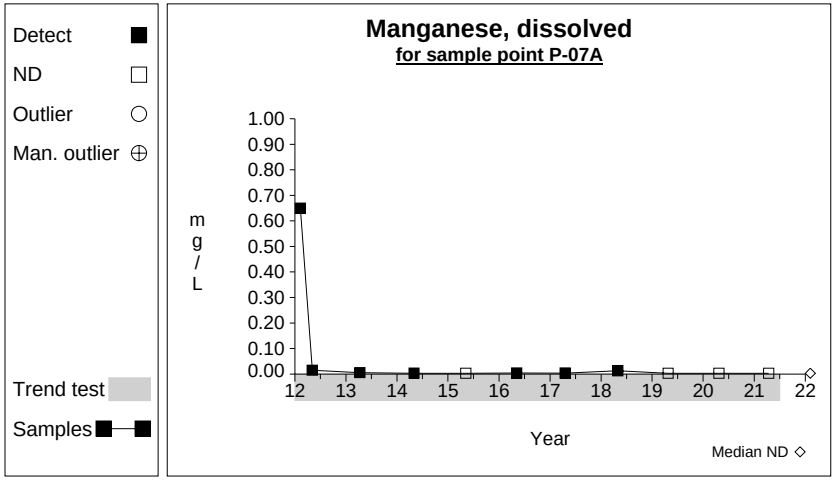


Graph 19

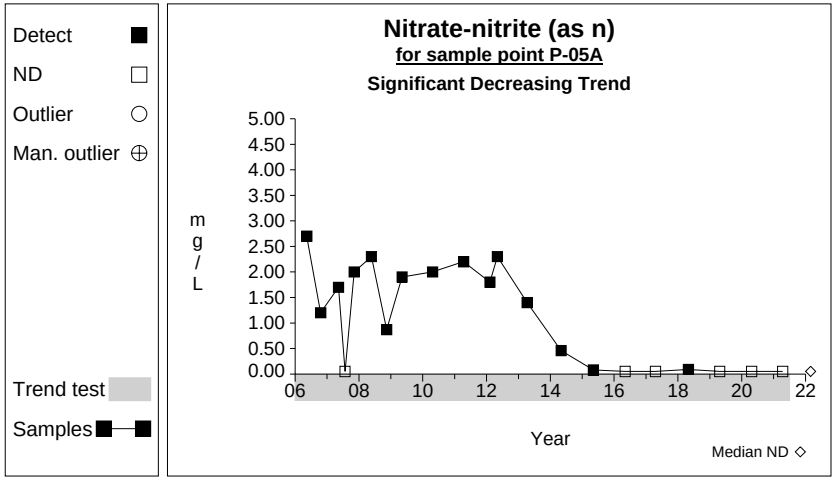


Graph 20

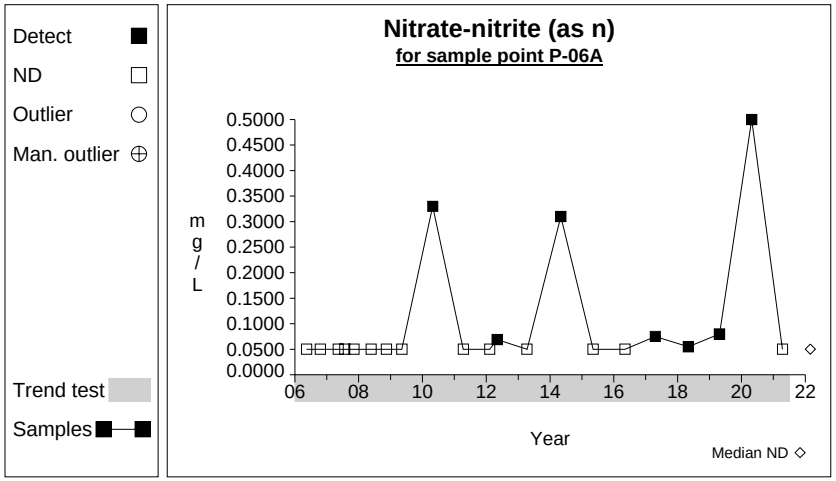
Time Series



Graph 21



Graph 22



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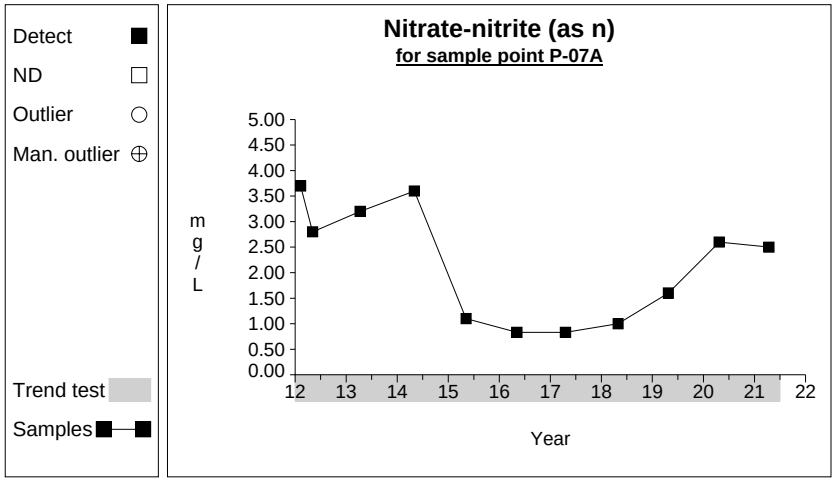
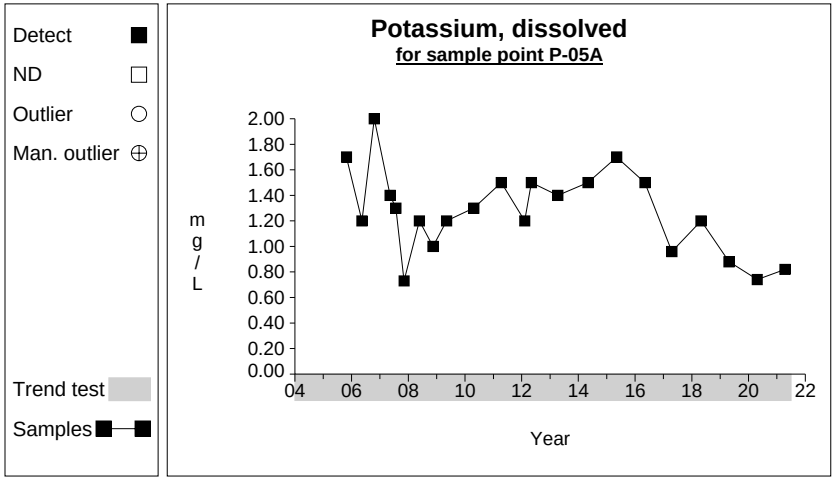


Graph 24

Time Series



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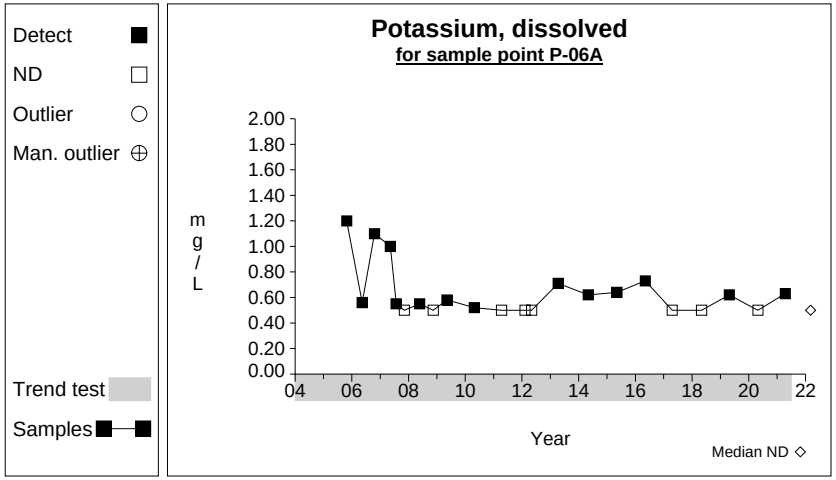

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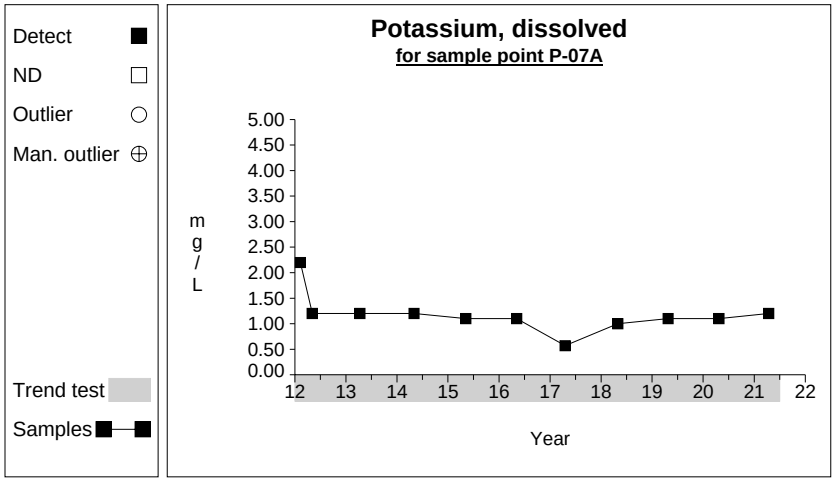

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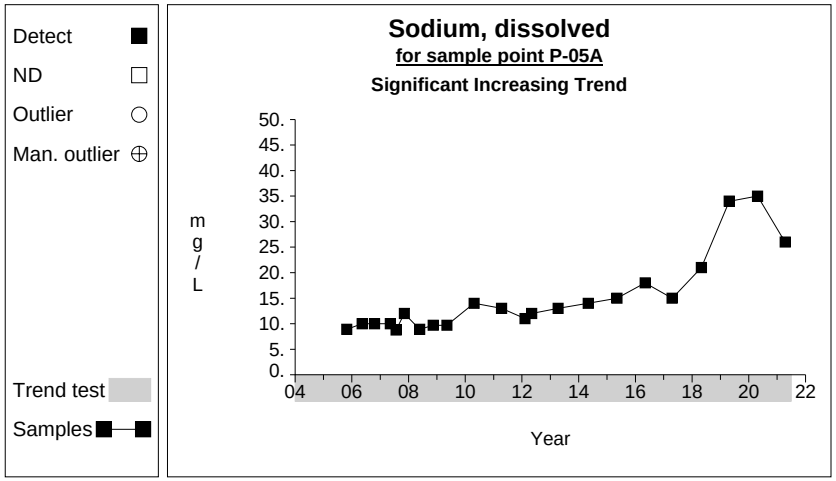
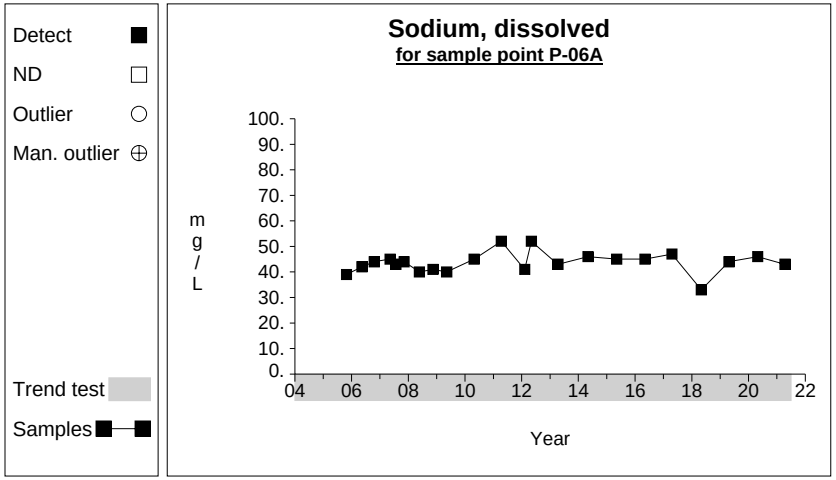


Graph 28

Time Series



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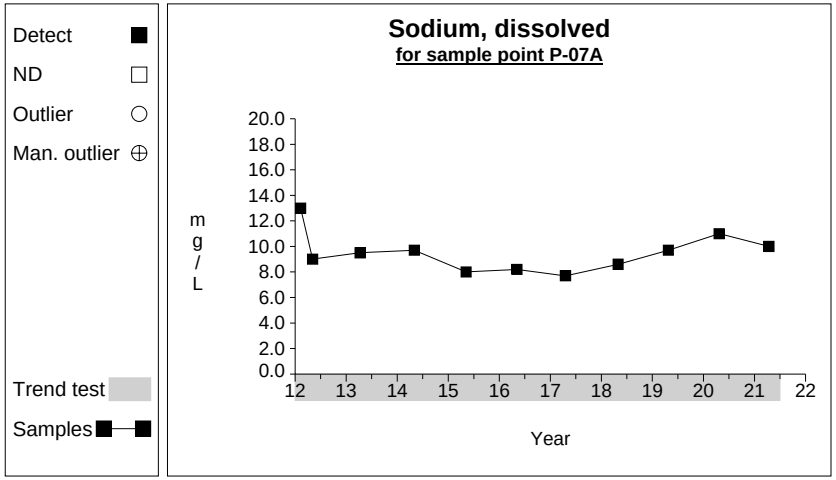

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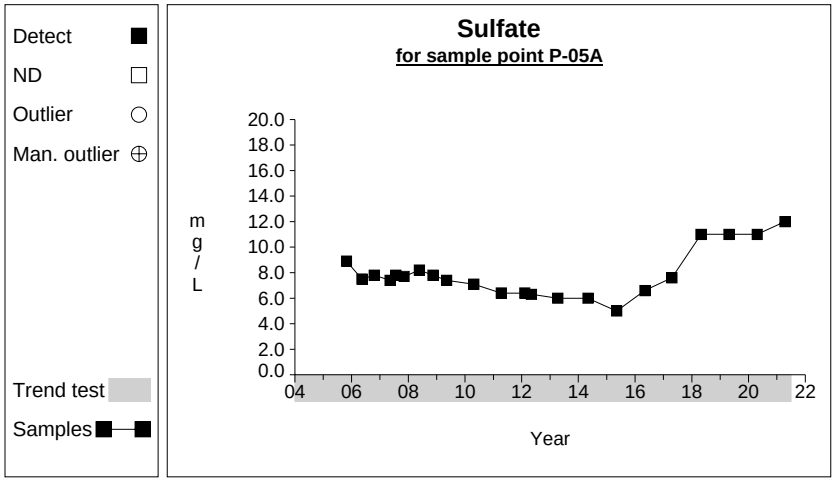
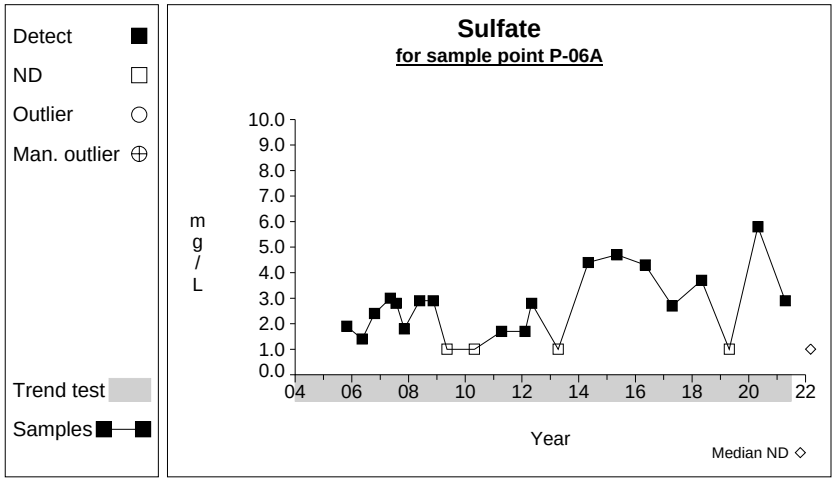
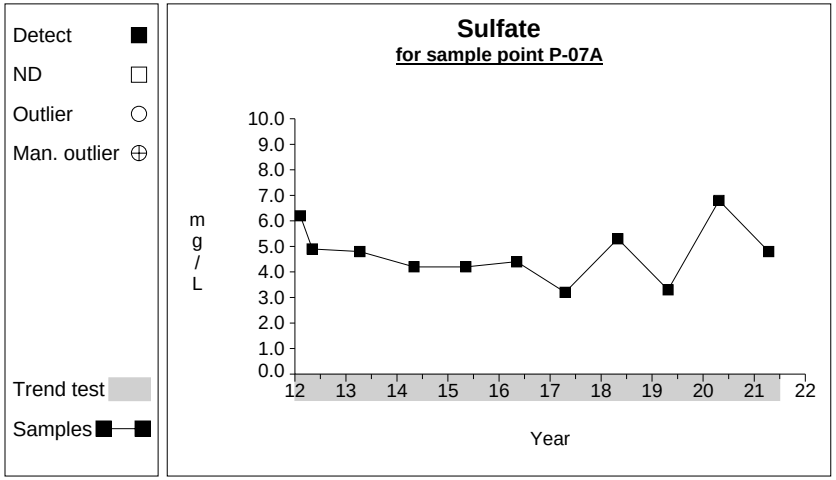


Graph 31



Graph 32

Time Series



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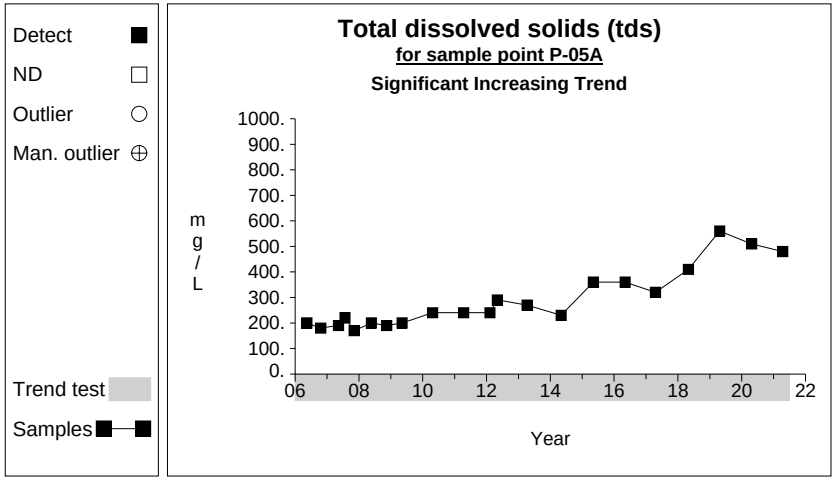

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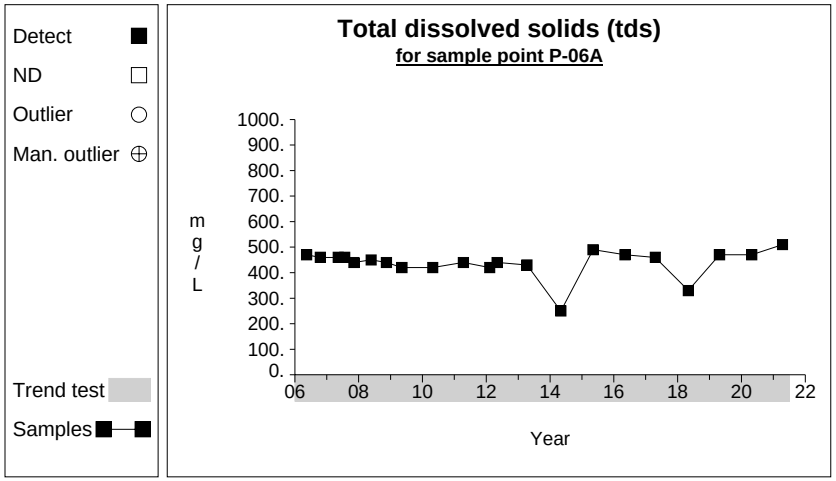

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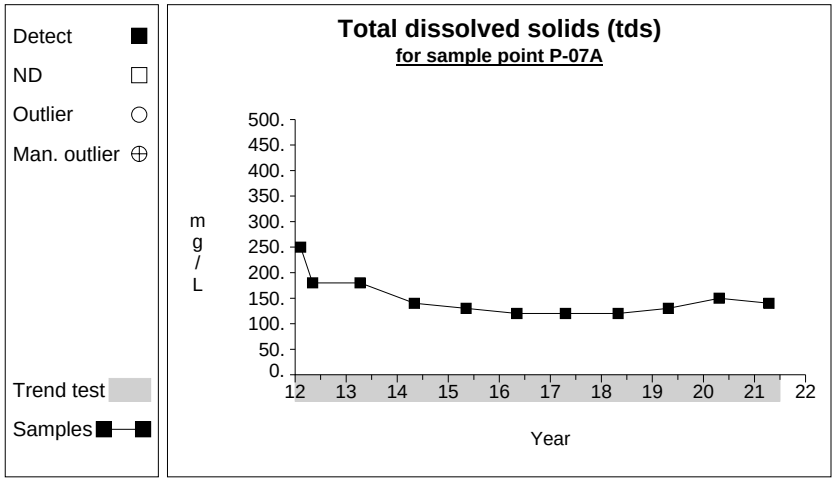
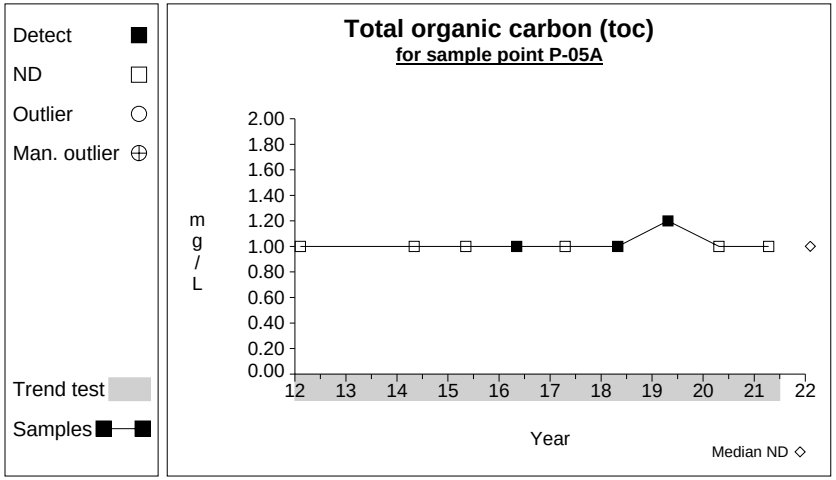


Graph 36

Time Series



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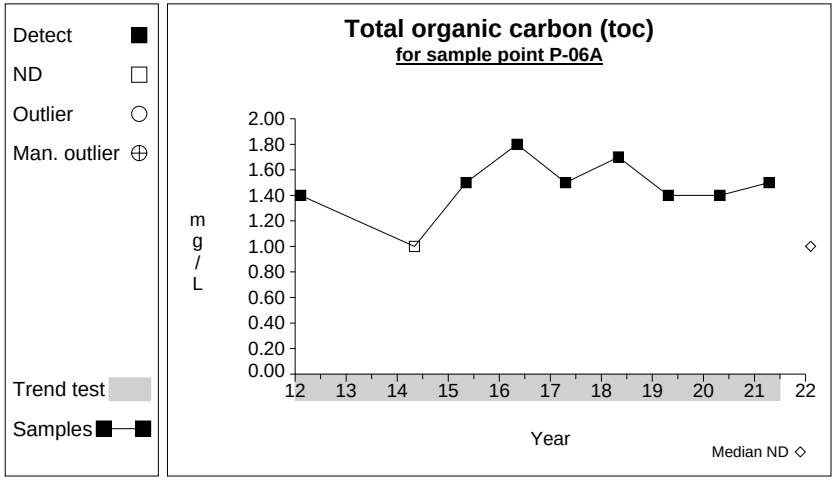

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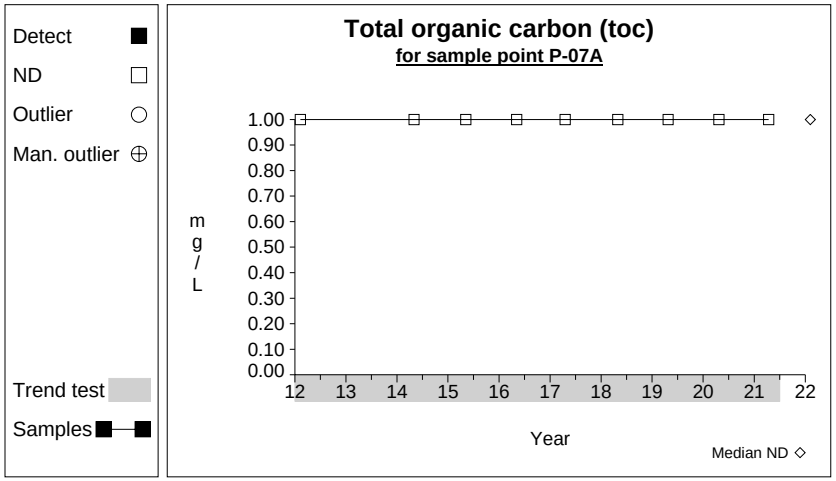
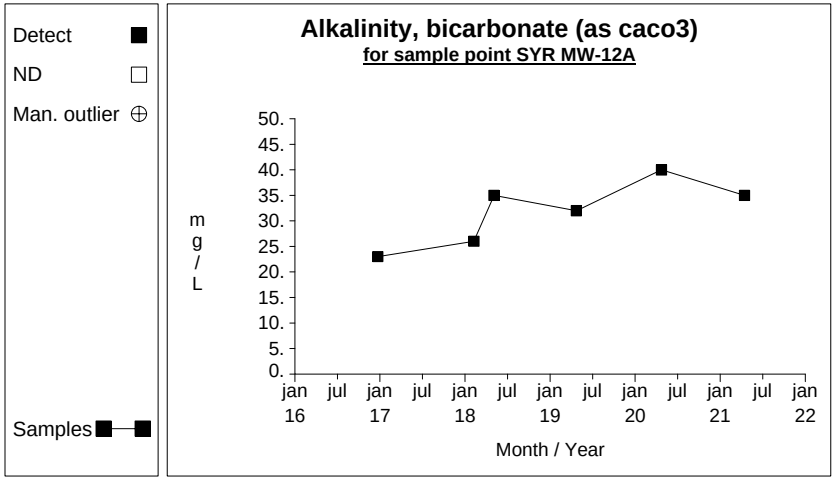


Graph 39

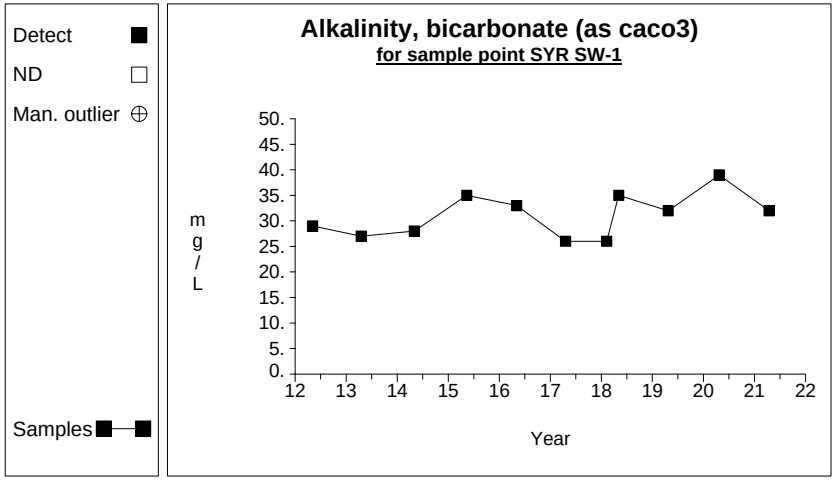
South Yamhill River Surface Water Samples

Time-Concentration Graphs

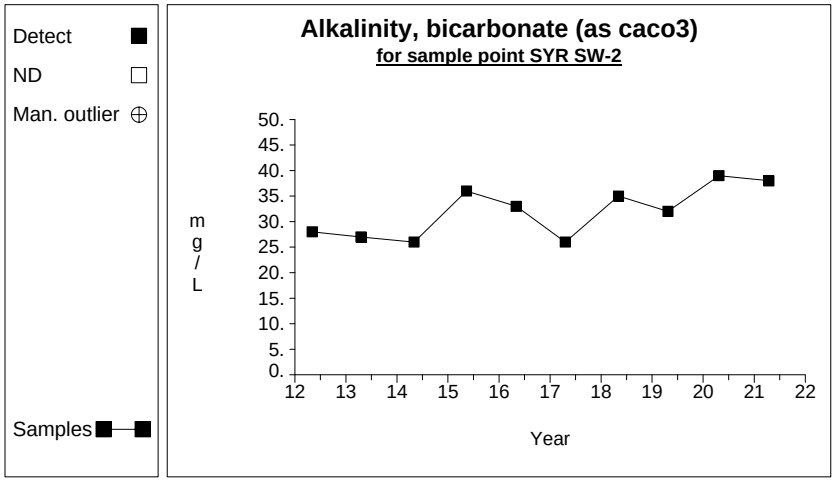
Time Series



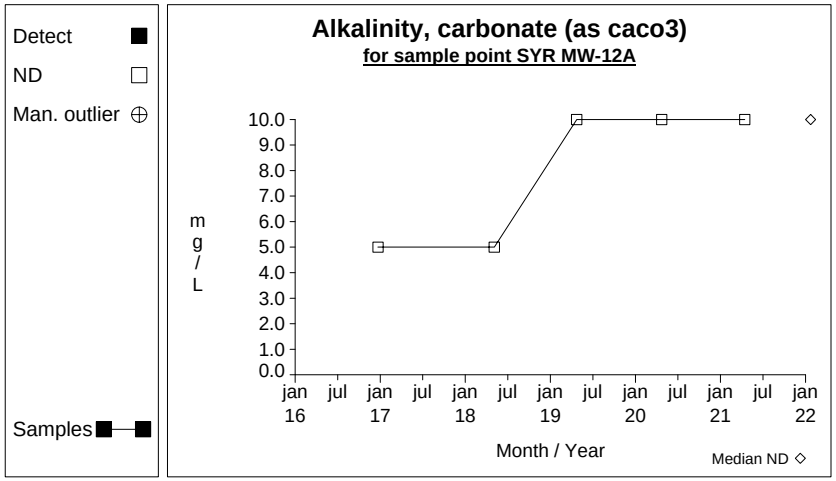
Graph 1



Graph 2

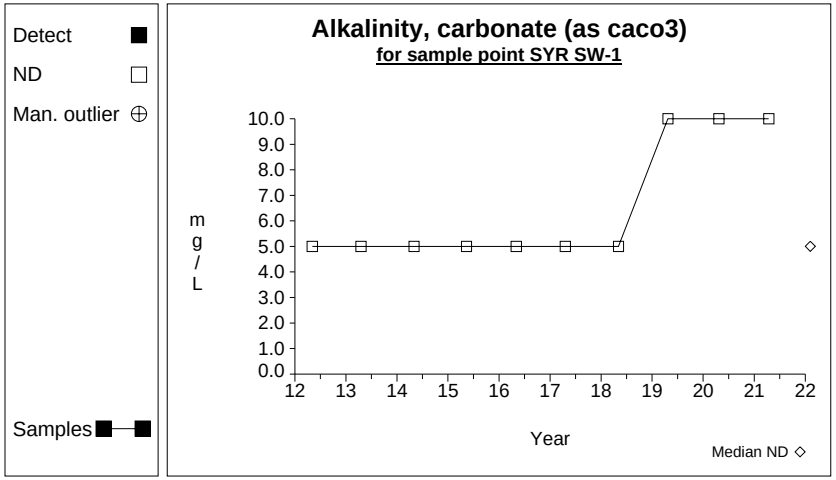


Graph 3

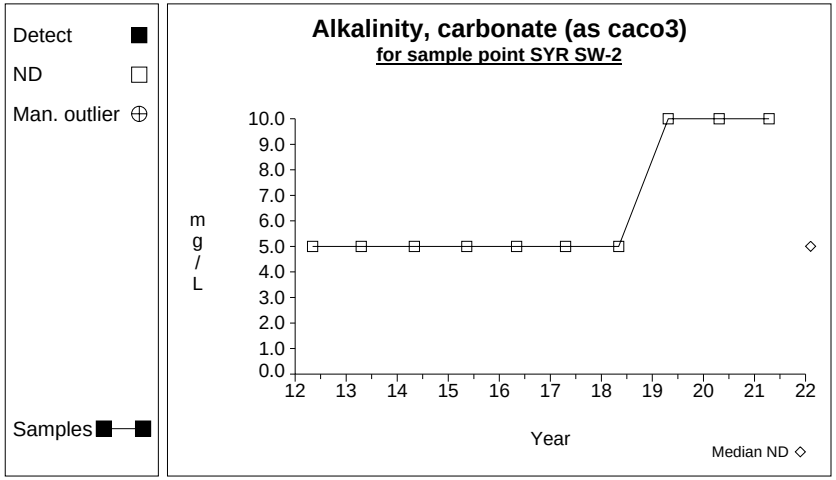


Graph 4

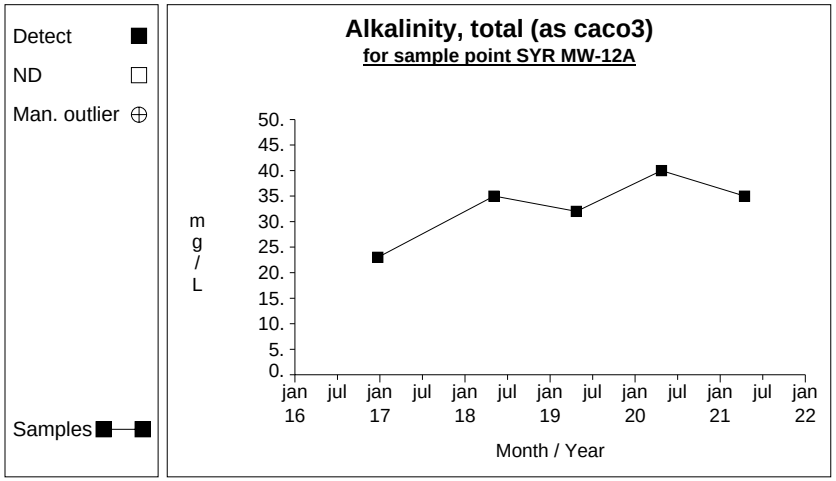
Time Series



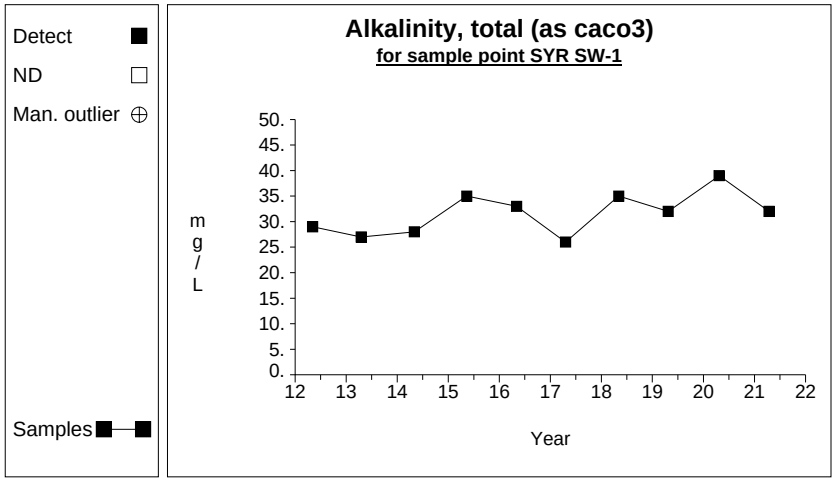
Graph 5



Graph 6

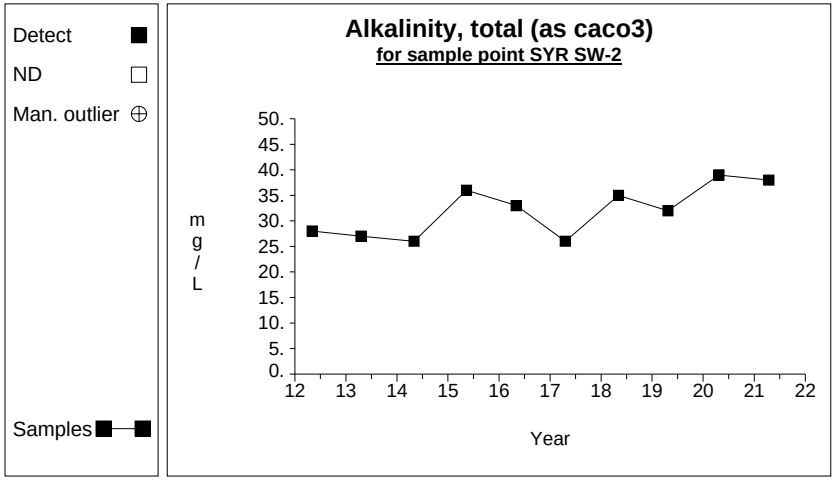


Graph 7

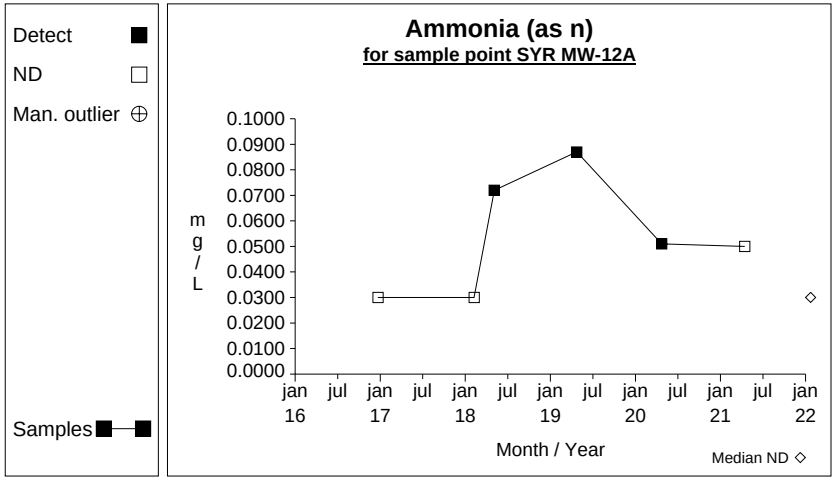


Graph 8

Time Series



Graph 9



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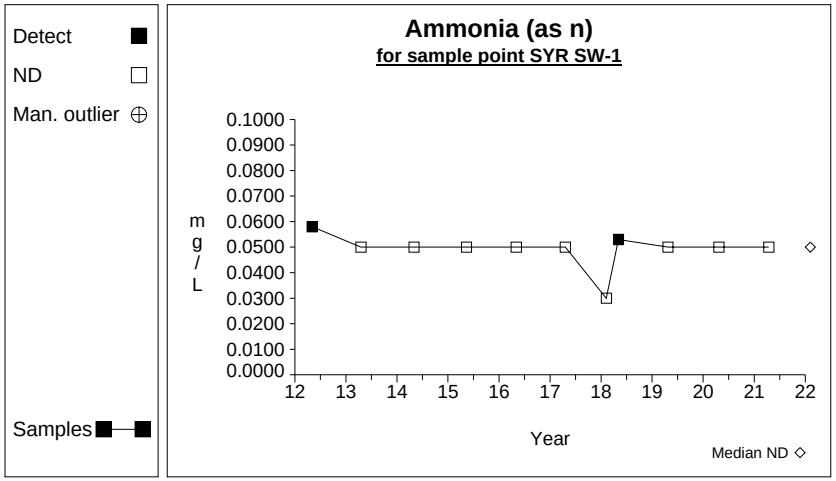

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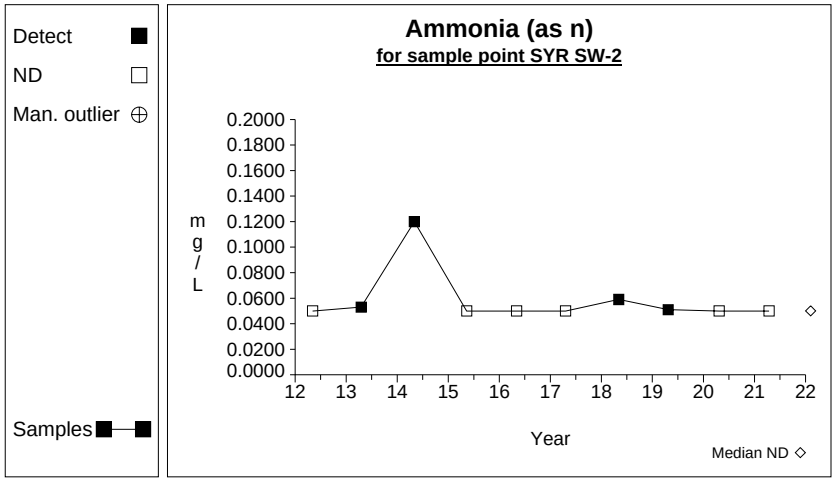
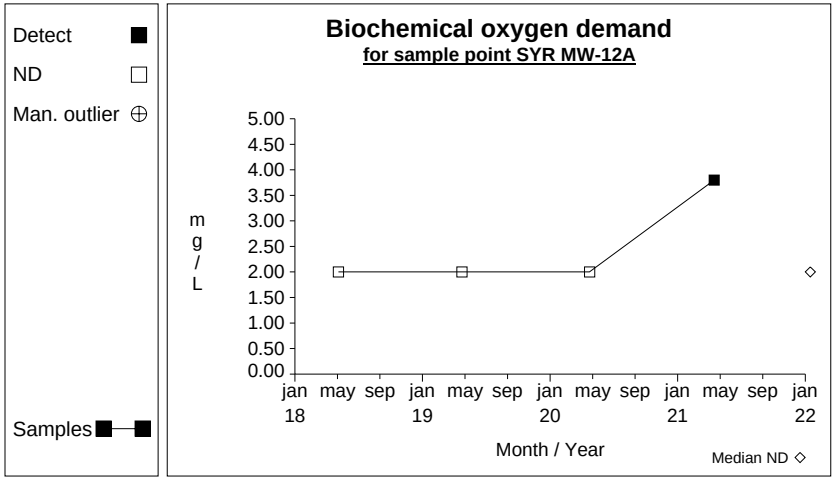
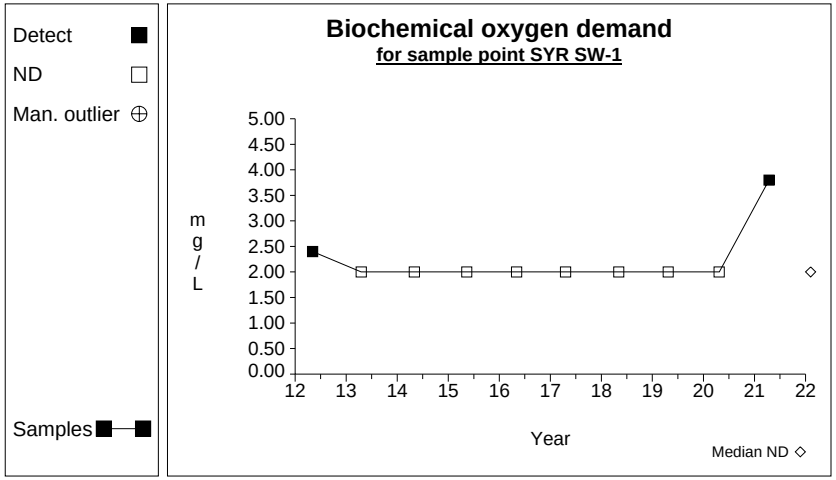


Graph 12

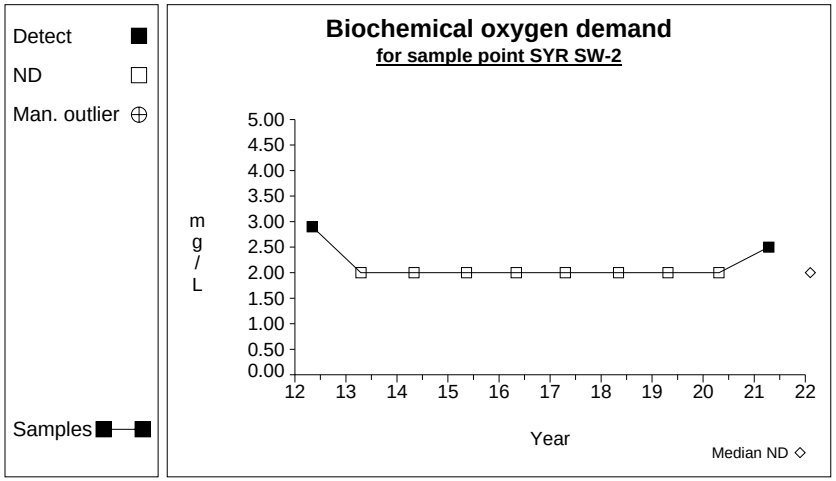
Time Series



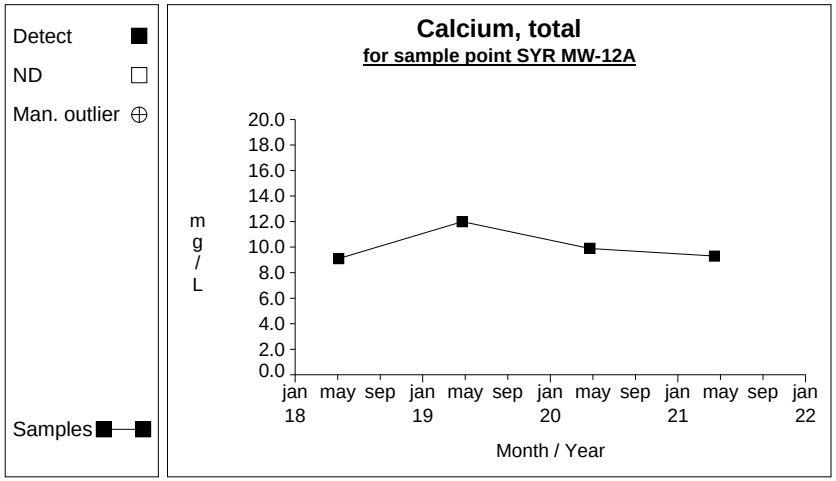
Graph 13



Graph 14

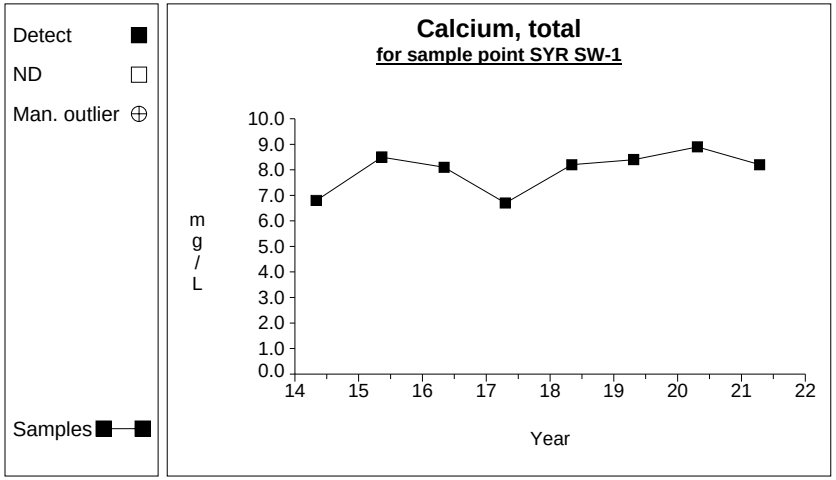


Graph 15

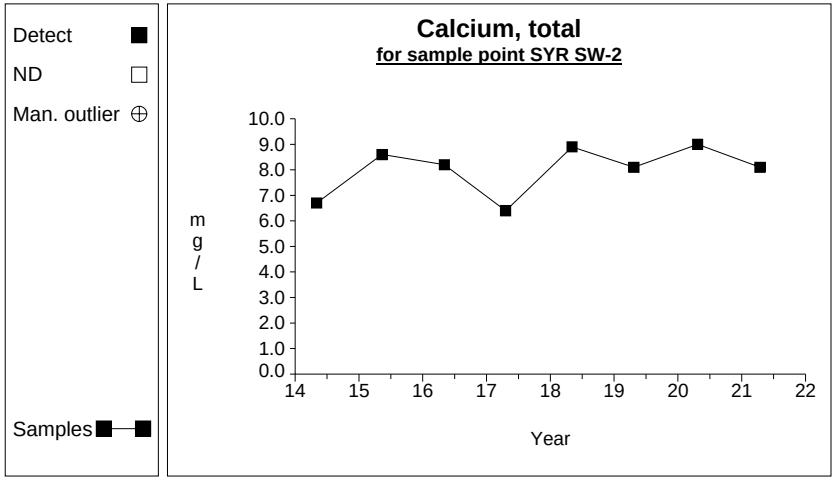


Graph 16

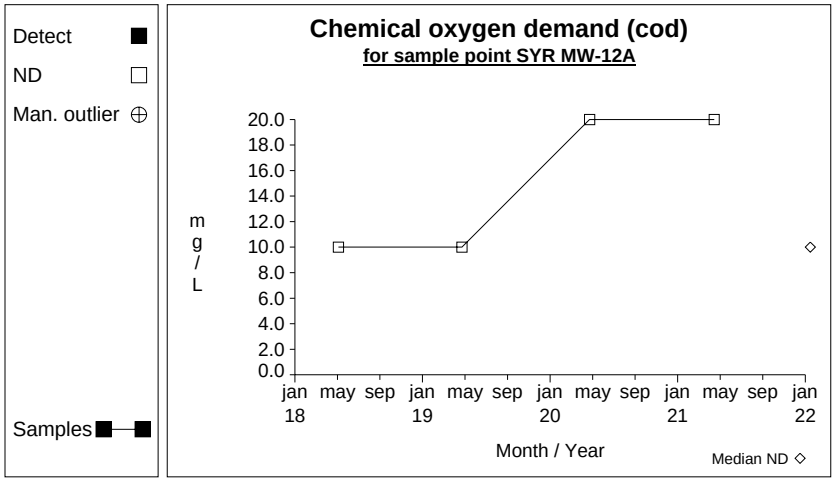
Time Series



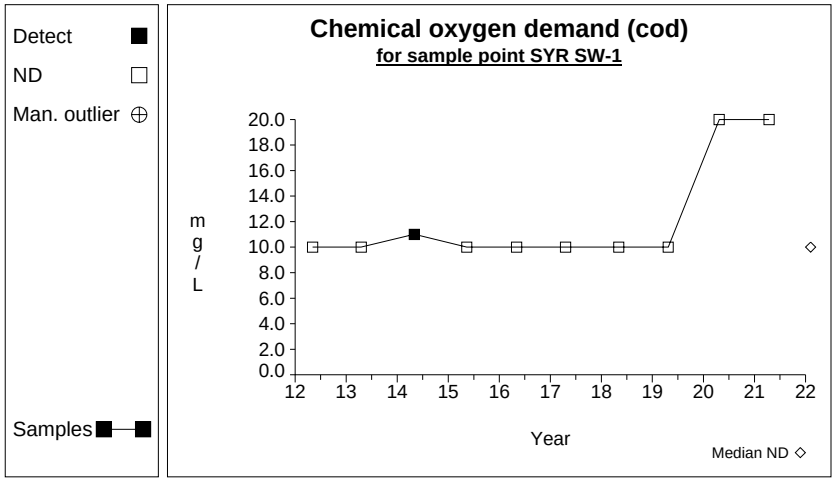
Graph 17



Graph 18

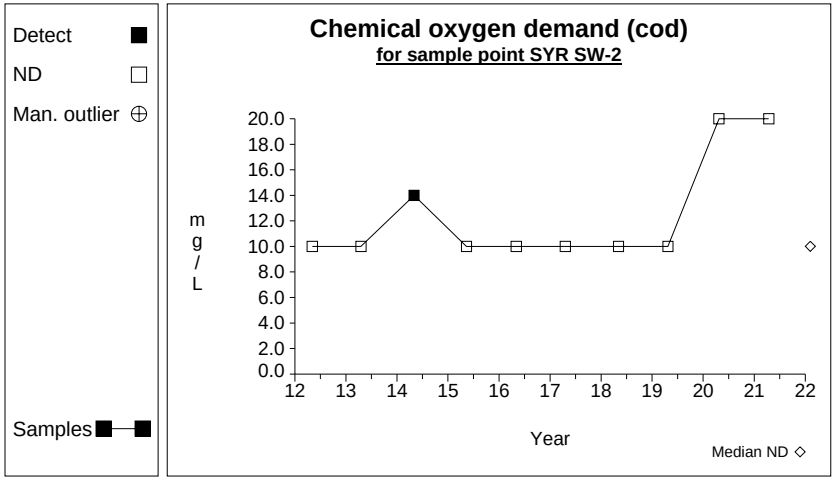


Graph 19



Graph 20

Time Series



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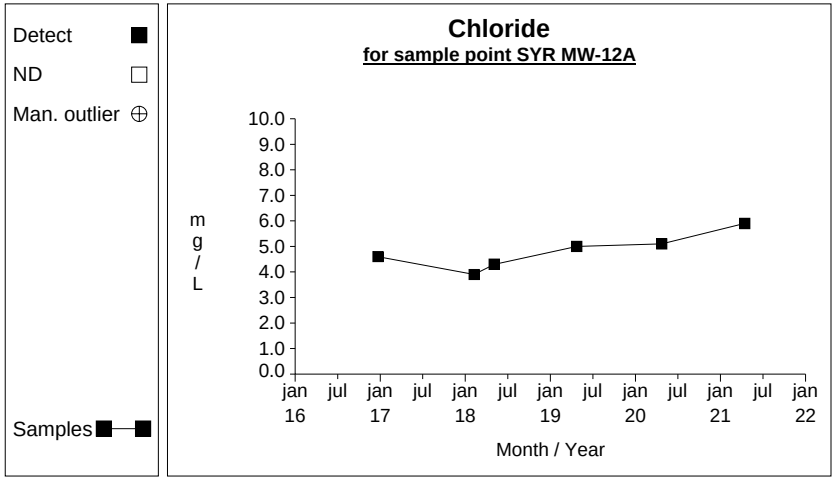
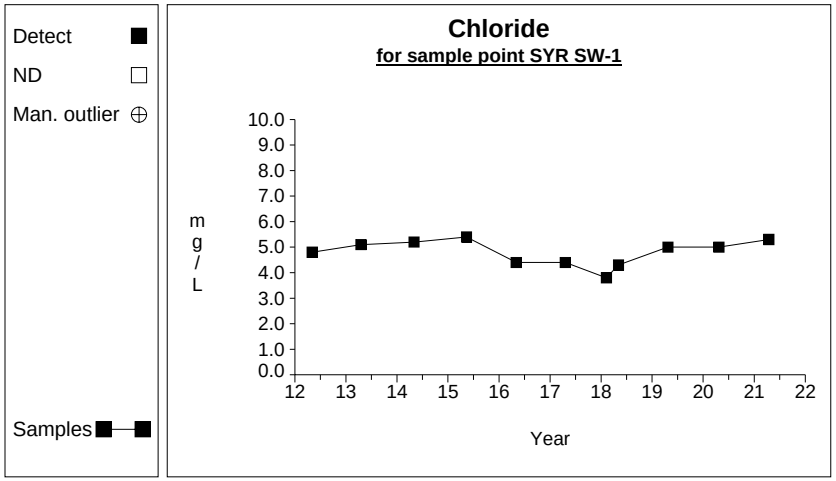
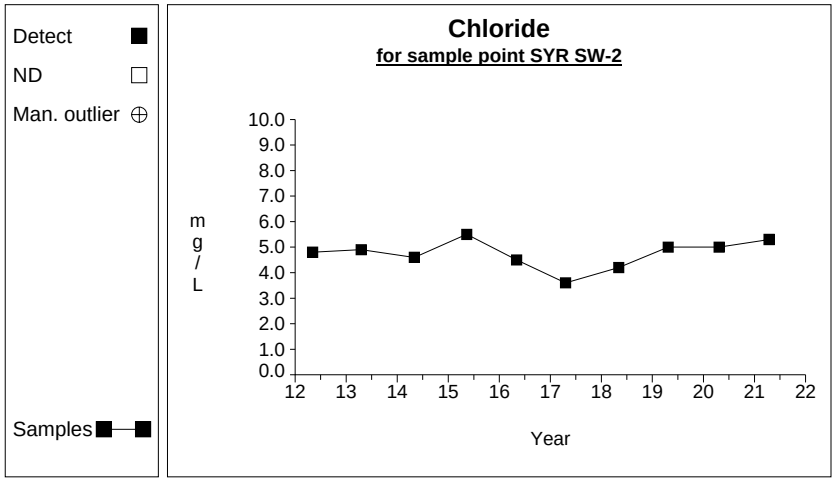


Graph 22

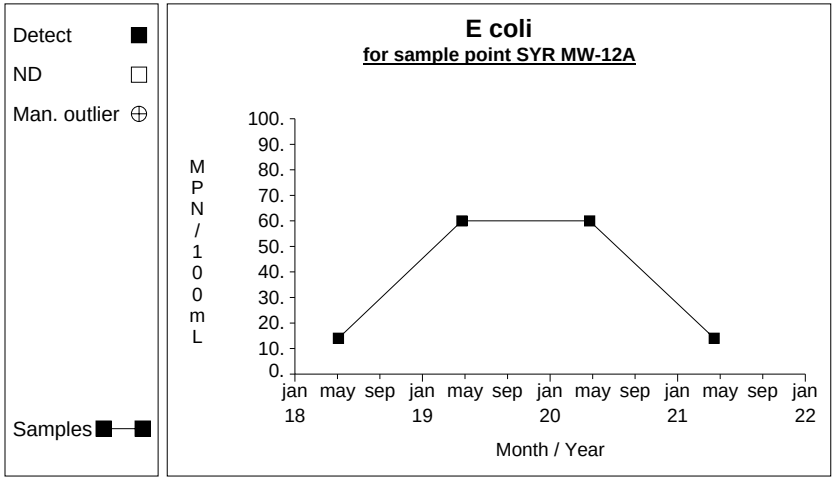


Graph 23

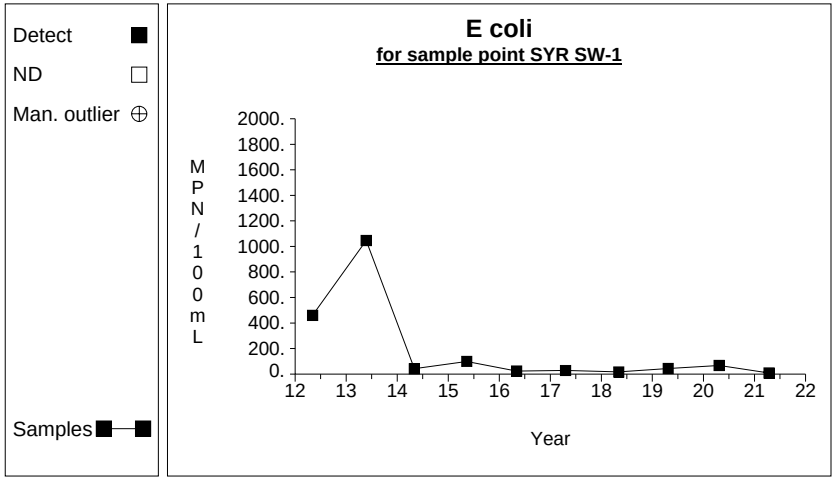


Graph 24

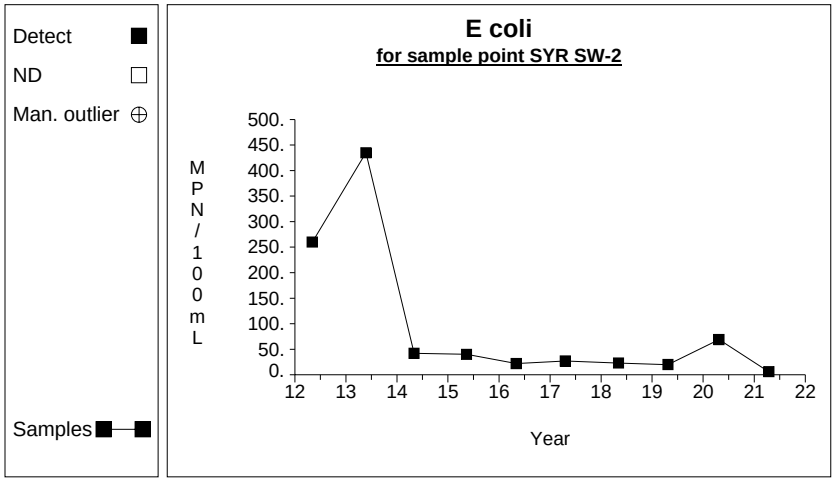
Time Series



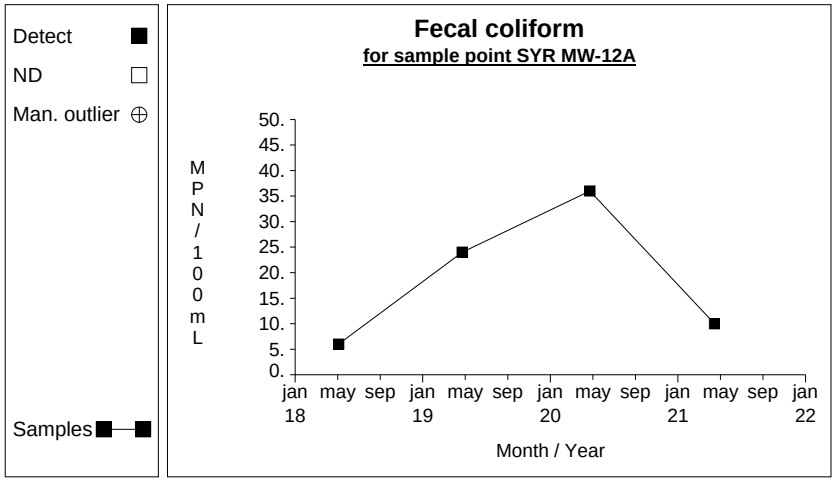
Graph 25



Graph 26

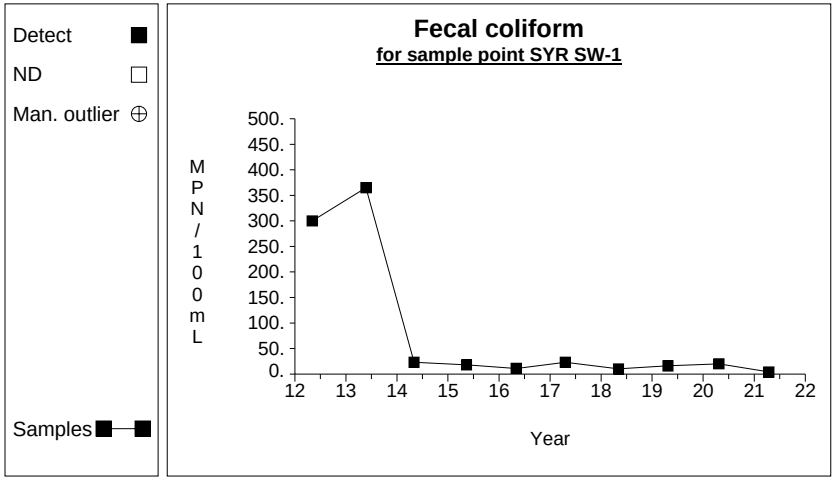


Graph 27

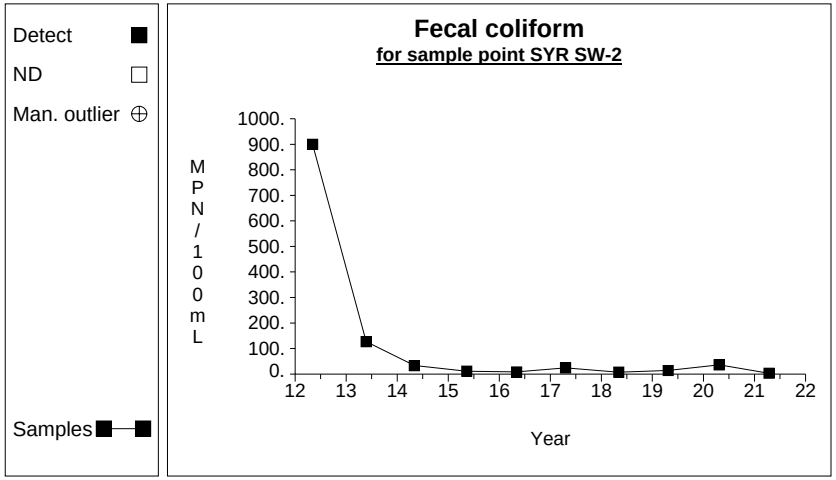


Graph 28

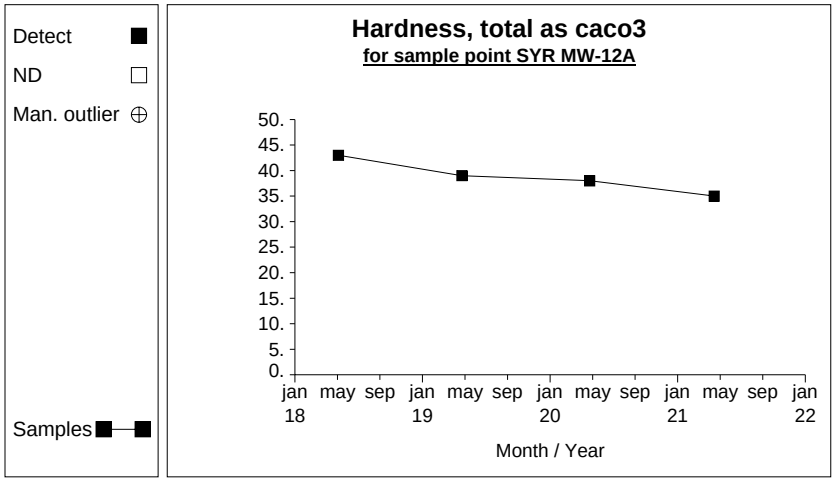
Time Series



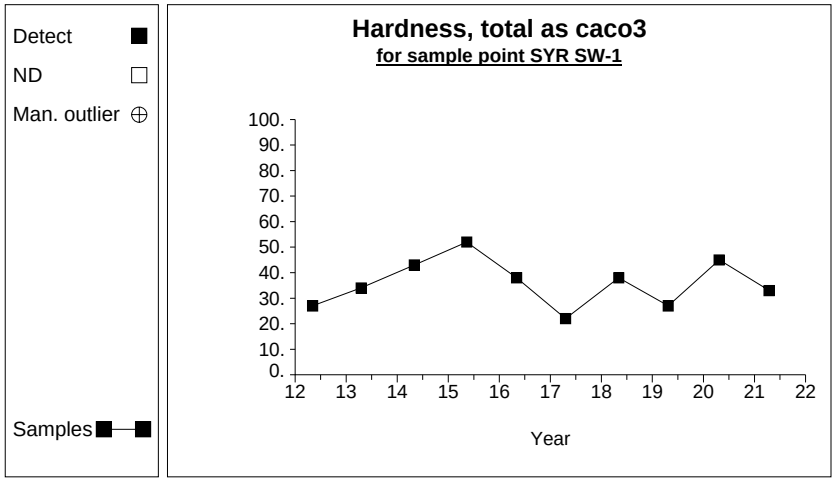
Graph 29



Graph 30

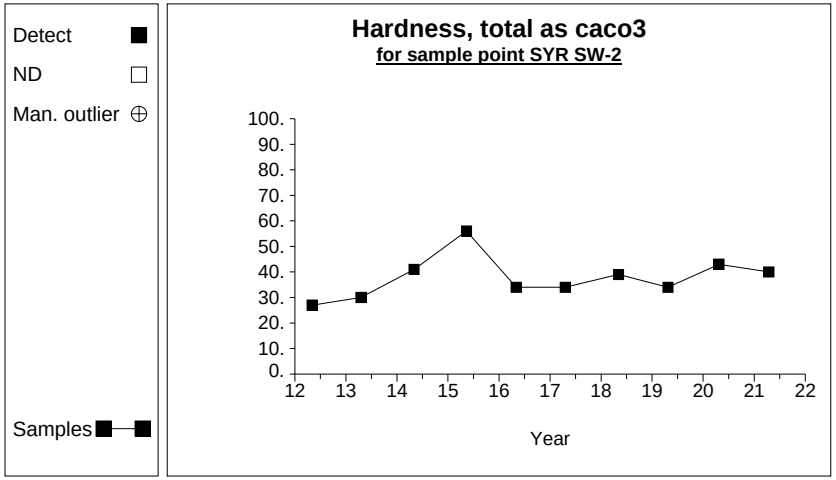


Graph 31

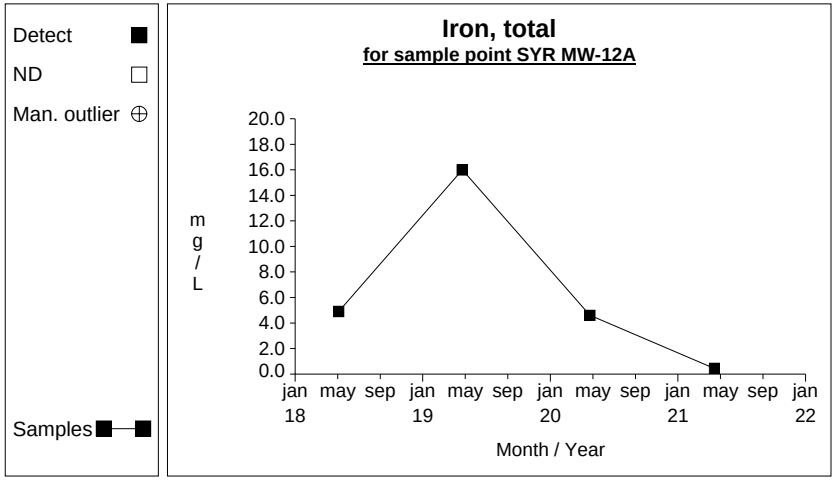


Graph 32

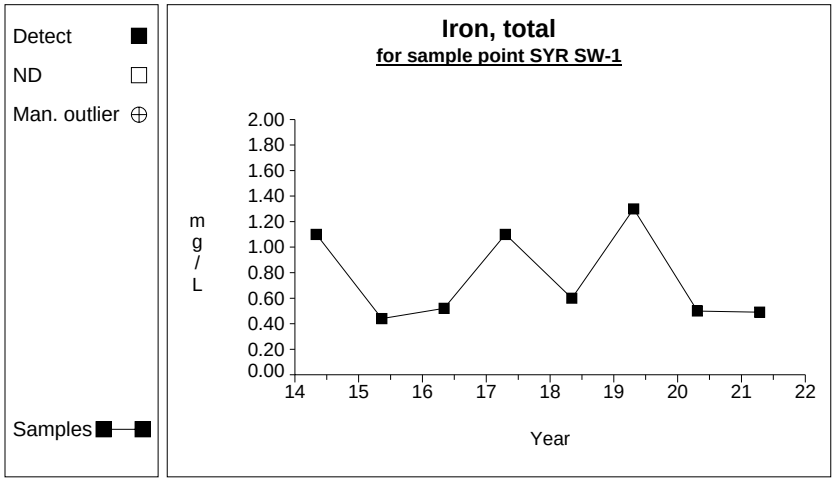
Time Series



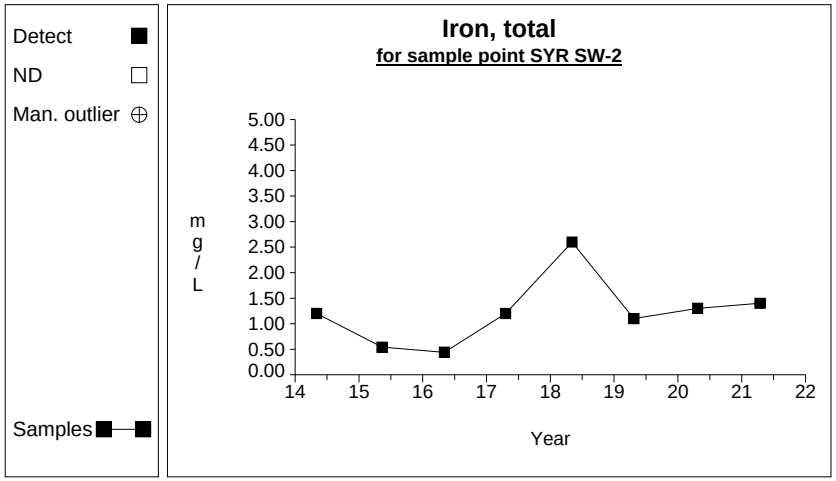
Graph 33



Graph 34

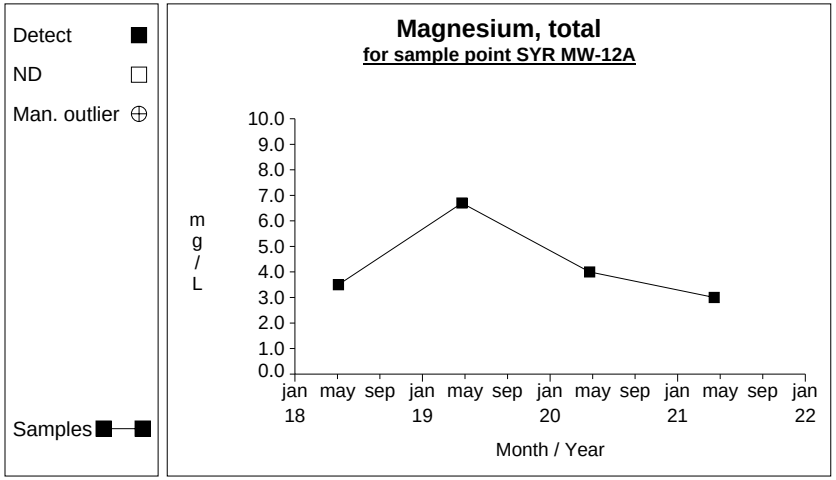


Graph 35

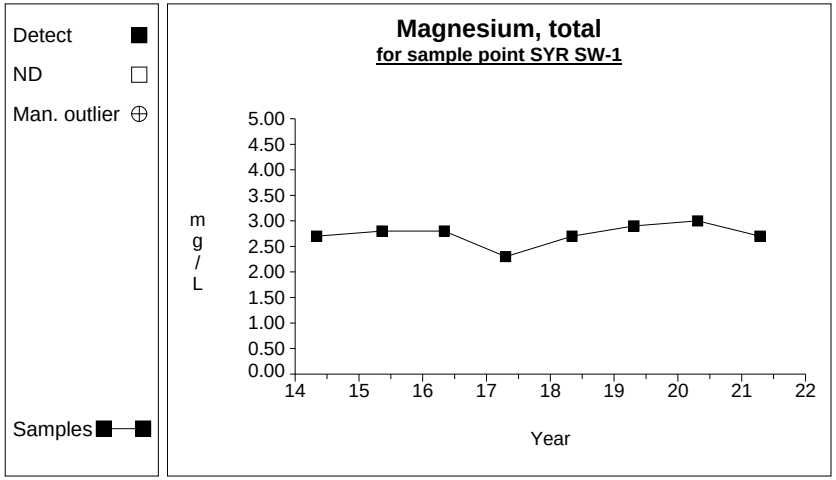


Graph 36

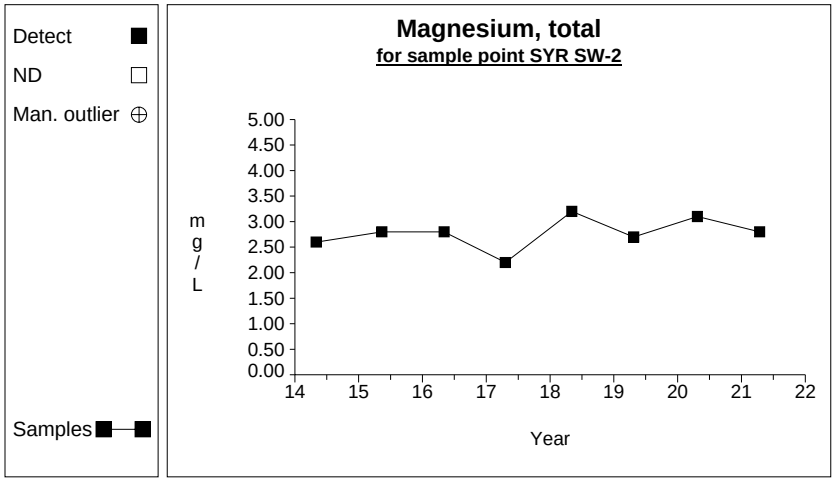
Time Series



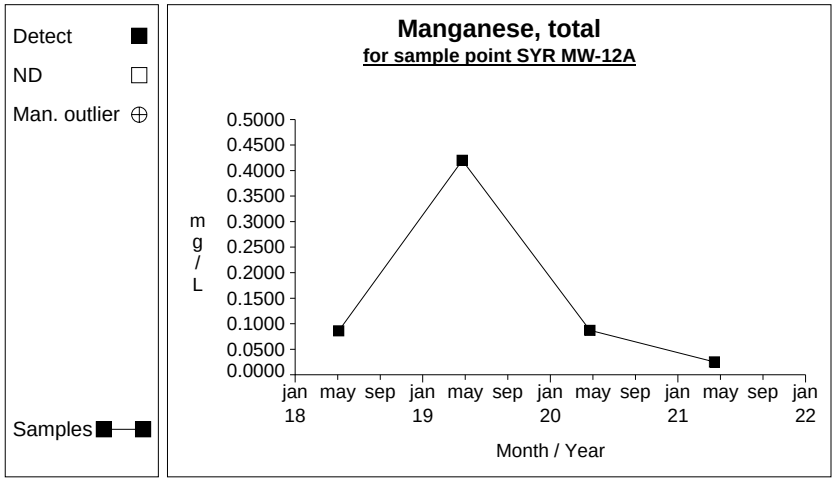
Graph 37



Graph 38

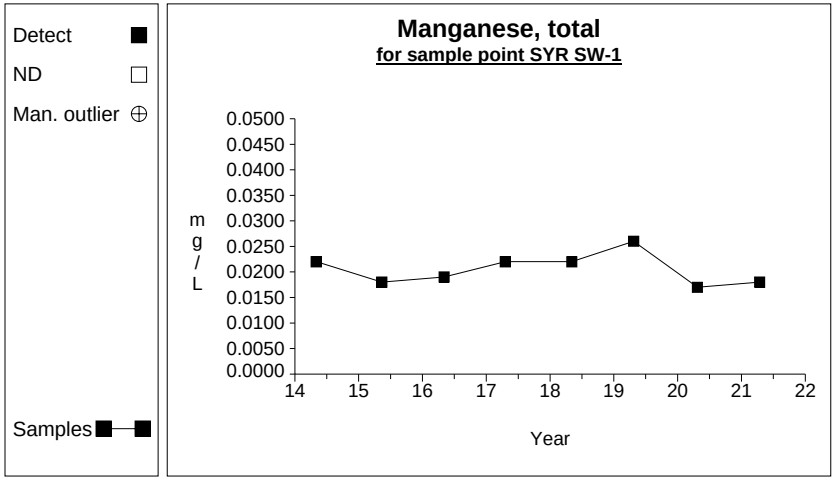


Graph 39

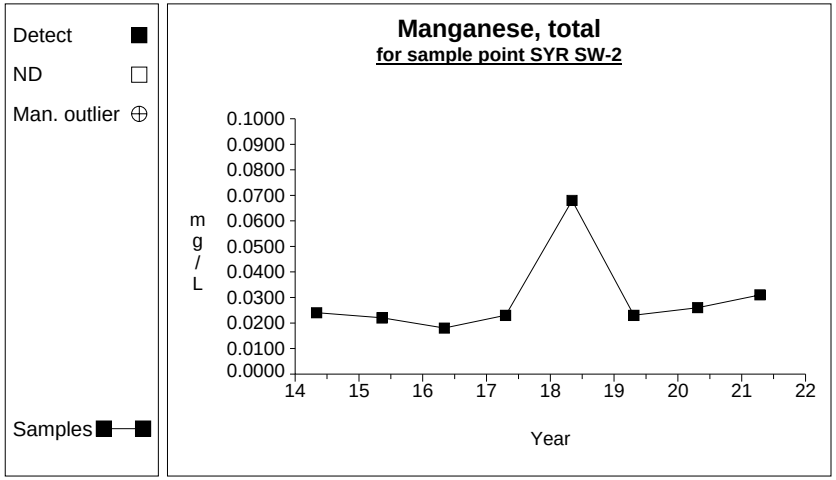


Graph 40

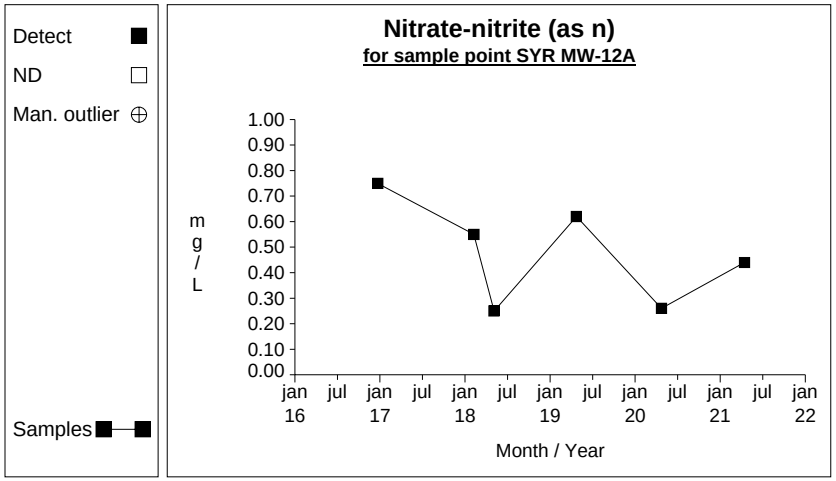
Time Series



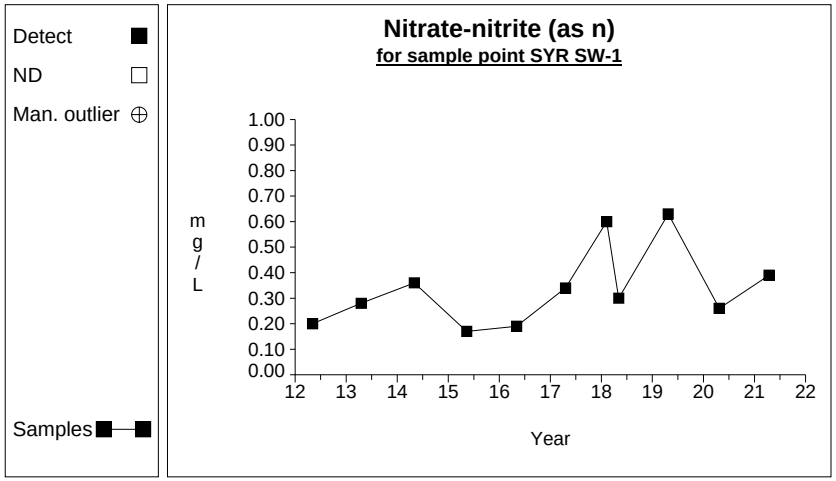
Graph 41



Graph 42

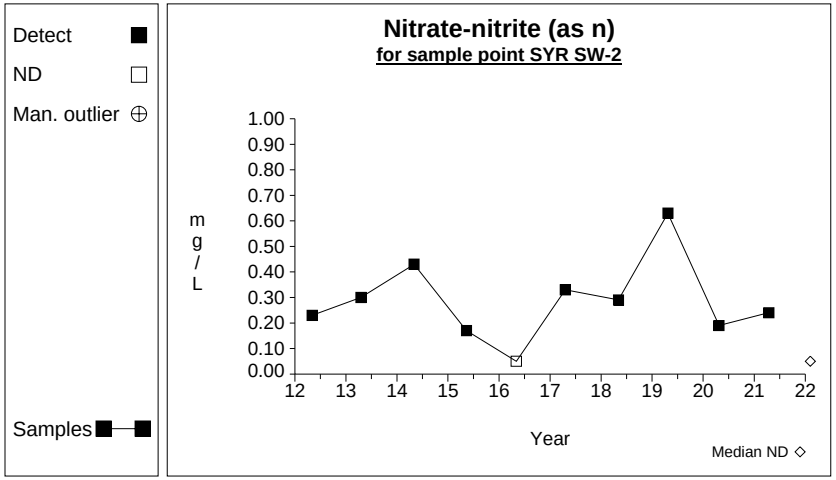


Graph 43

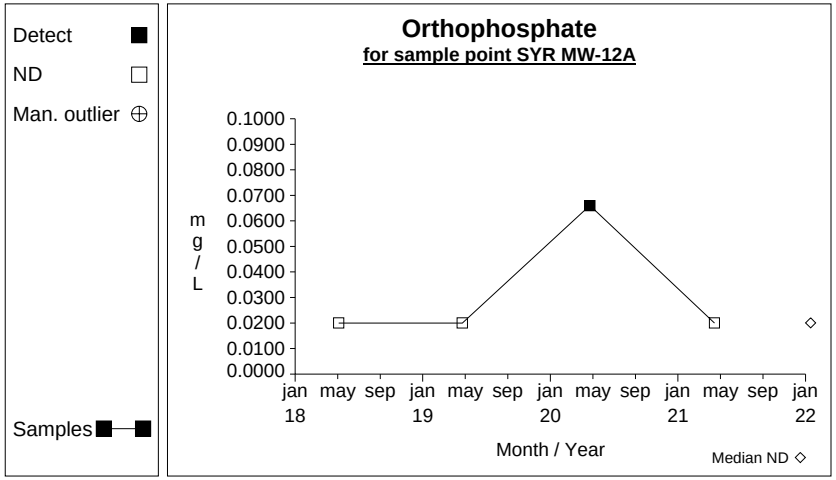


Graph 44

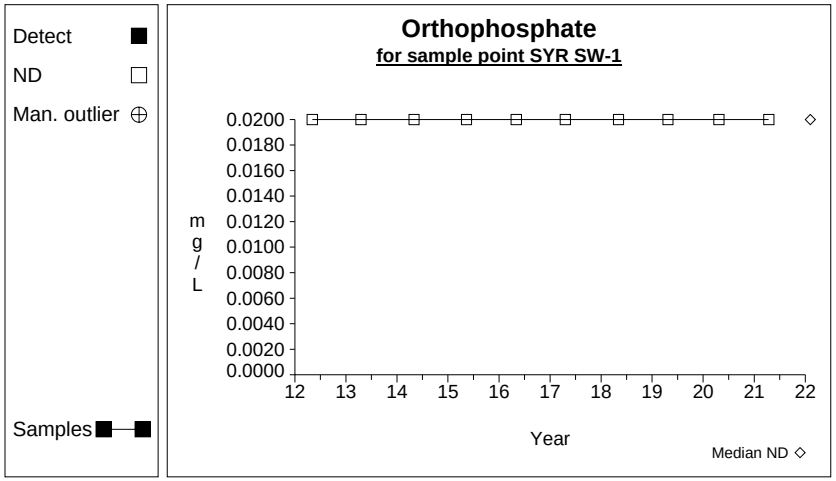
Time Series



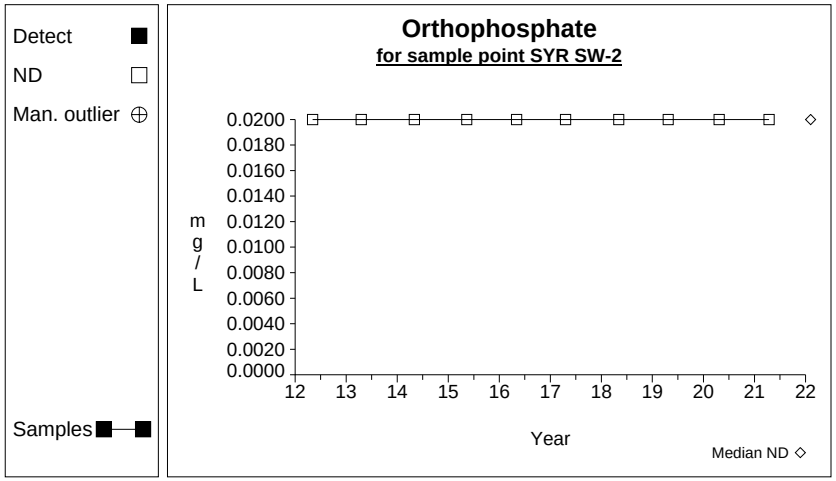
Graph 45



Graph 46

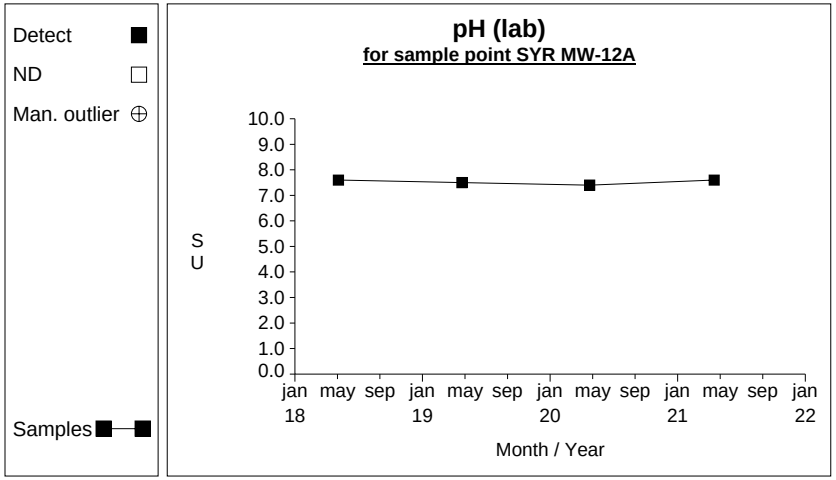


Graph 47

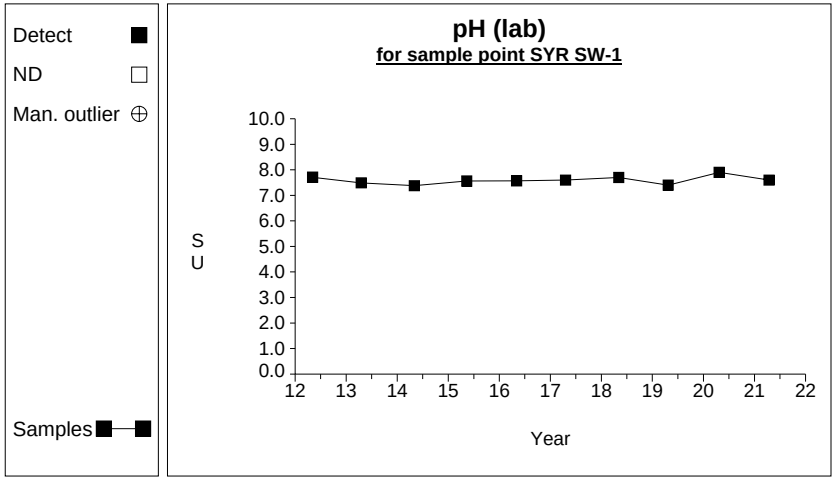


Graph 48

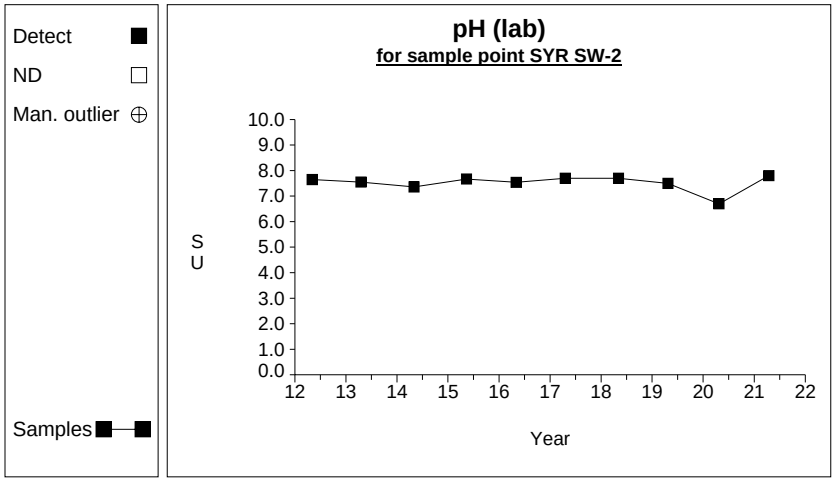
Time Series



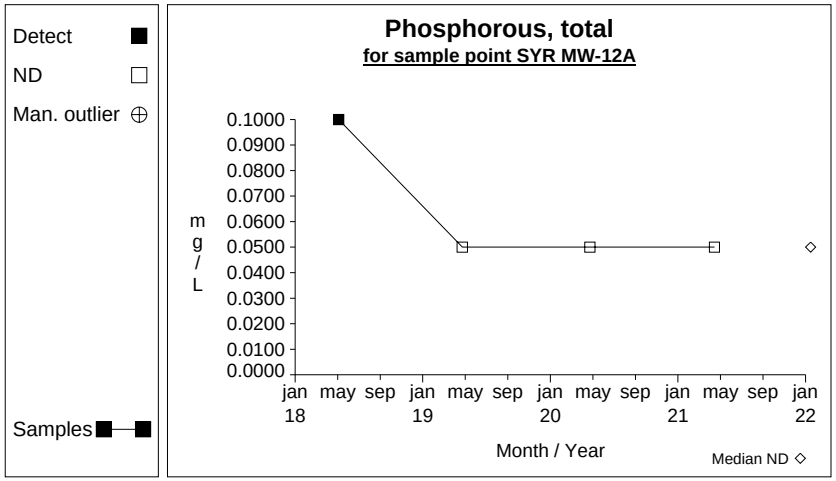
Graph 49



Graph 50

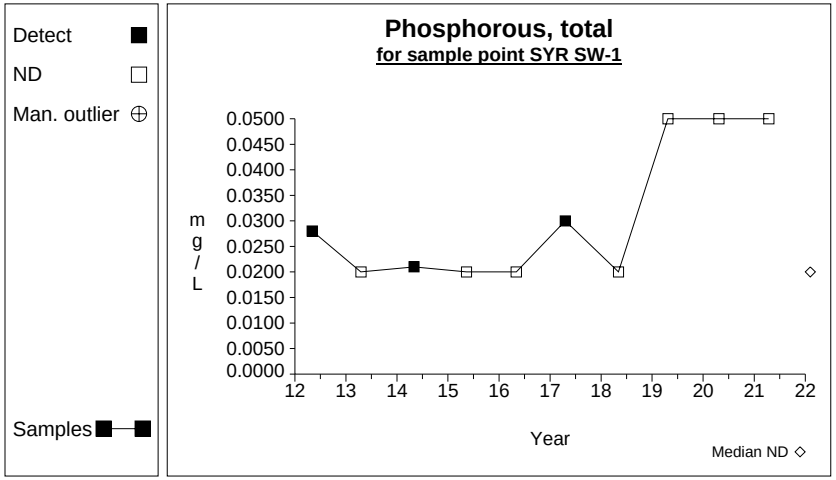


Graph 51

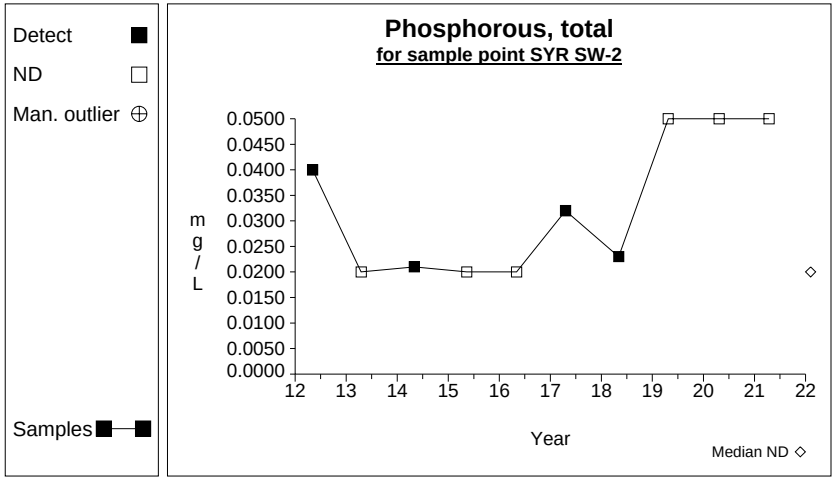


Graph 52

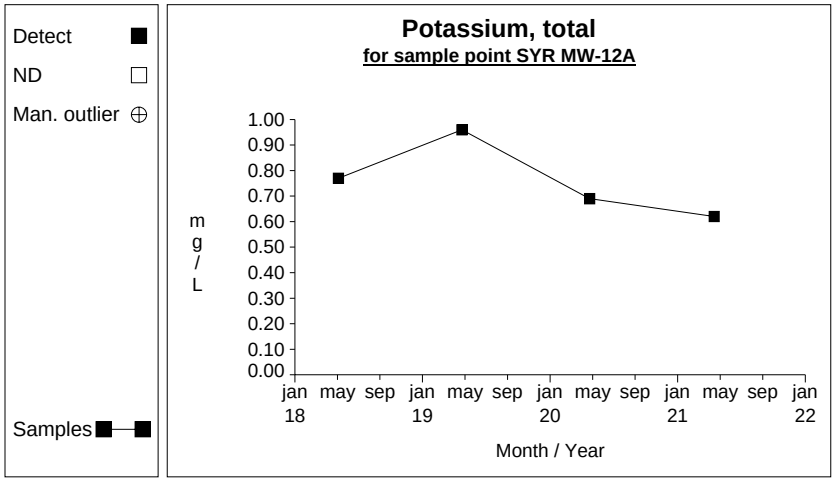
Time Series



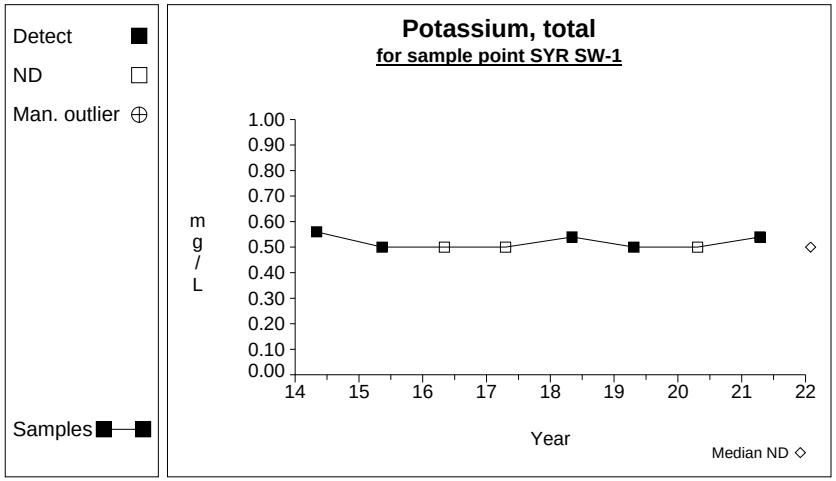
Graph 53



Graph 54

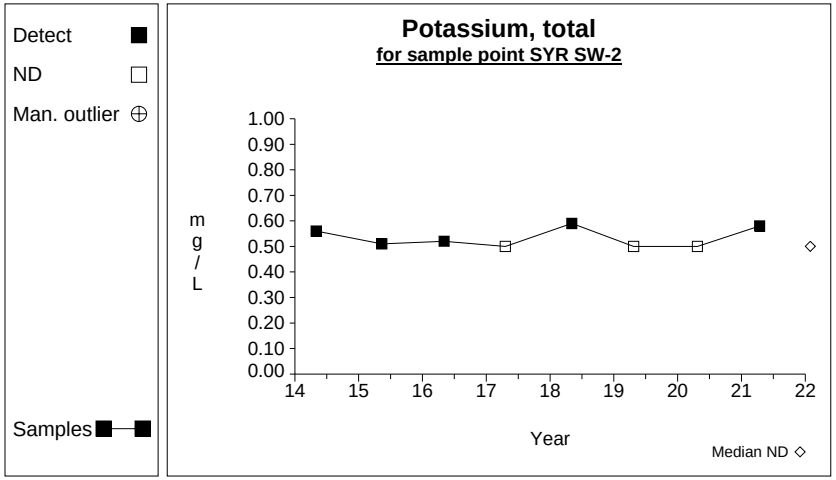


Graph 55

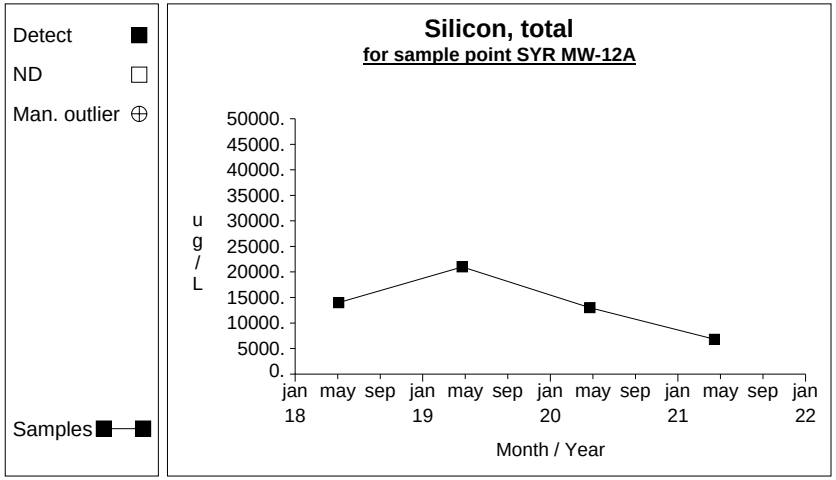


Graph 56

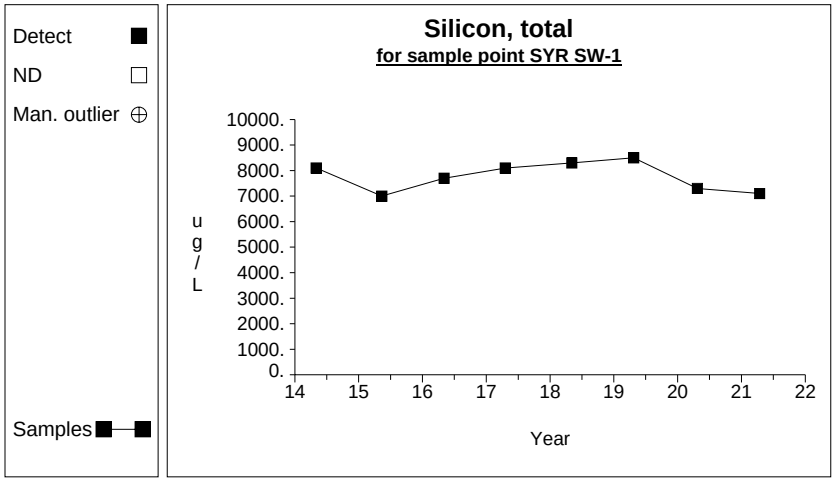
Time Series



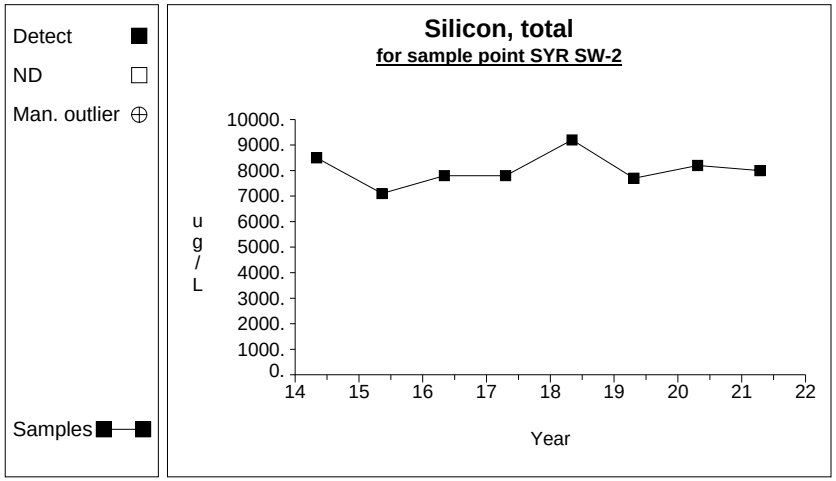
Graph 57



Graph 58

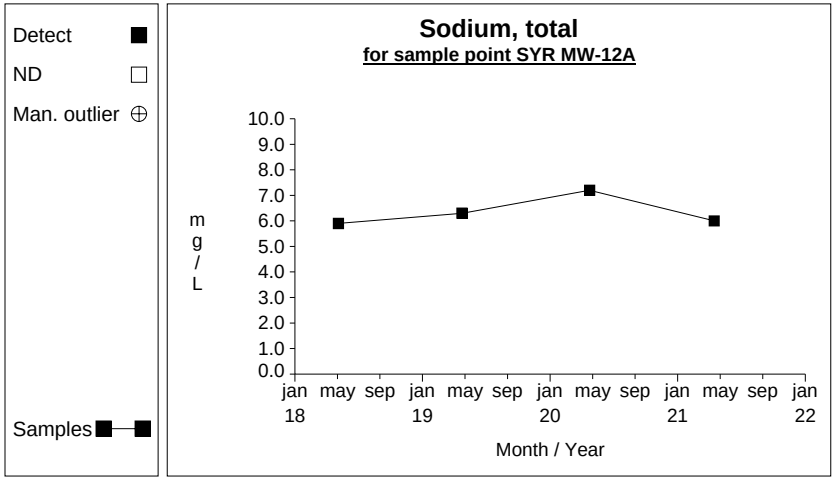


Graph 59

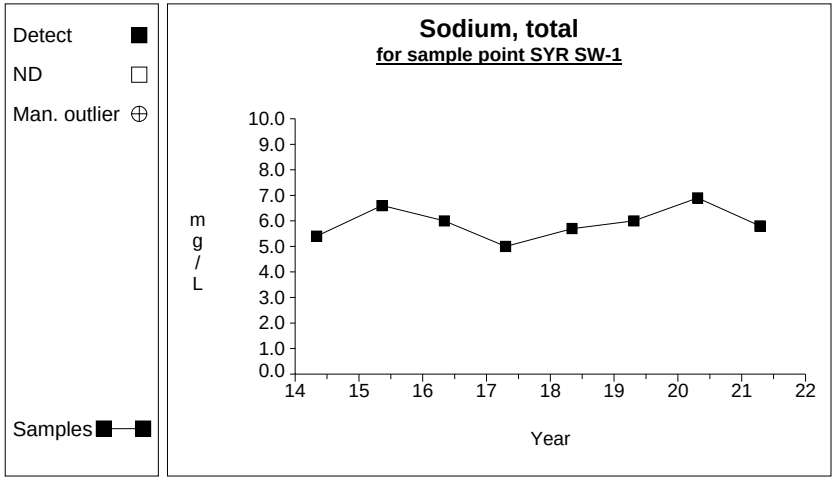


Graph 60

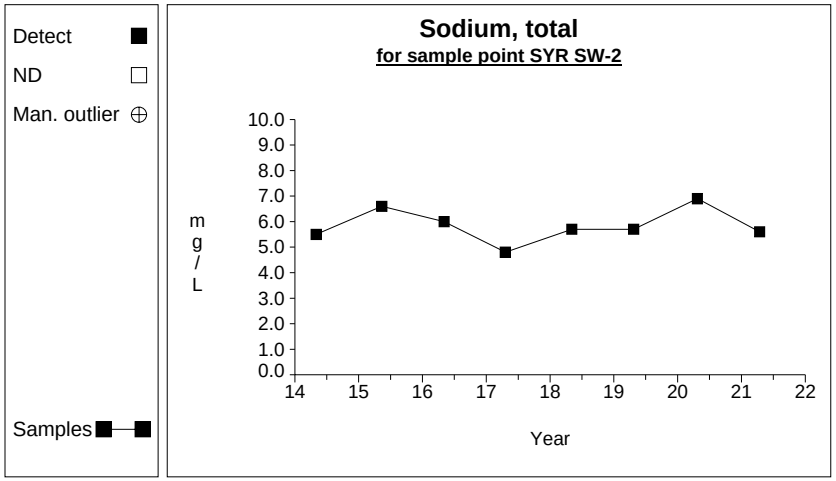
Time Series



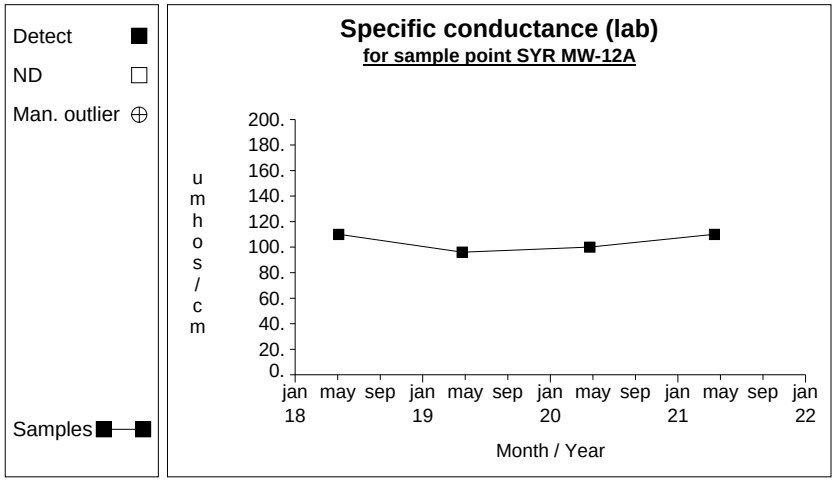
Graph 61



Graph 62

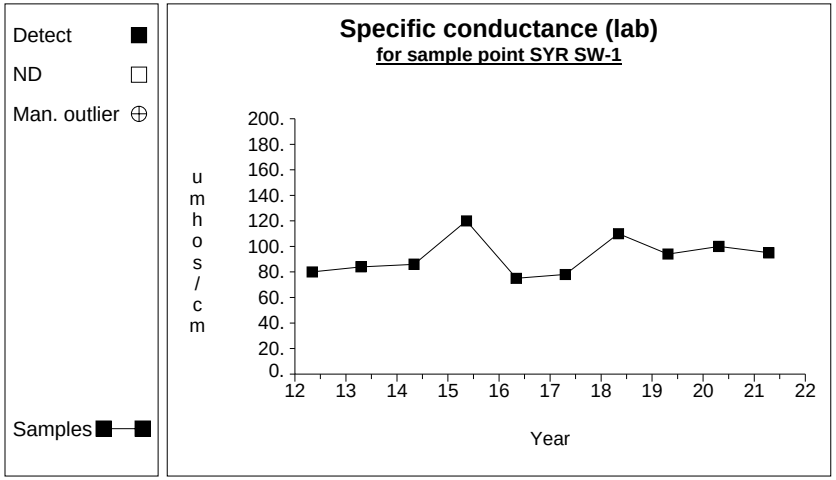


Graph 63

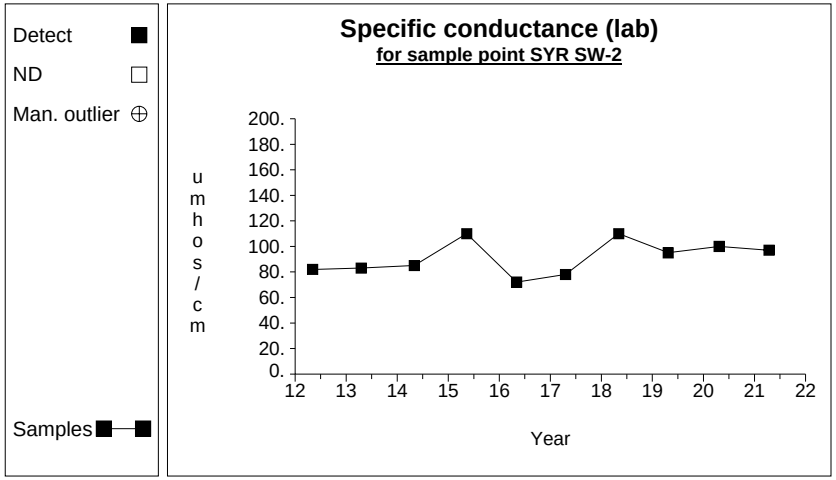


Graph 64

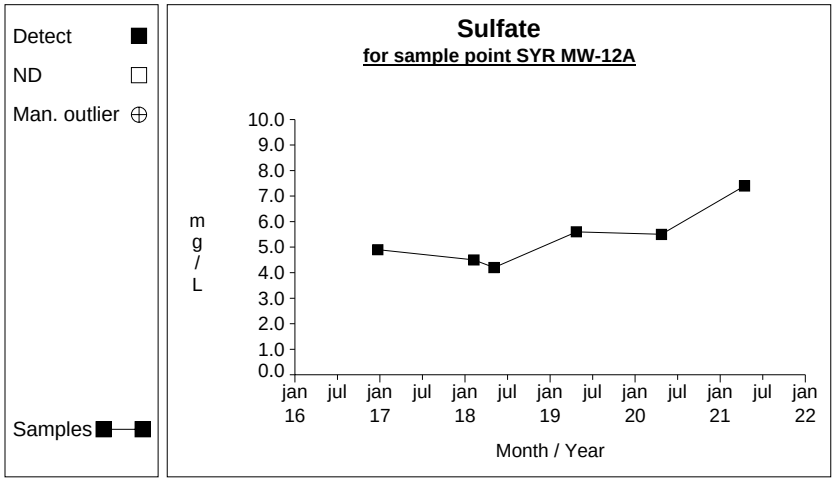
Time Series



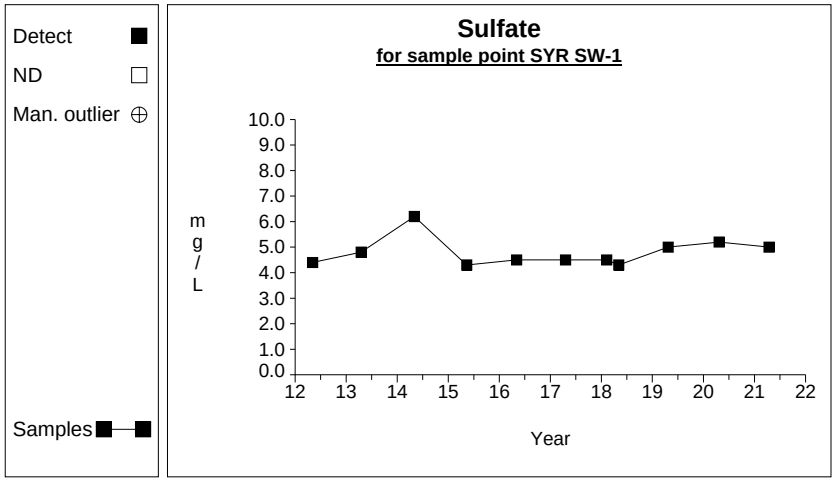
Graph 65



Graph 66

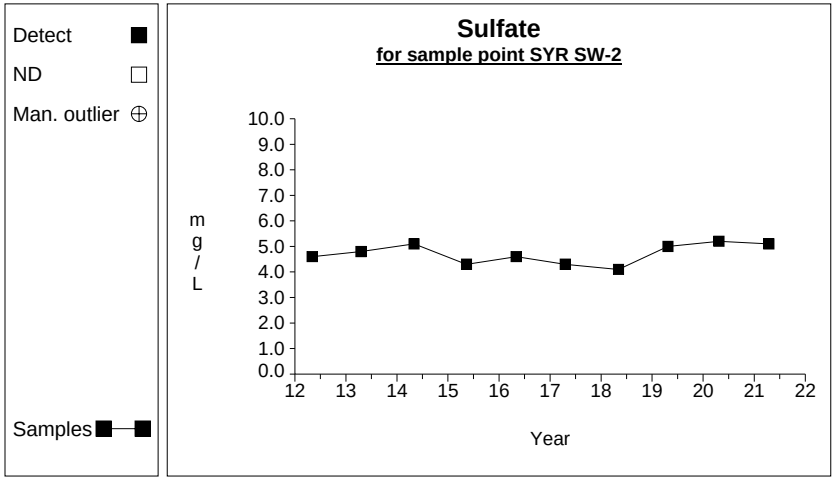


Graph 67

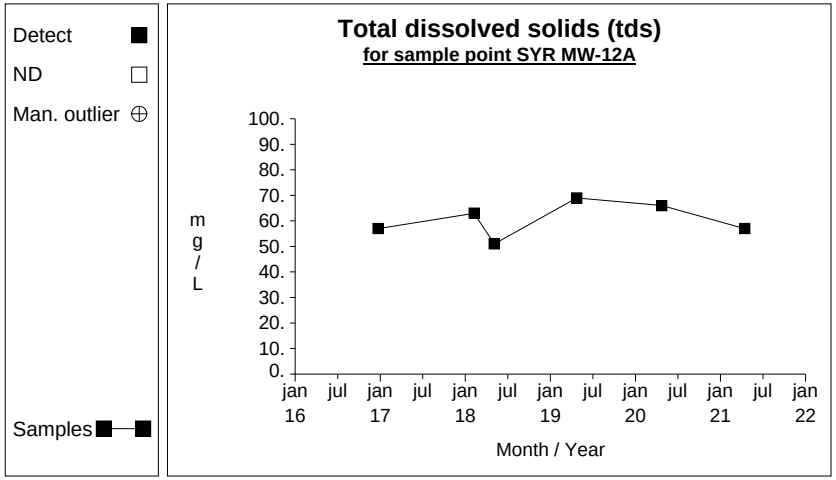


Graph 68

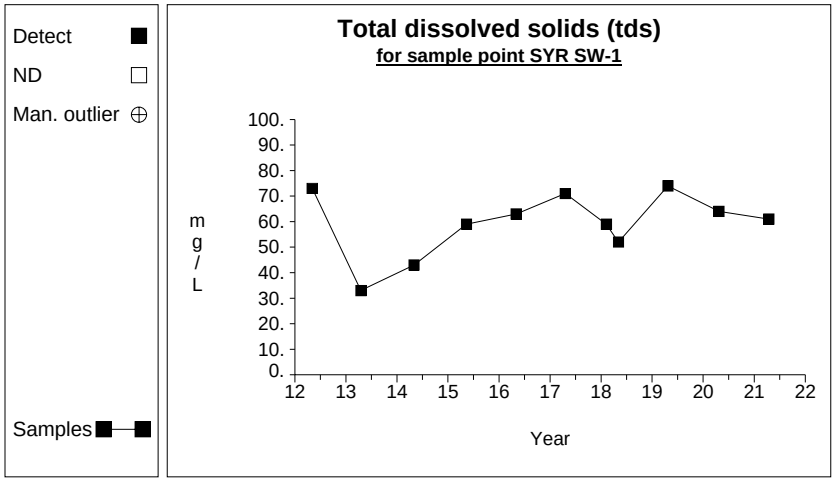
Time Series



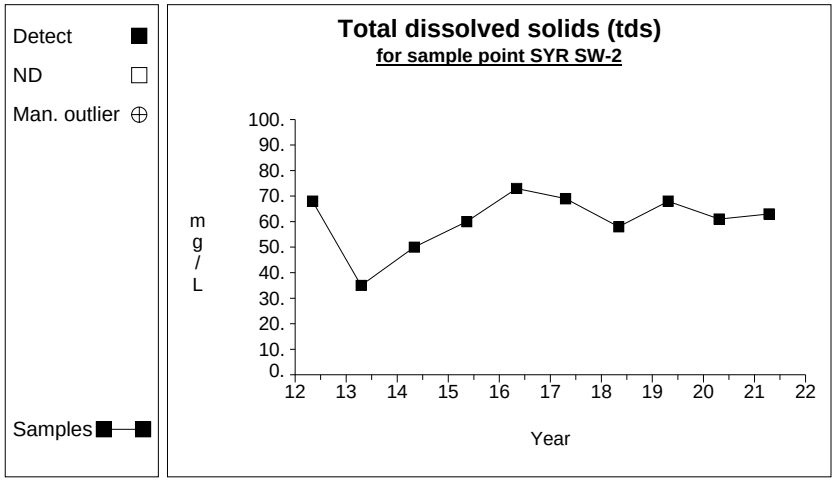
Graph 69



Graph 70

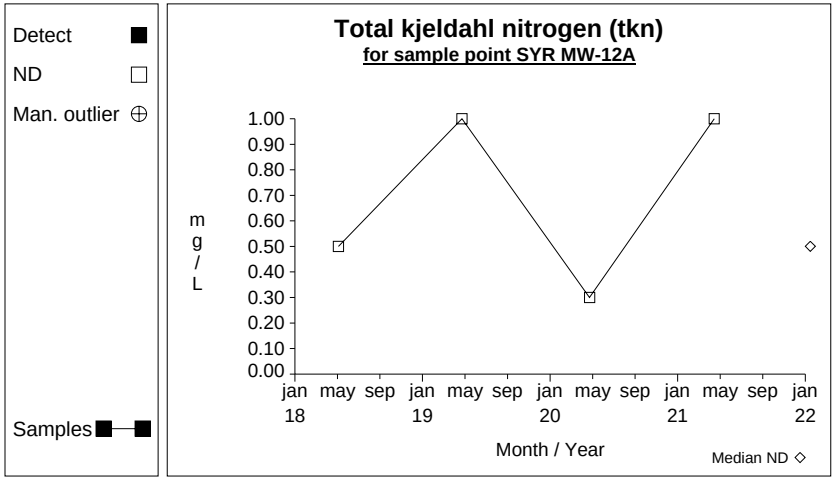


Graph 71

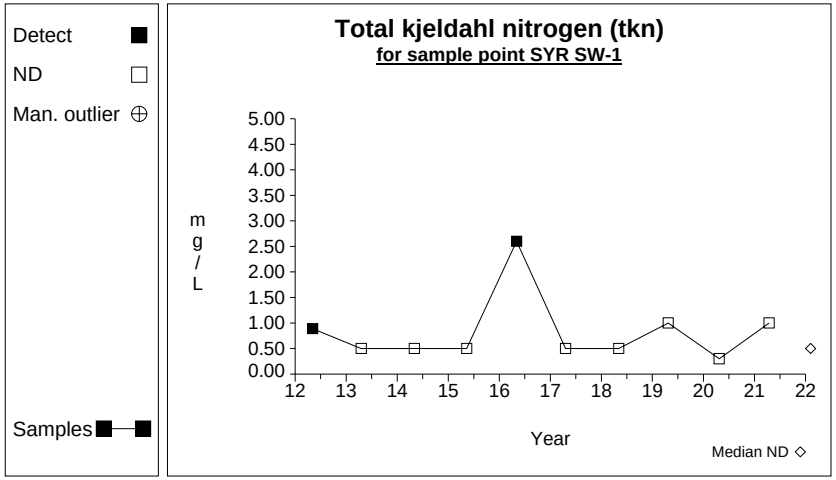


Graph 72

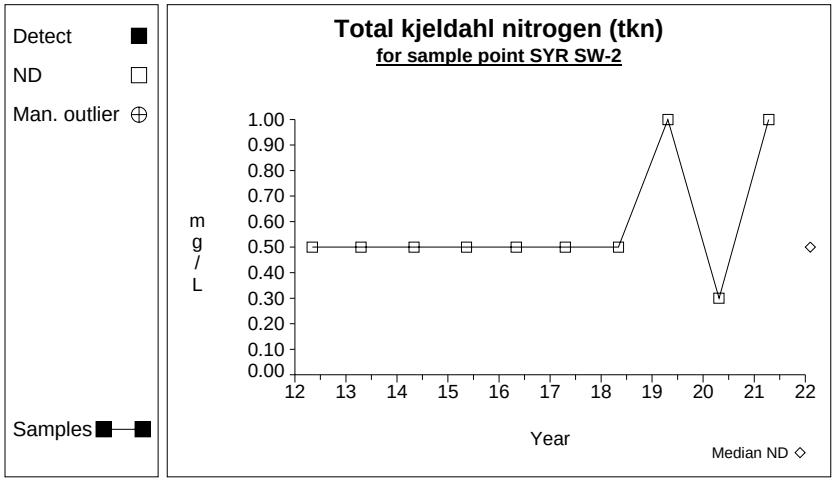
Time Series



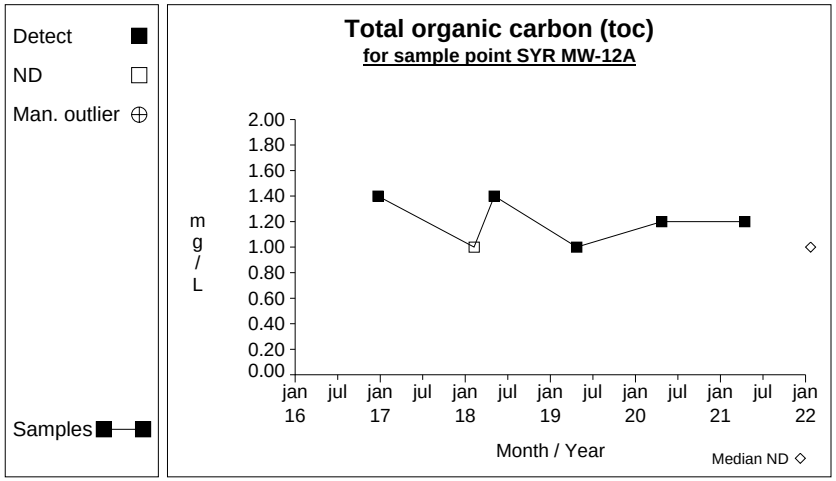
Graph 73



Graph 74

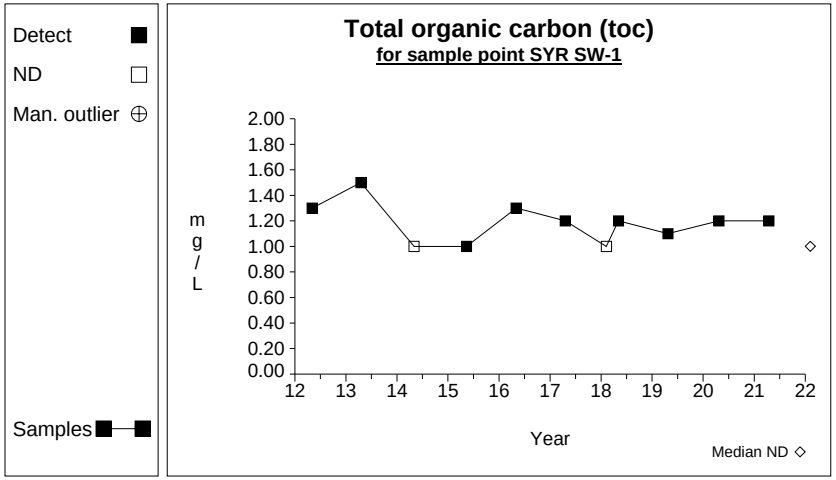


Graph 75

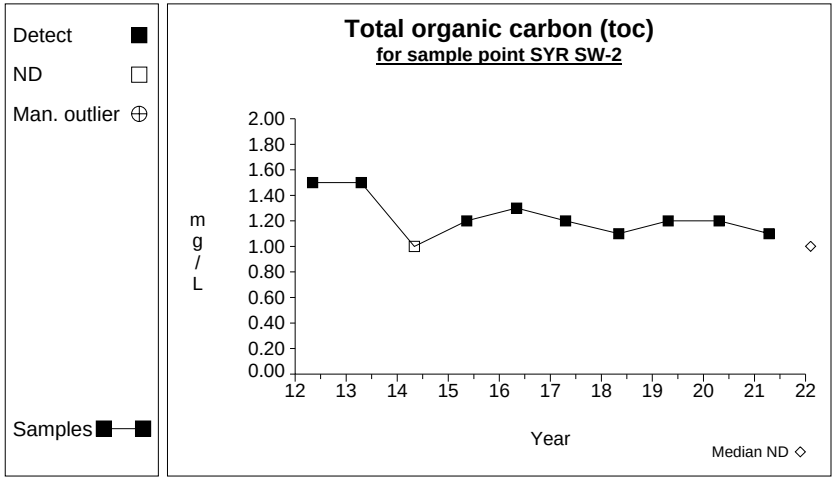


Graph 76

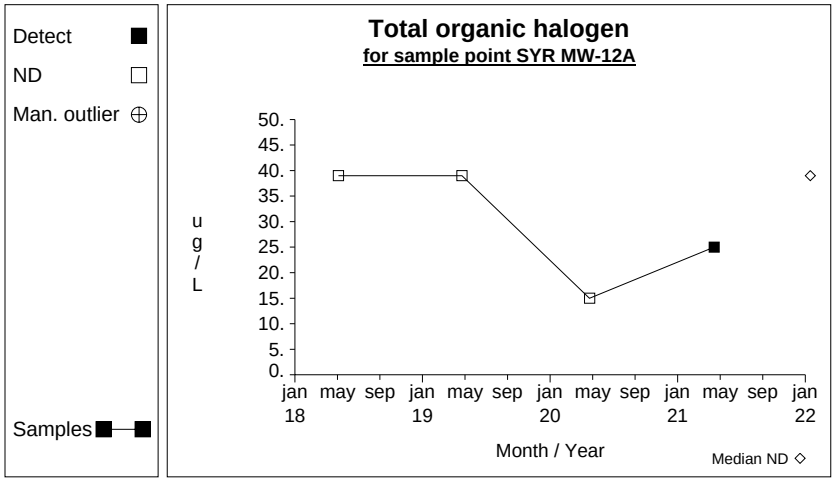
Time Series



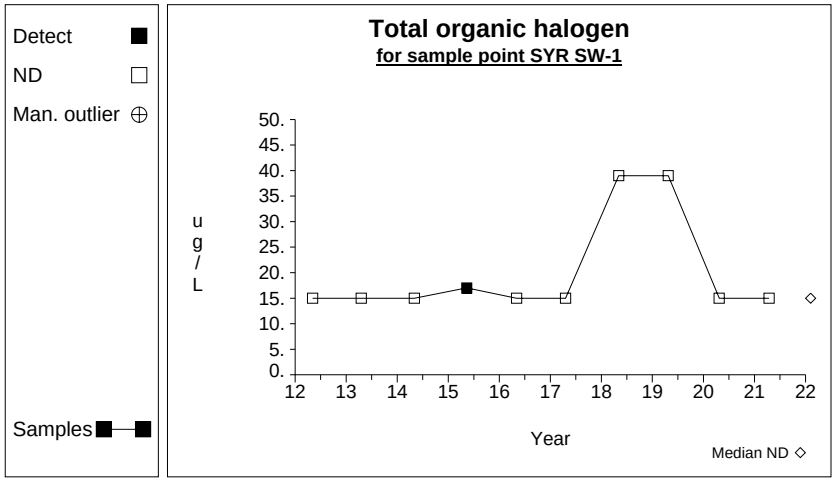
Graph 77



Graph 78

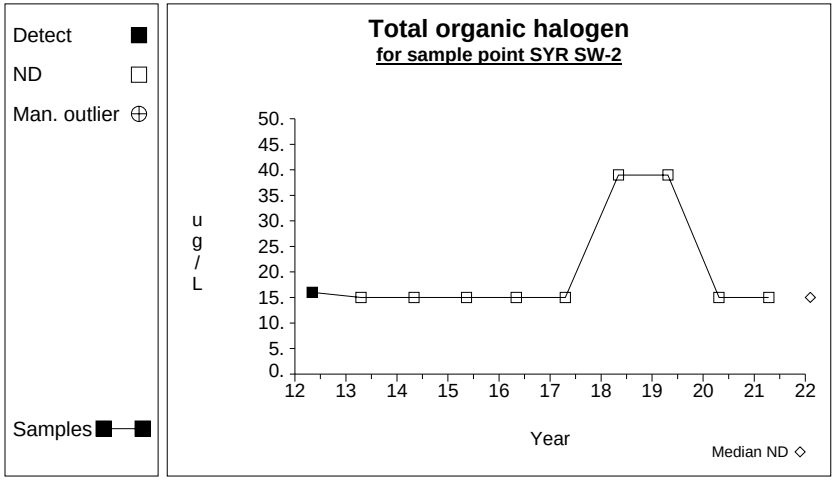


Graph 79

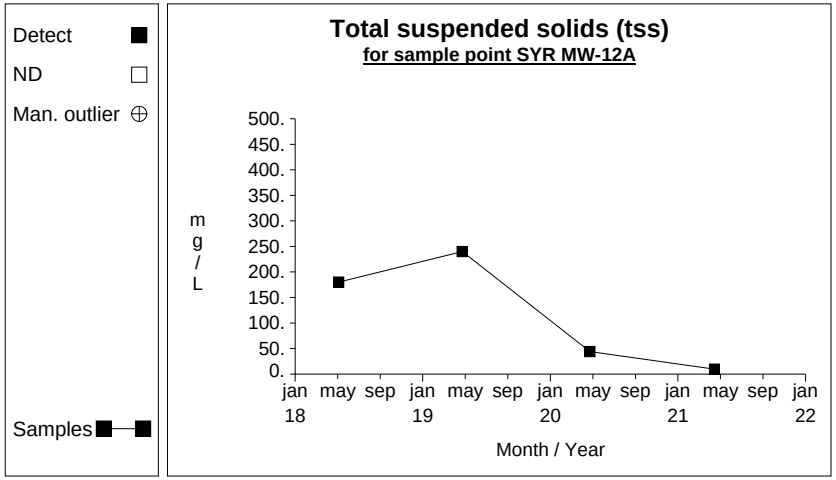


Graph 80

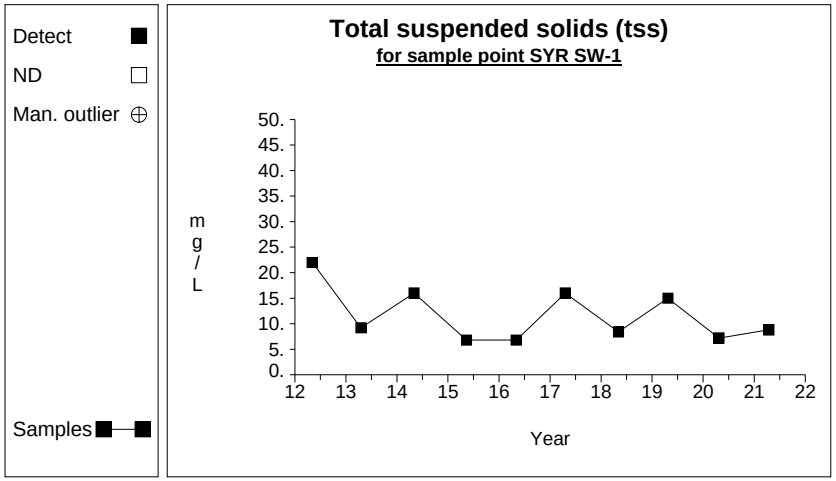
Time Series



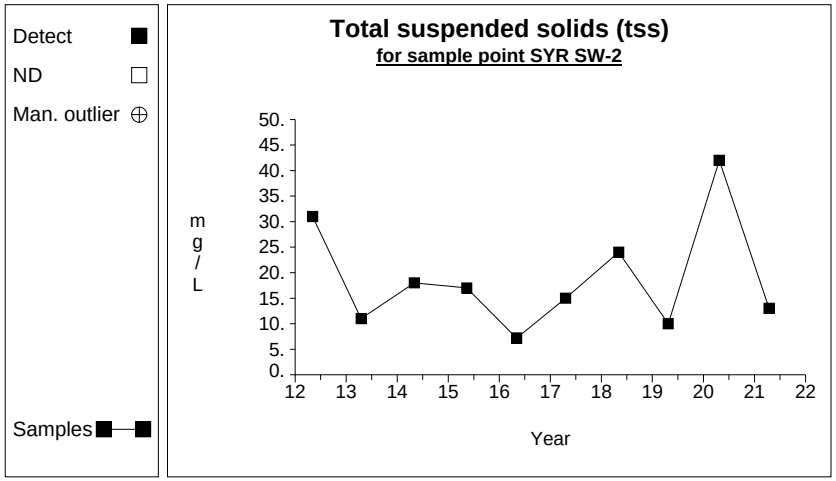
Graph 81



Graph 82



Graph 83

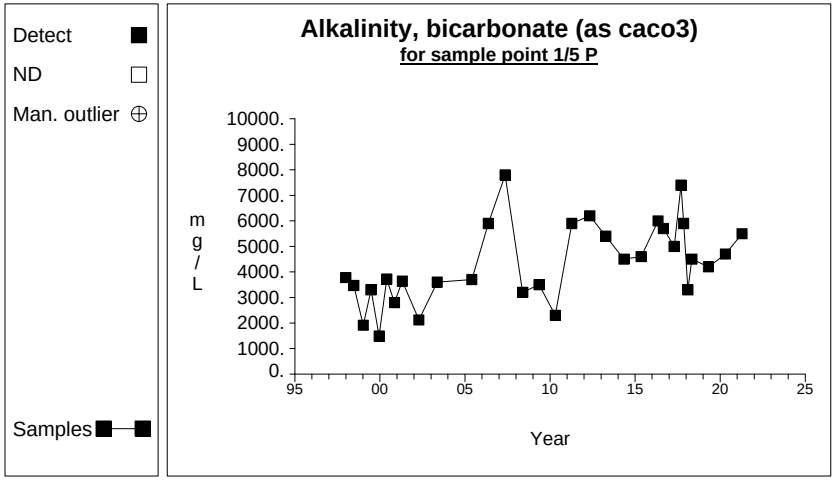


Graph 84

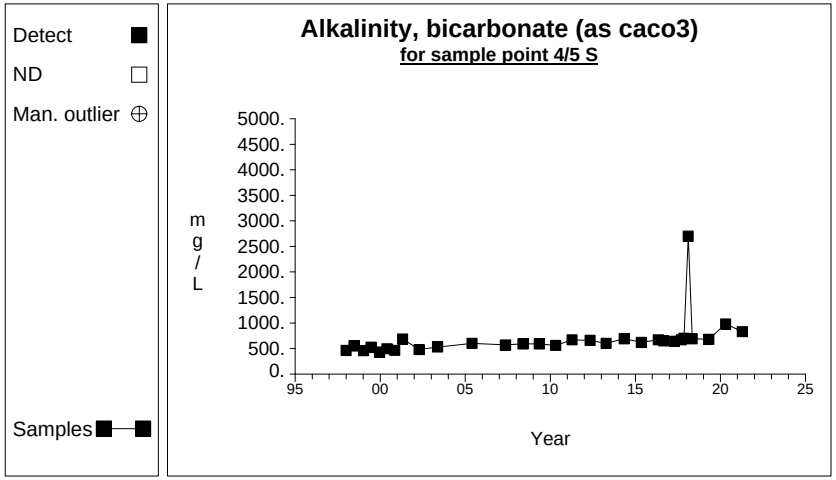
LCRS and LDS Sump Samples

Time-Concentration Graphs

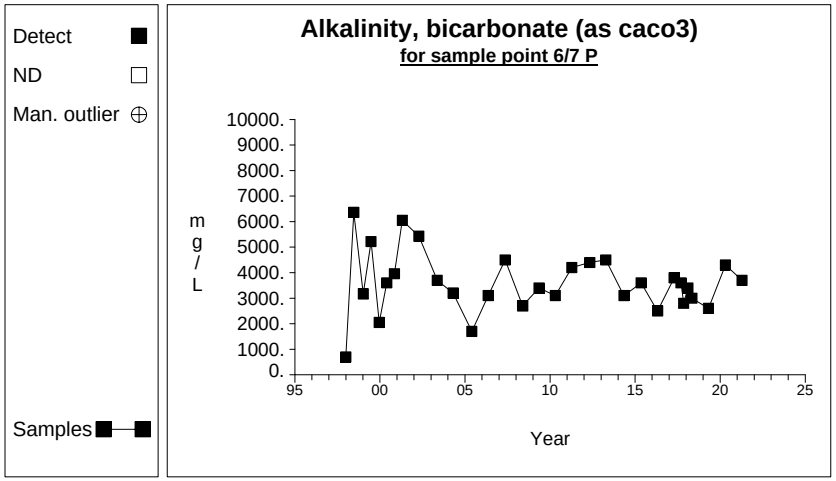
Time Series



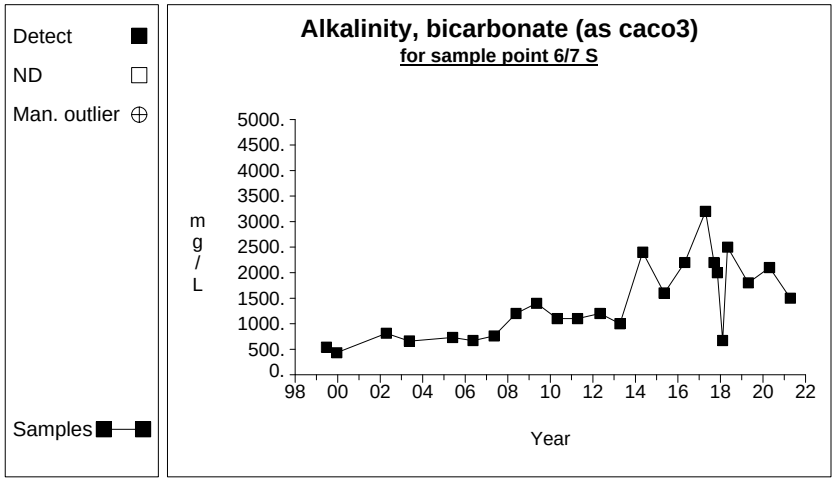
Graph 1



Graph 2

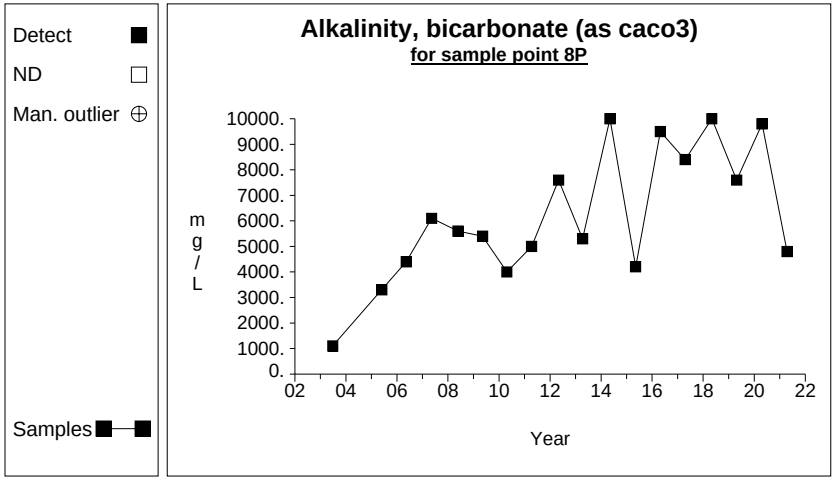


Graph 3

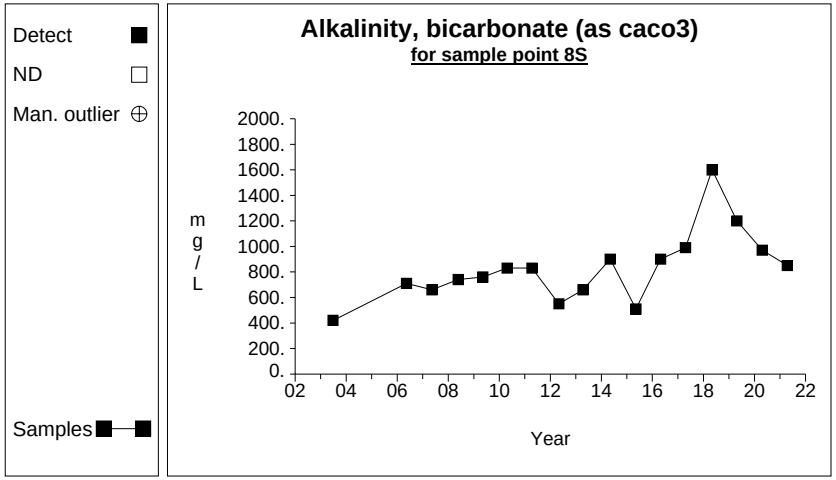


Graph 4

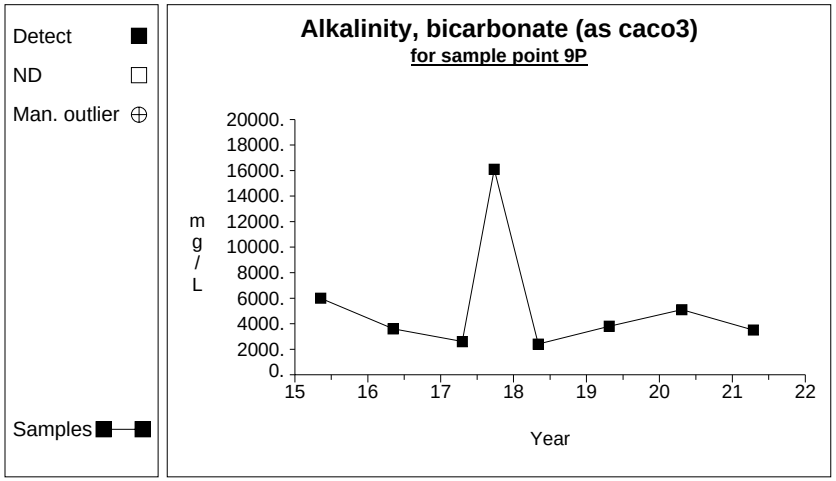
Time Series



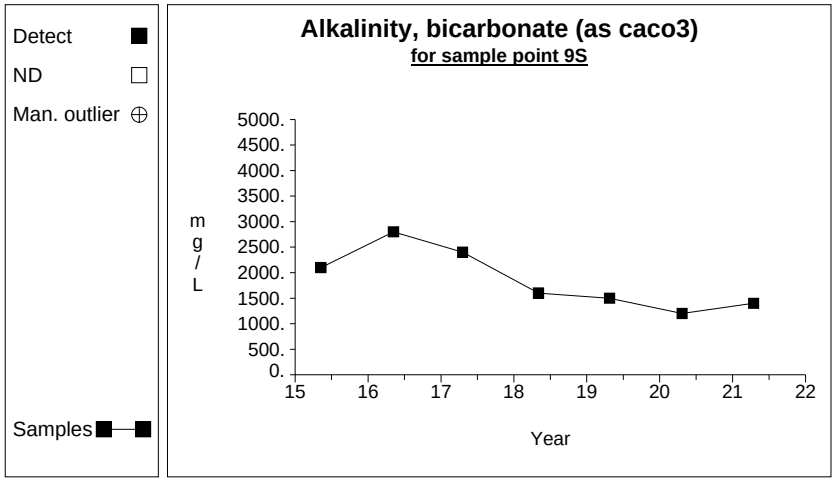
Graph 5



Graph 6

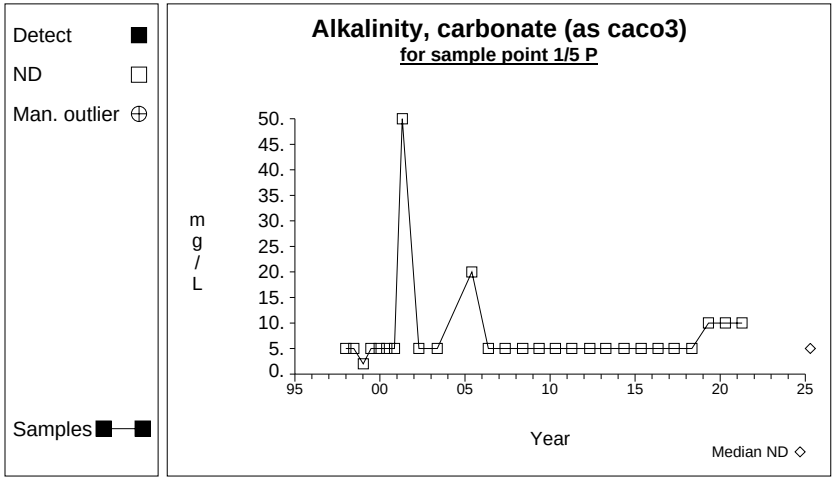


Graph 7

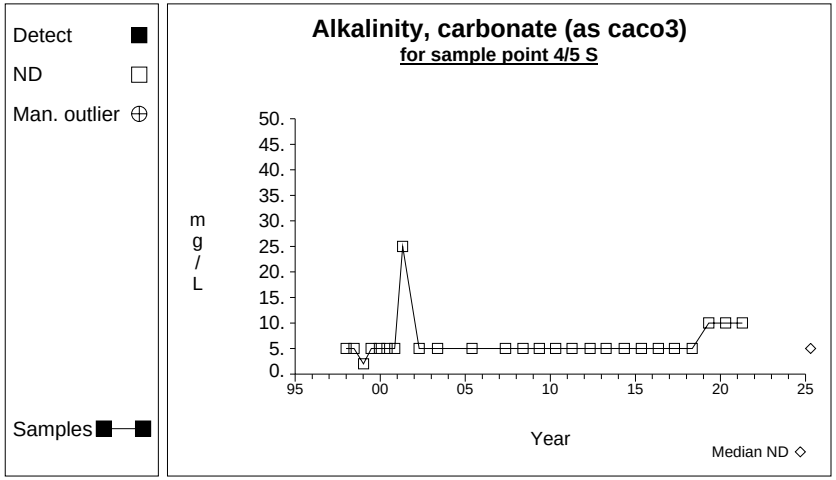


Graph 8

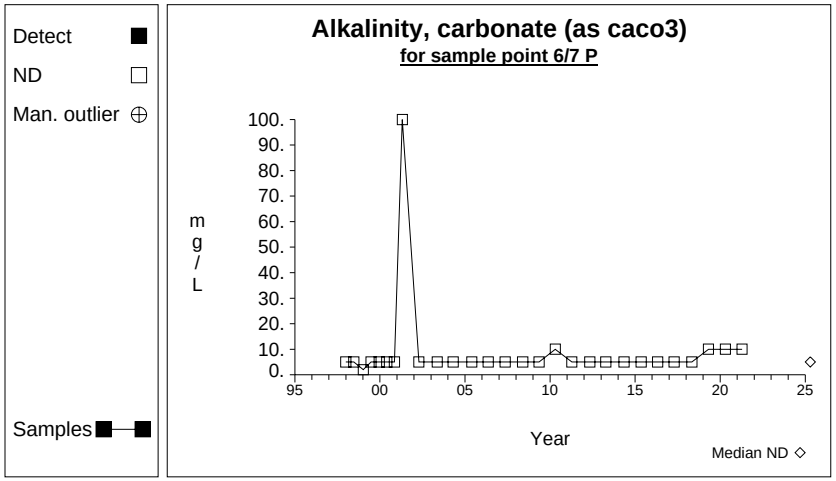
Time Series



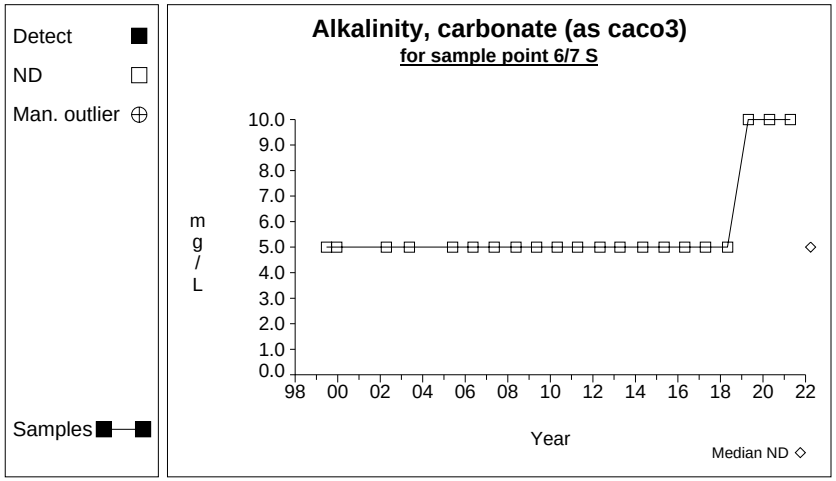
Graph 9



Graph 10

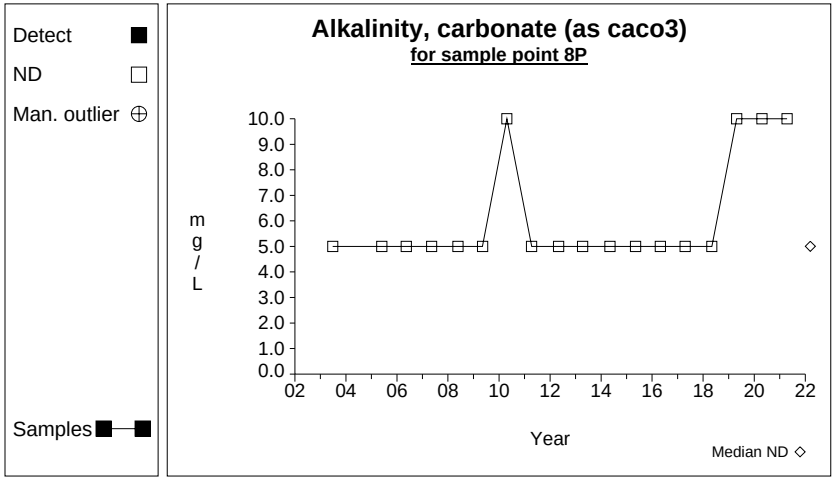


Graph 11

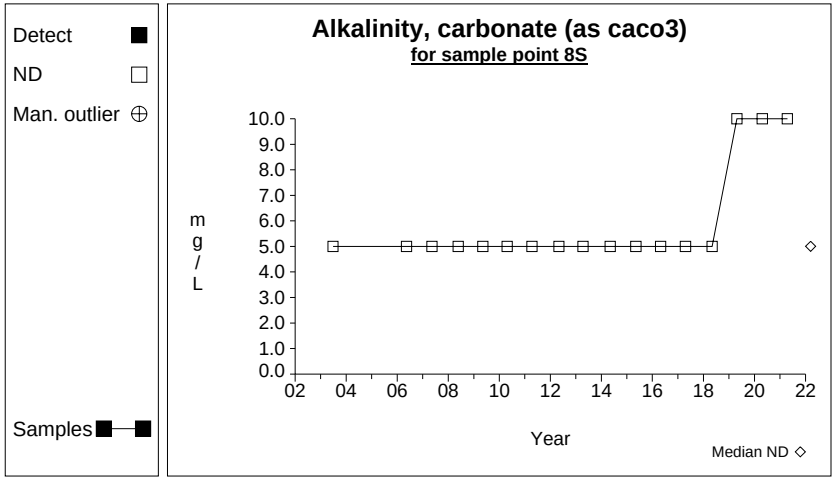


Graph 12

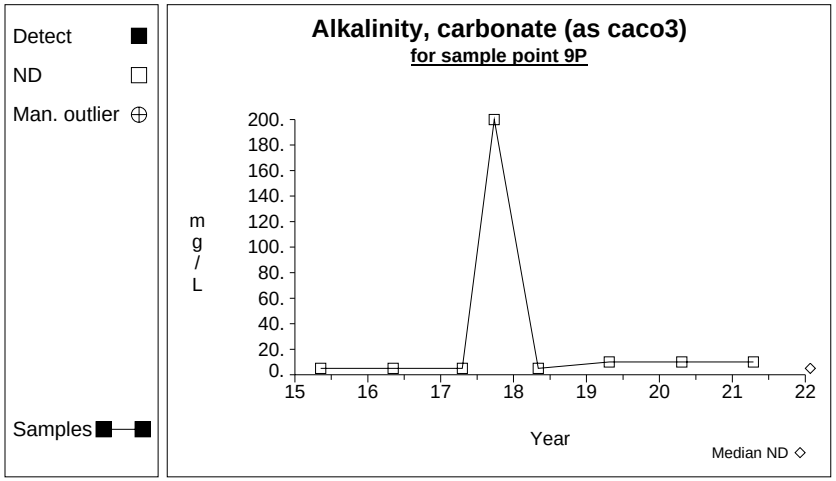
Time Series



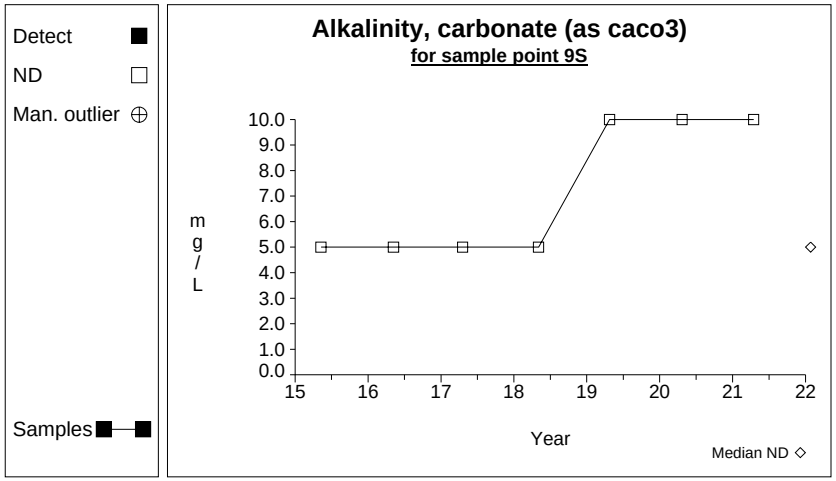
Graph 13



Graph 14

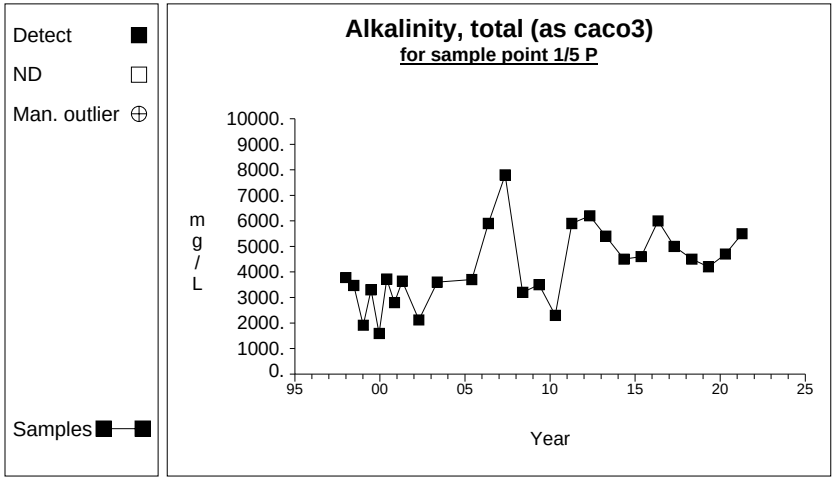


Graph 15

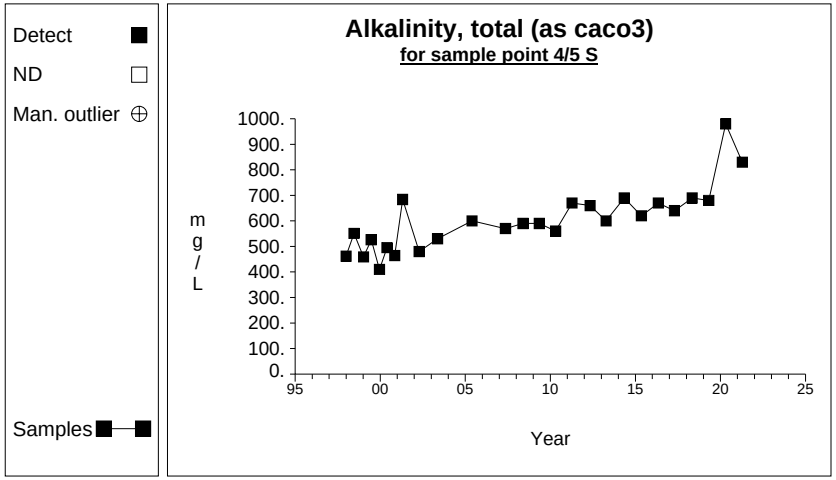


Graph 16

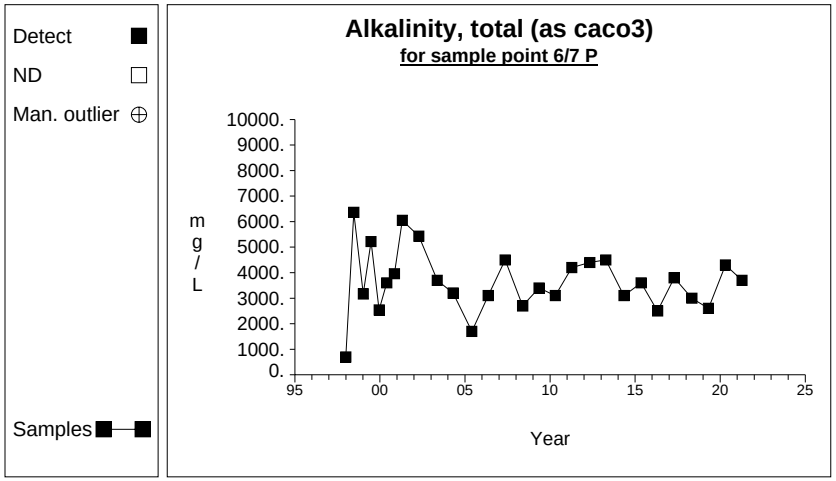
Time Series



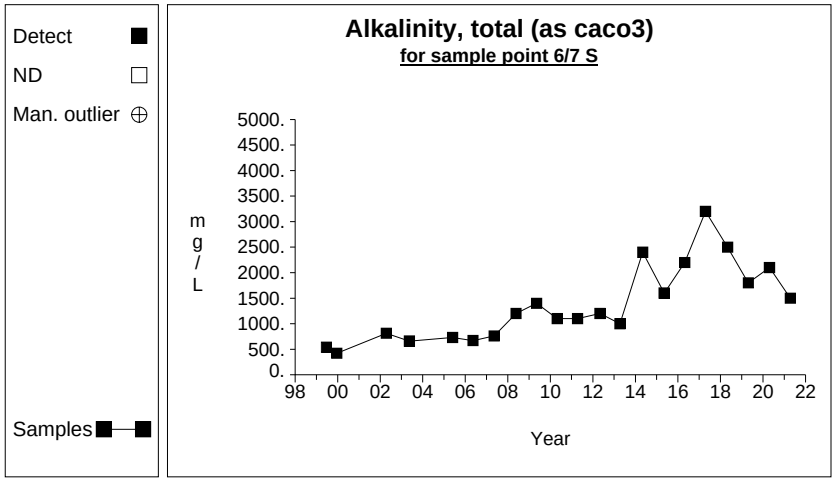
Graph 17



Graph 18

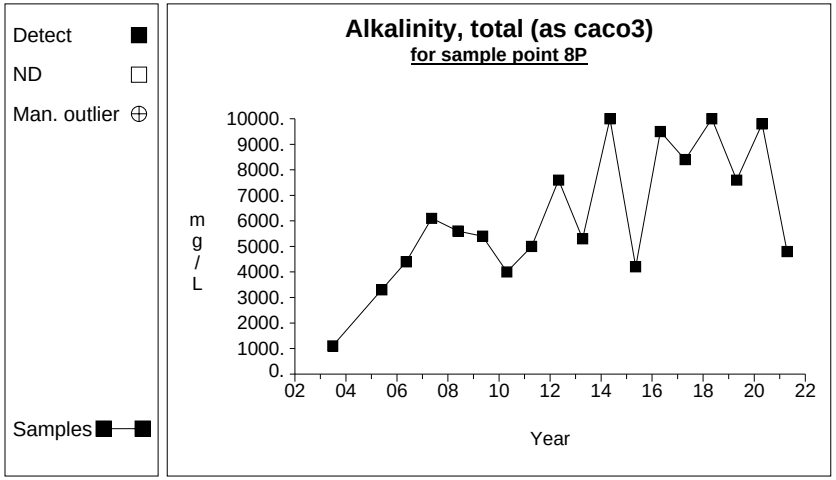


Graph 19

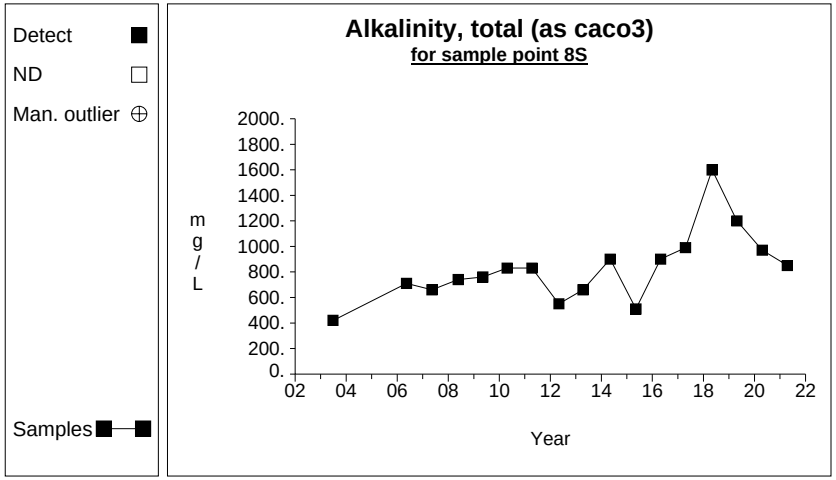


Graph 20

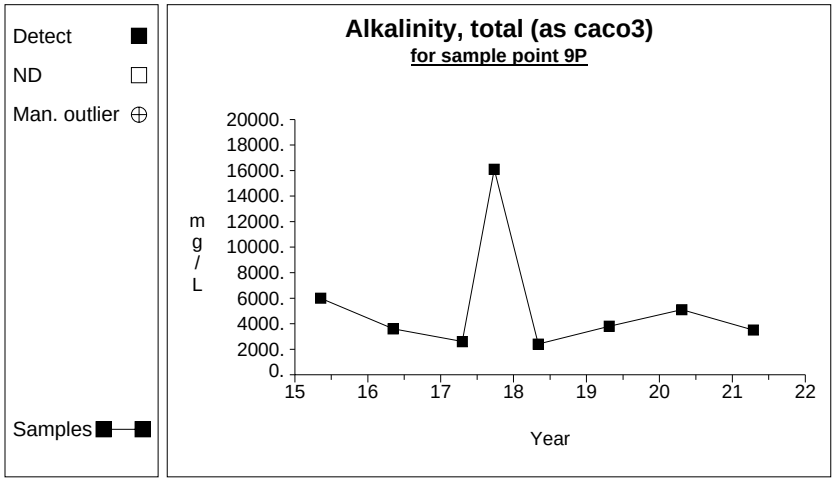
Time Series



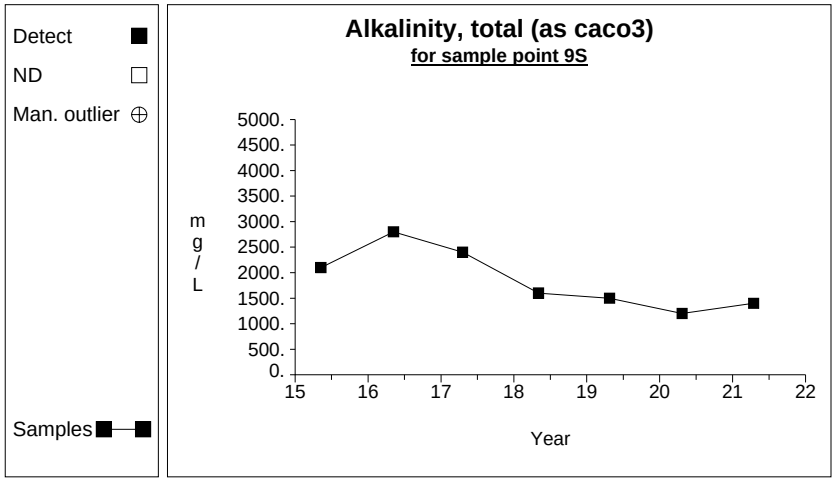
Graph 21



Graph 22

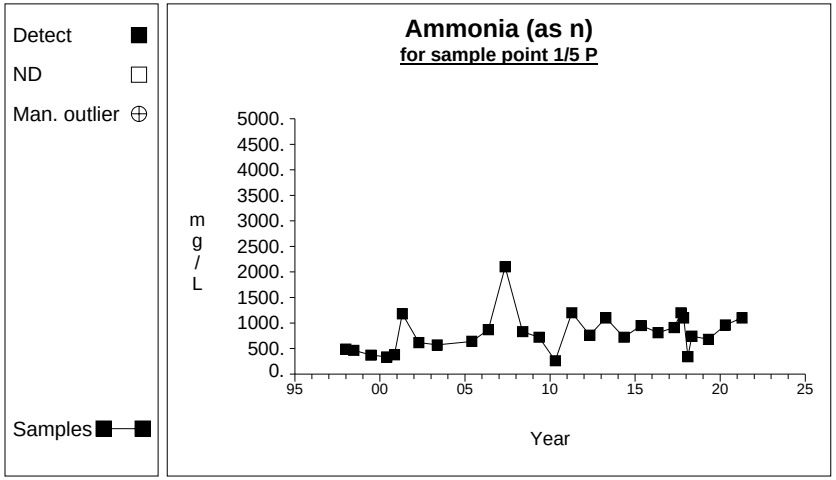


Graph 23

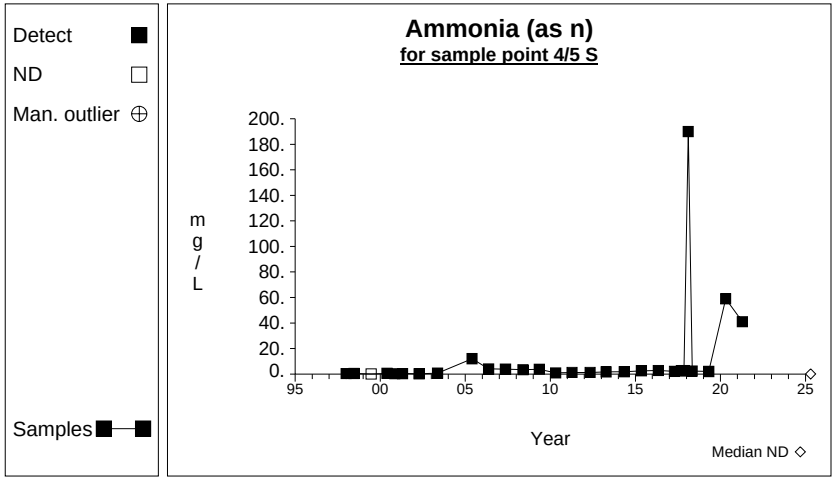


Graph 24

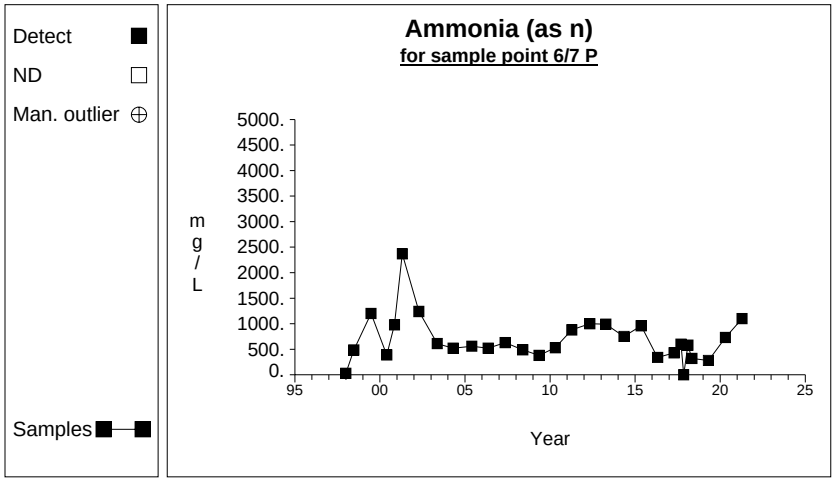
Time Series



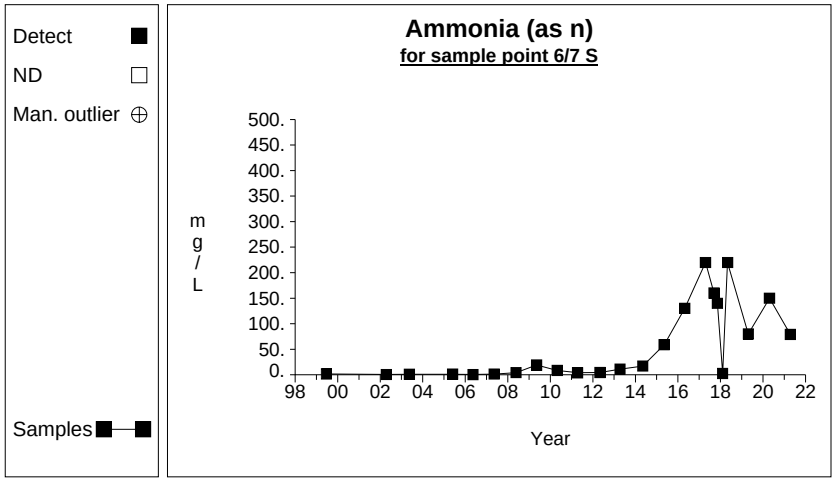
Graph 25



Graph 26

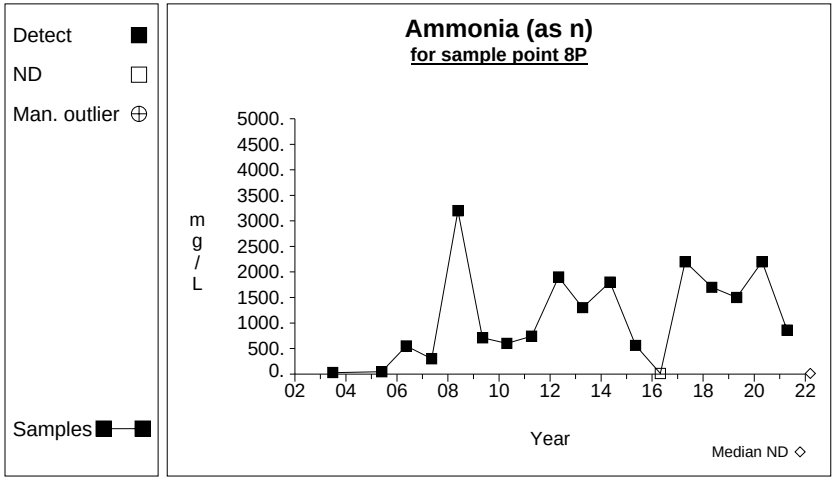


Graph 27

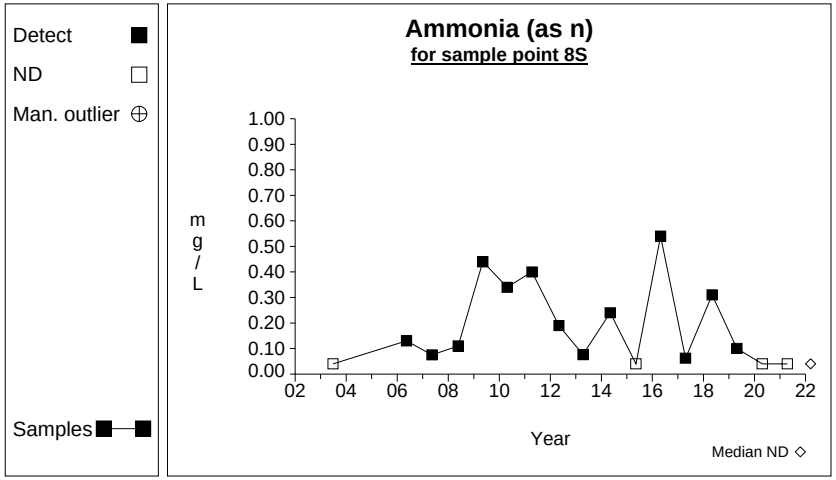


Graph 28

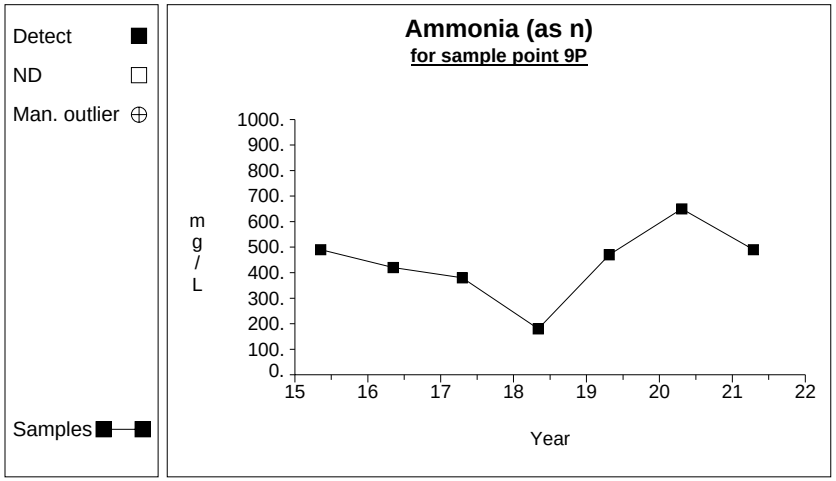
Time Series



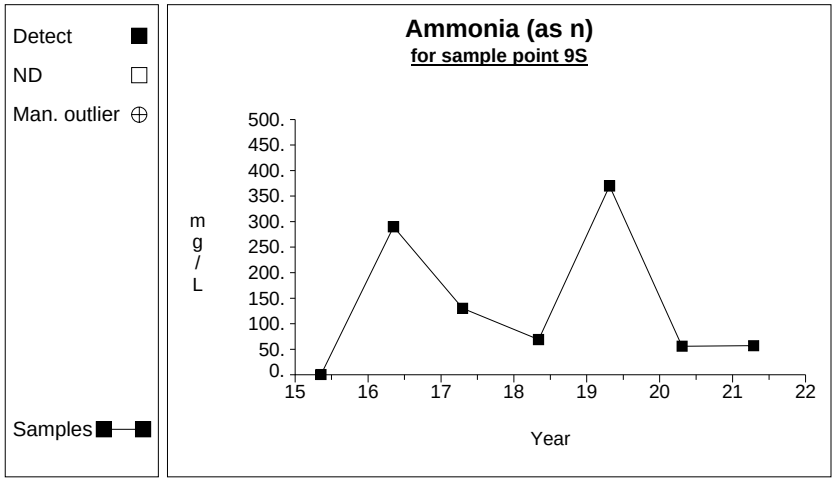
Graph 29



Graph 30

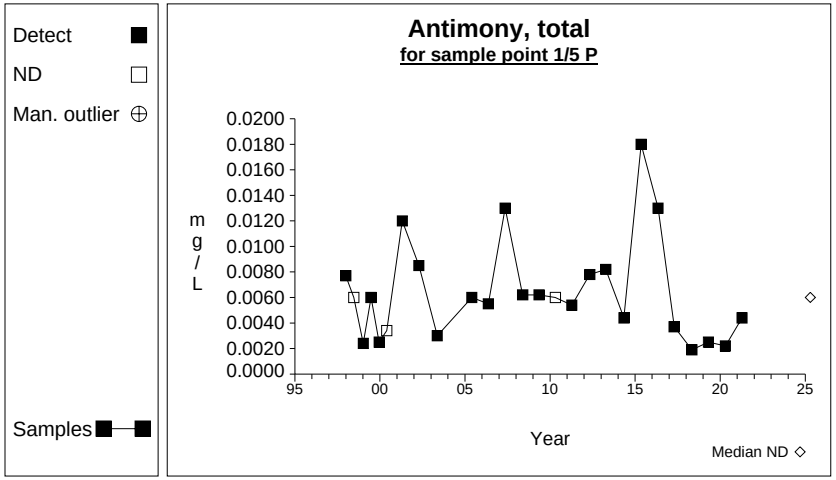


Graph 31

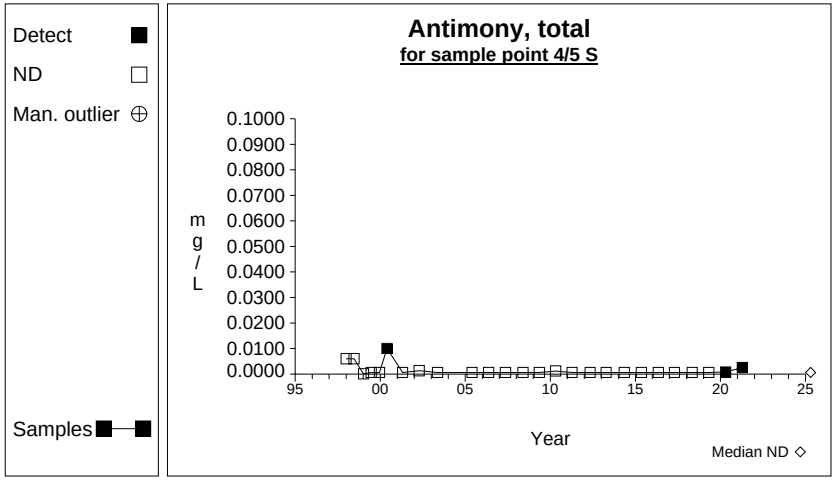


Graph 32

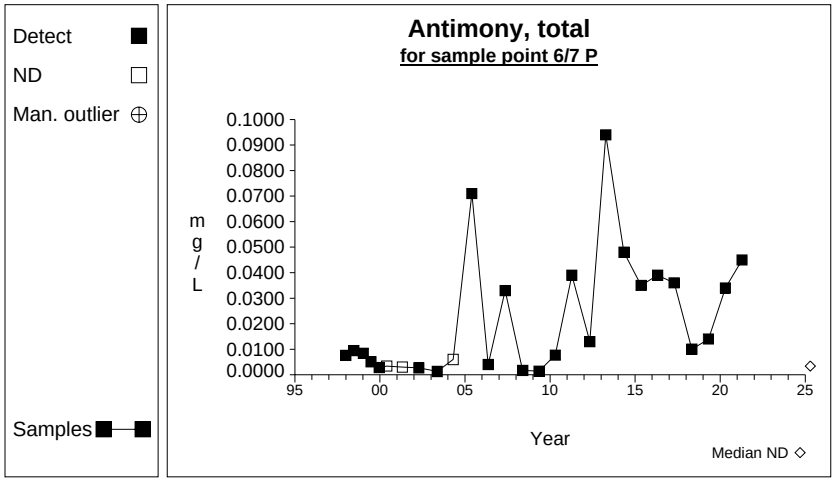
Time Series



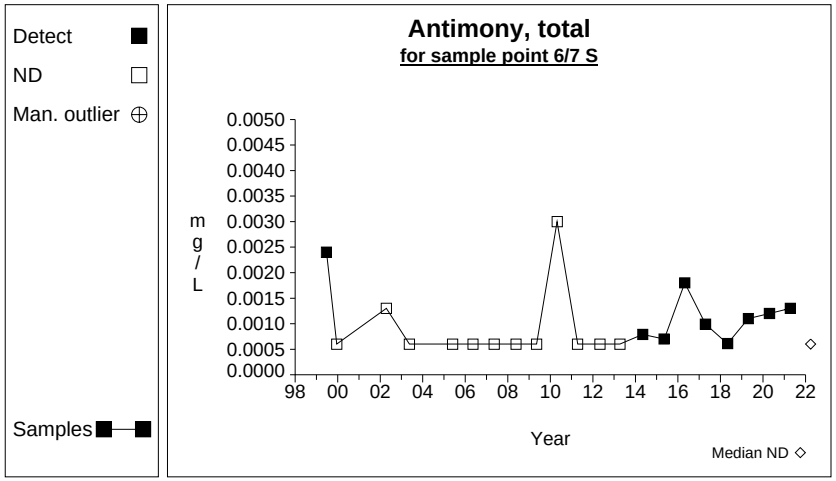
Graph 33



Graph 34

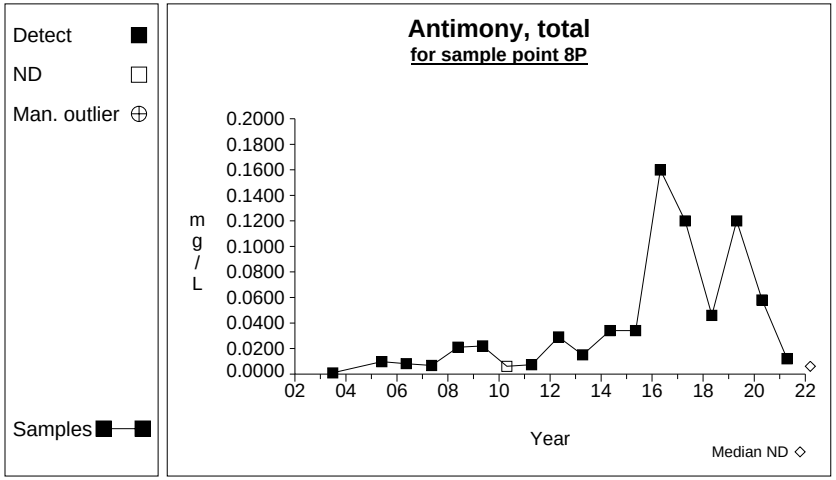


Graph 35

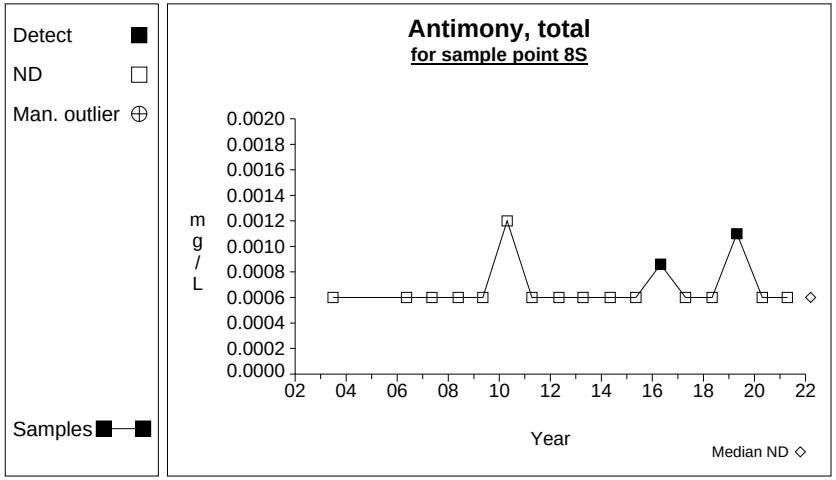


Graph 36

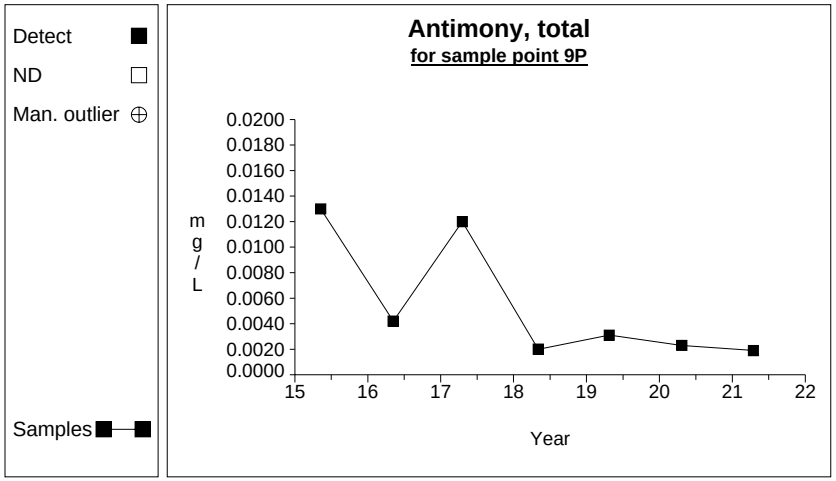
Time Series



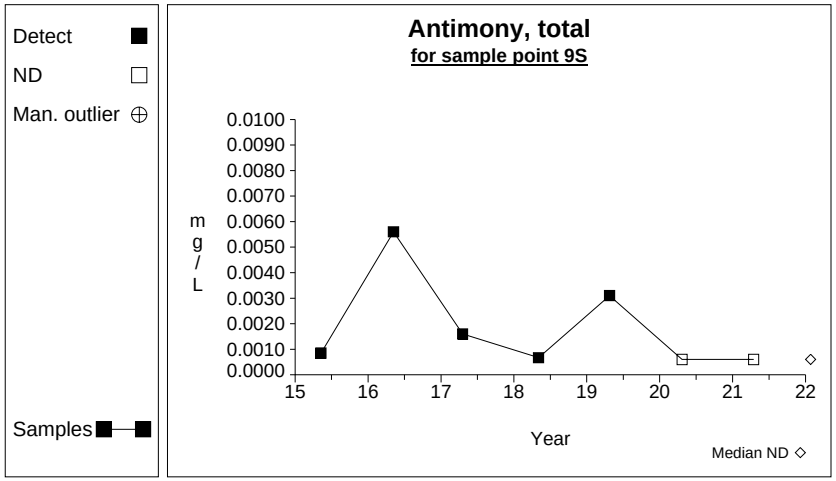
Graph 37



Graph 38

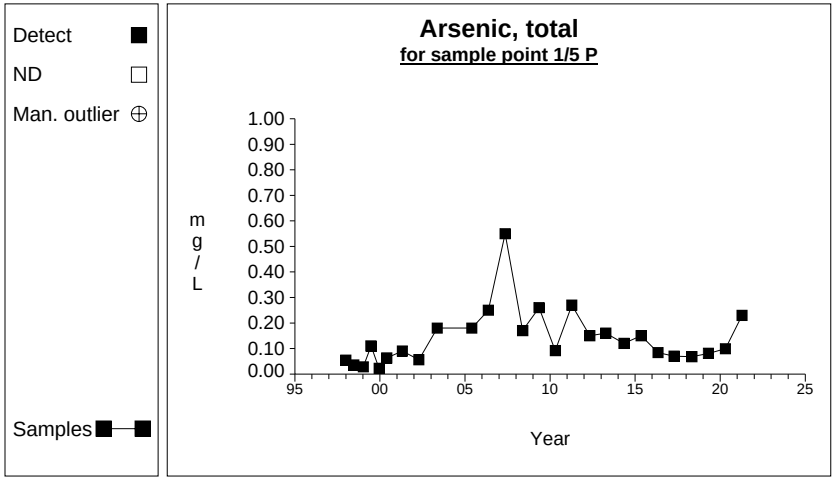


Graph 39

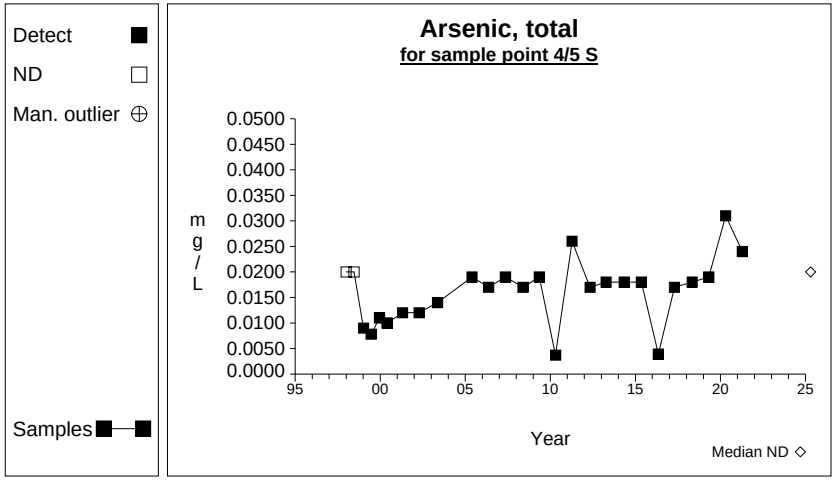


Graph 40

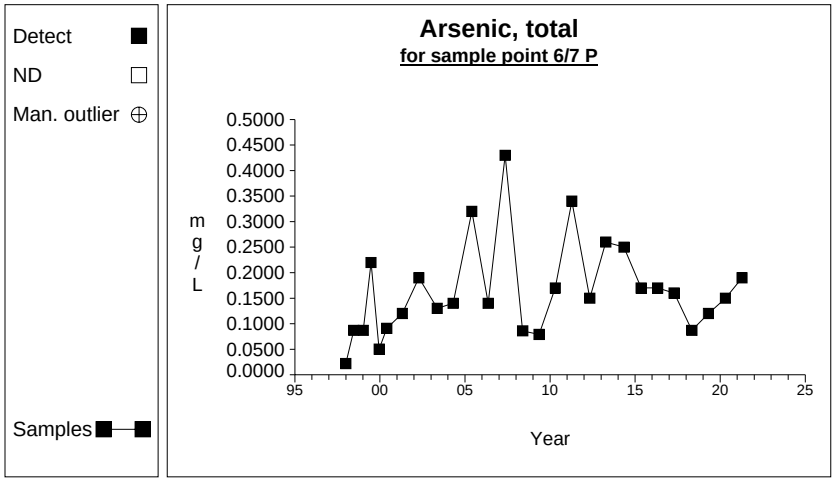
Time Series



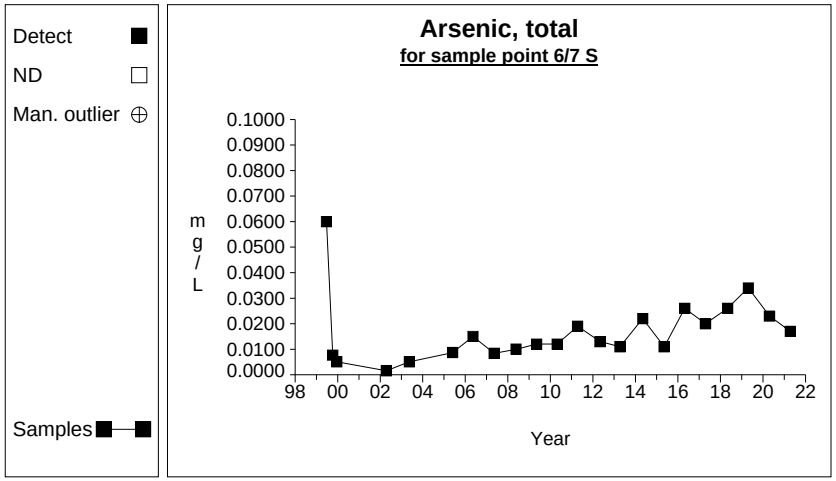
Graph 41



Graph 42

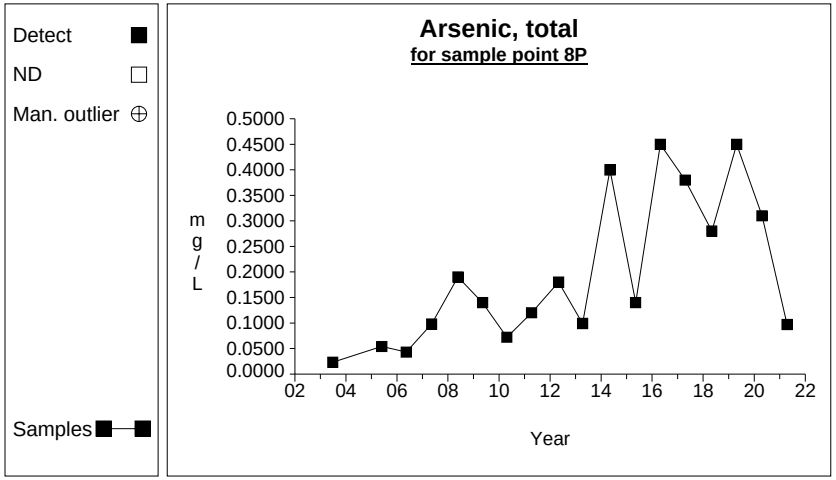


Graph 43

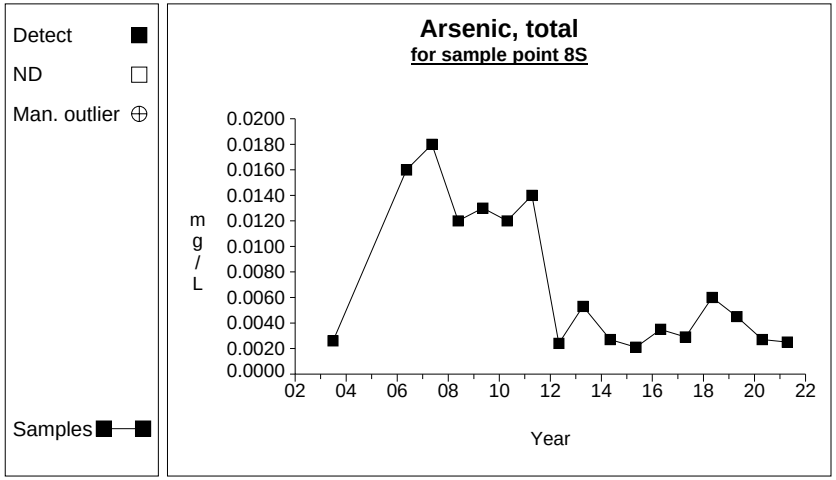


Graph 44

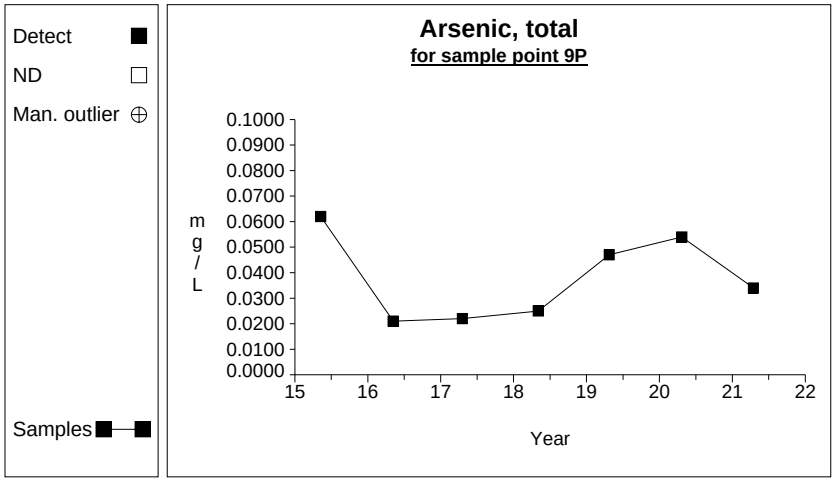
Time Series



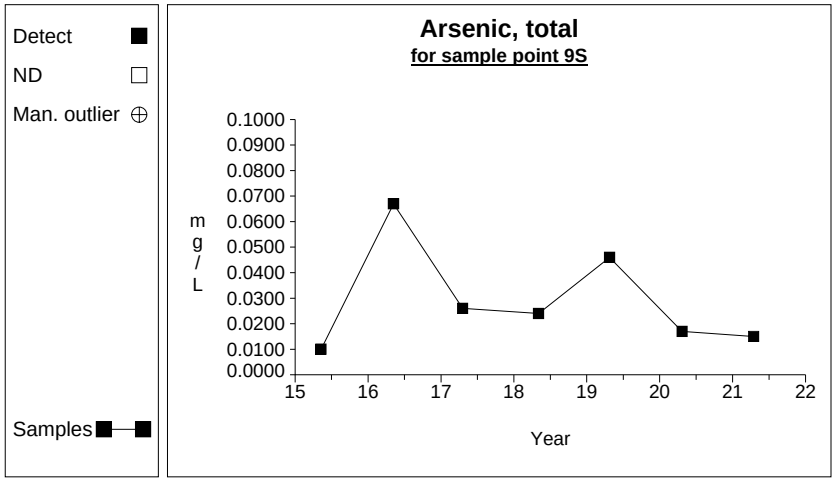
Graph 45



Graph 46

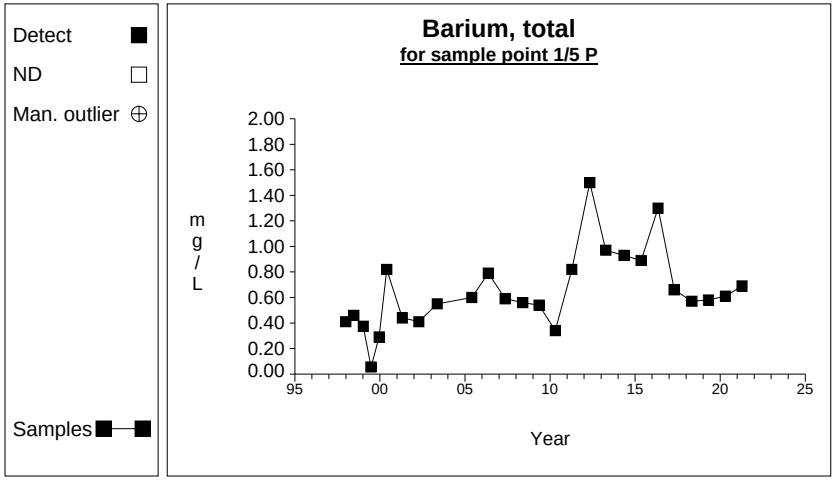


Graph 47

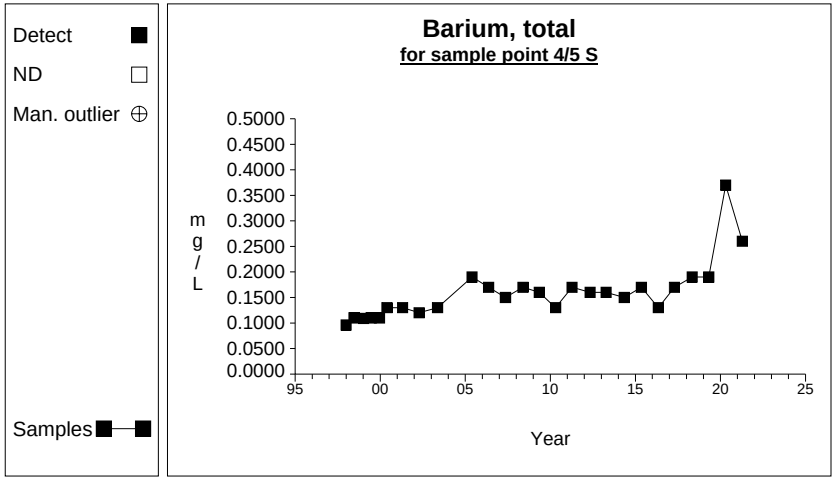


Graph 48

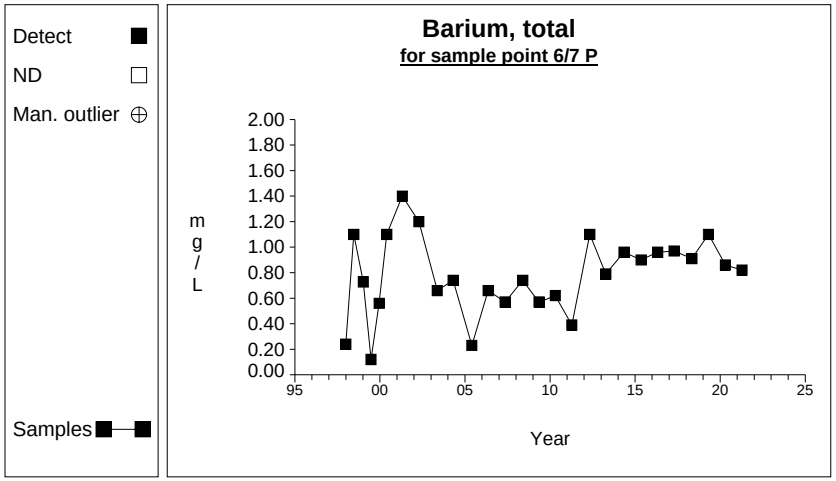
Time Series



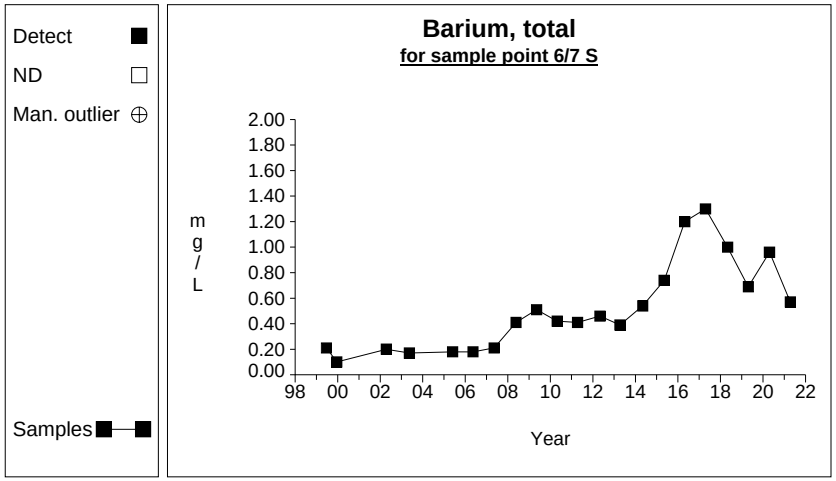
Graph 49



Graph 50

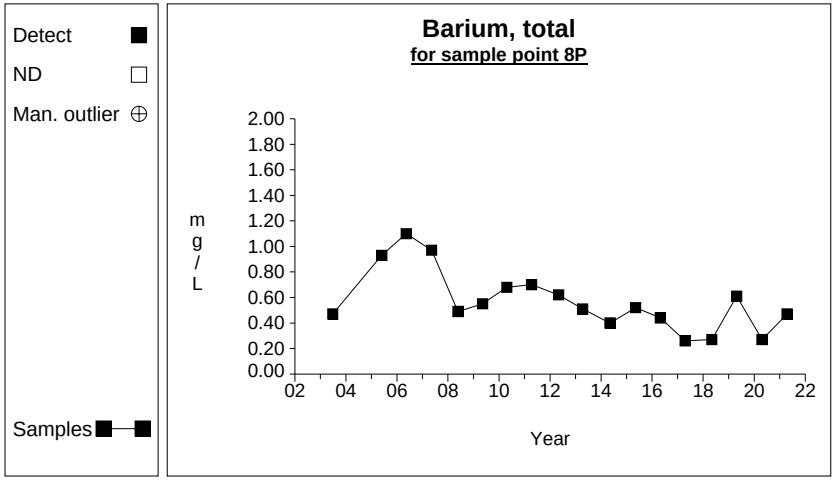


Graph 51

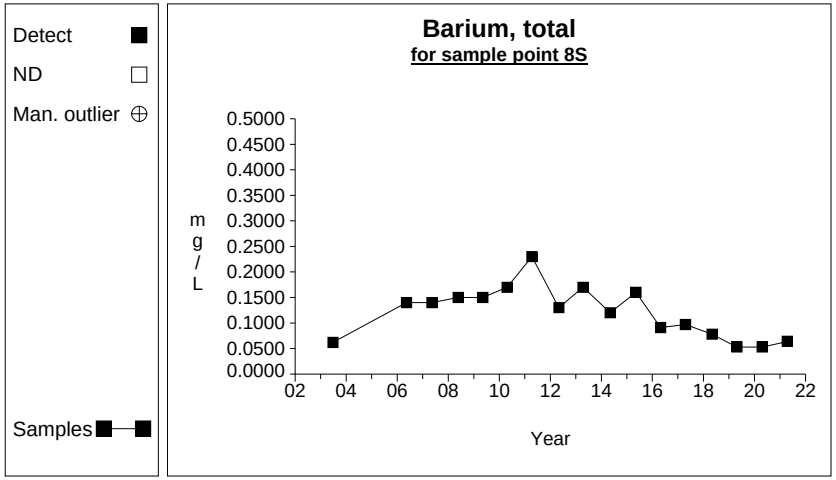


Graph 52

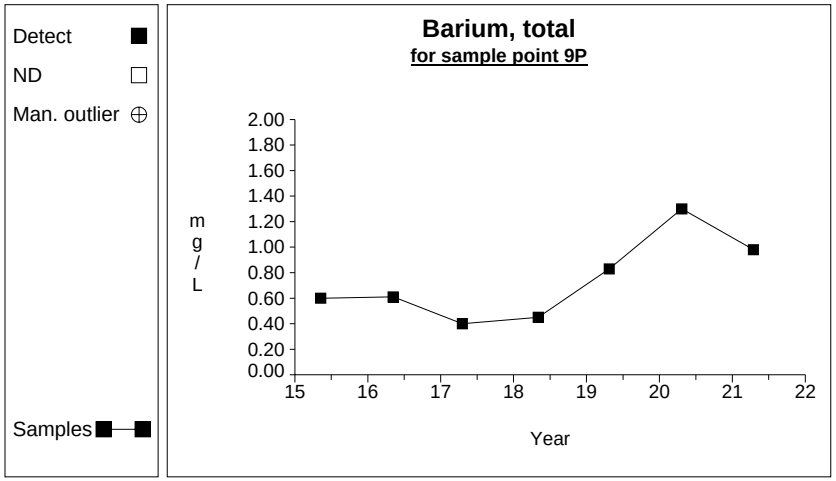
Time Series



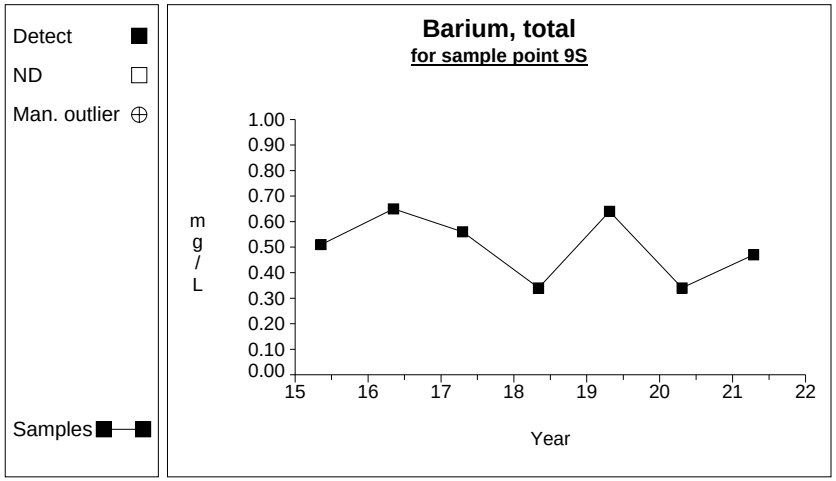
Graph 53



Graph 54

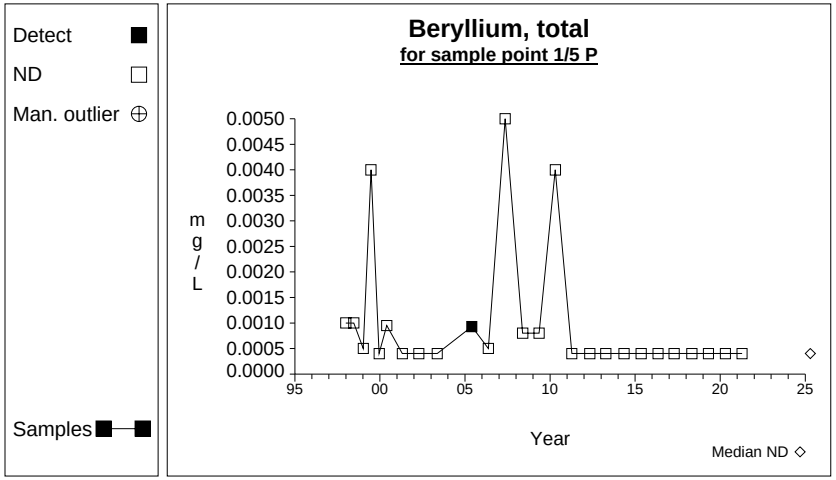


Graph 55

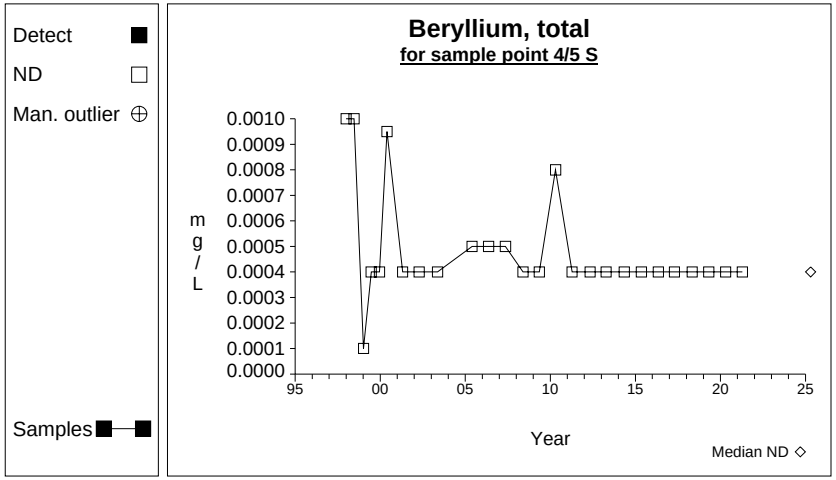


Graph 56

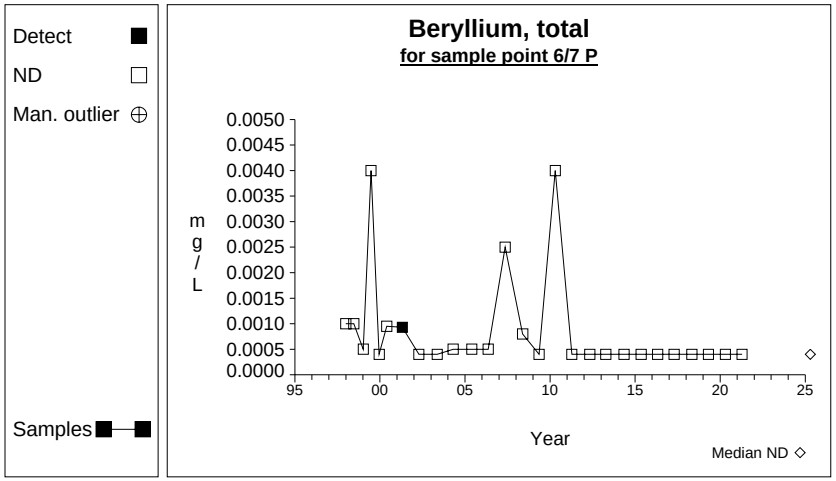
Time Series



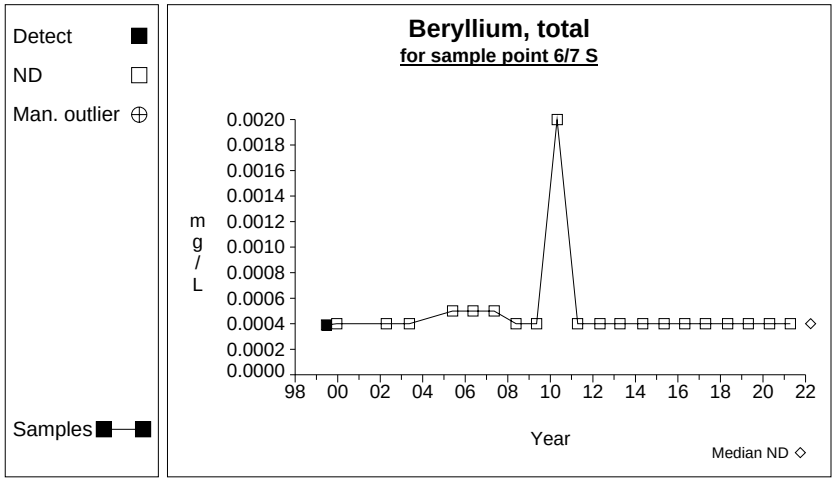
Graph 57



Graph 58

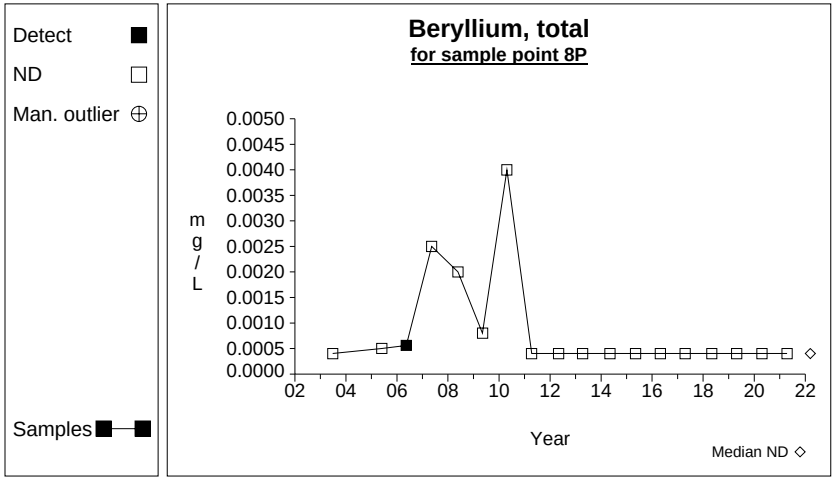


Graph 59

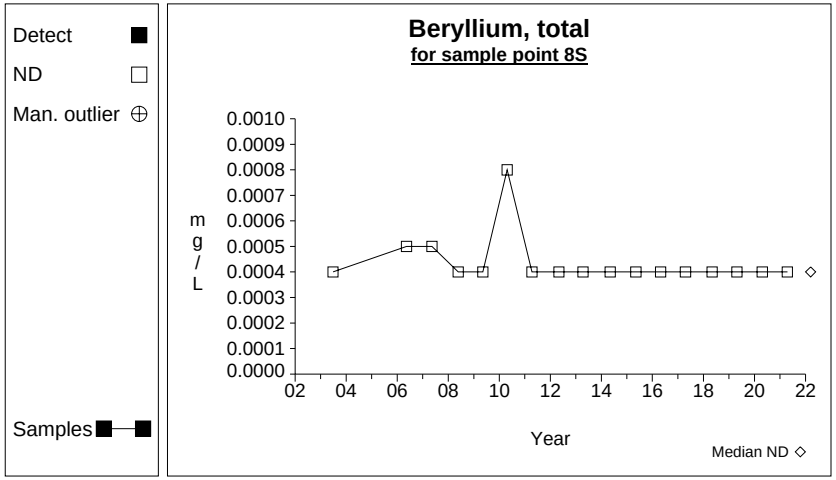


Graph 60

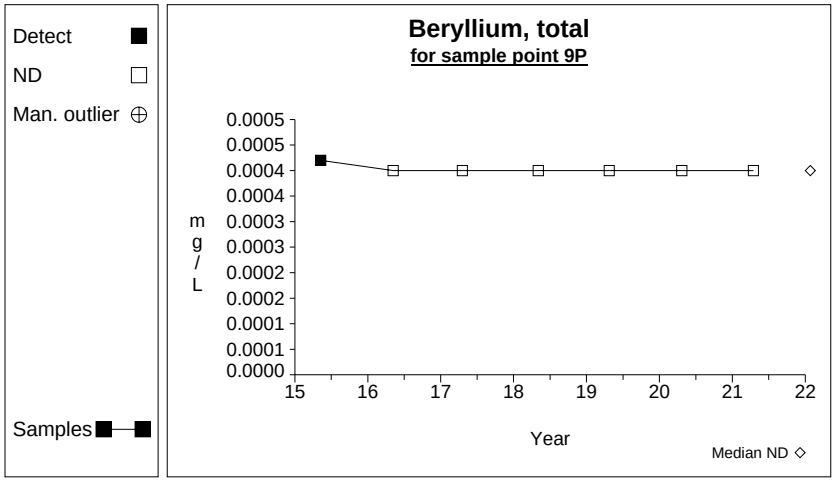
Time Series



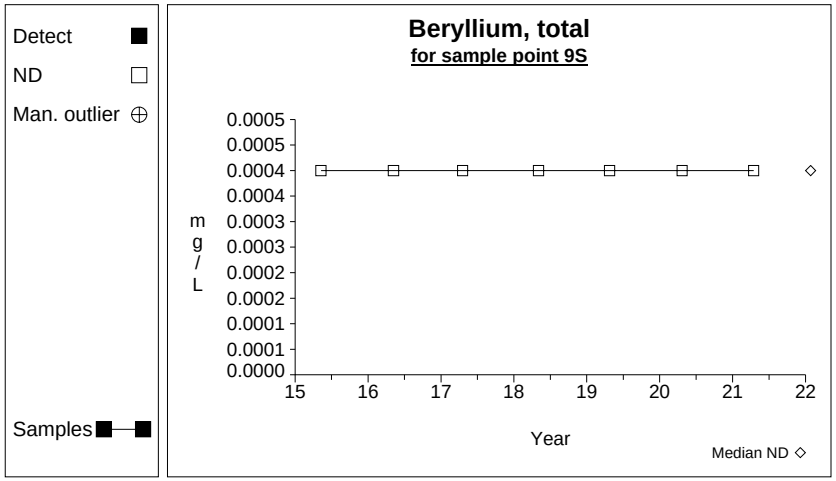
Graph 61



Graph 62

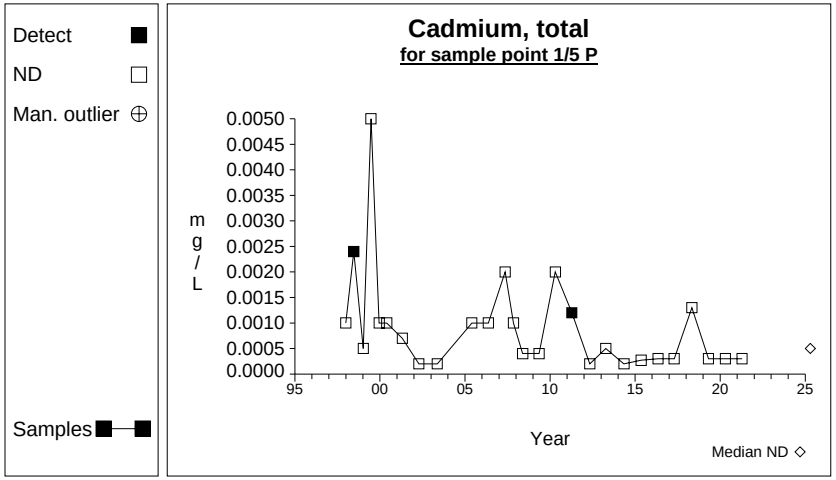


Graph 63

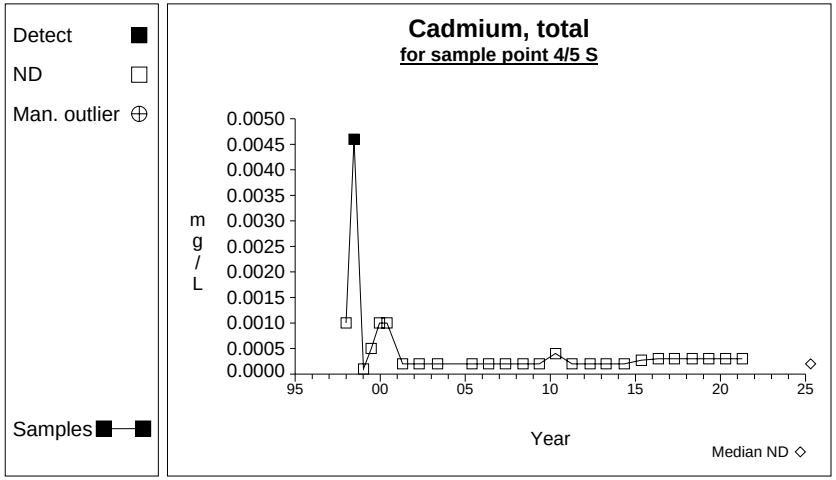


Graph 64

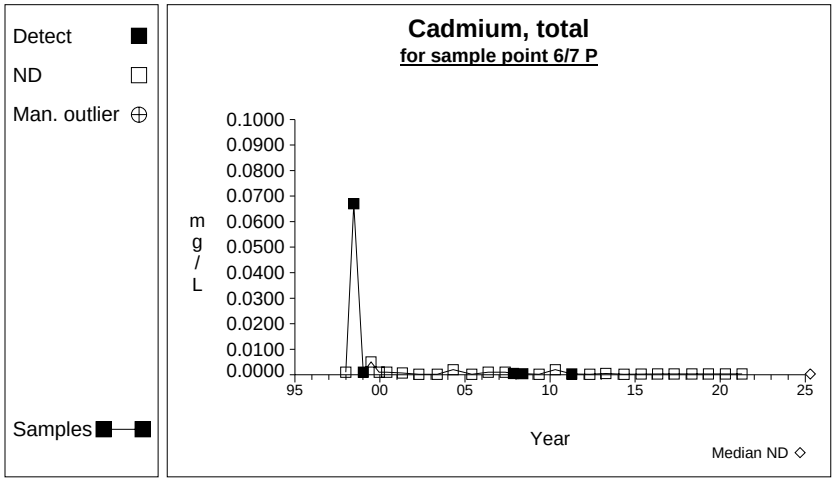
Time Series



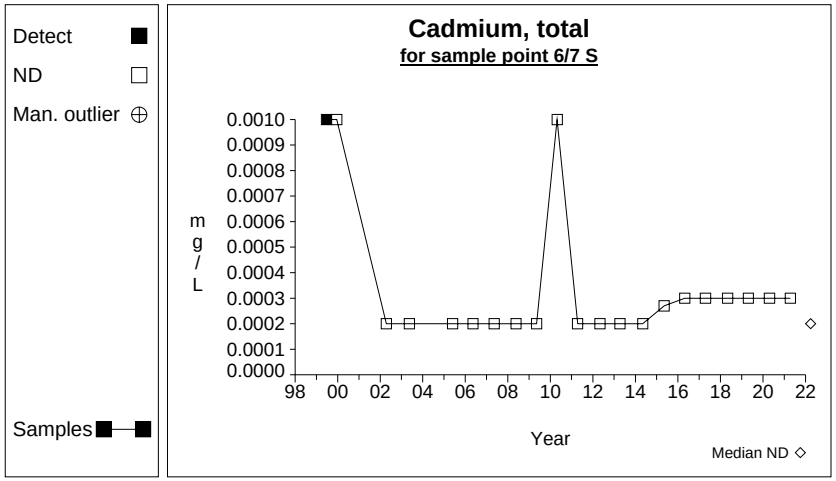
Graph 65



Graph 66

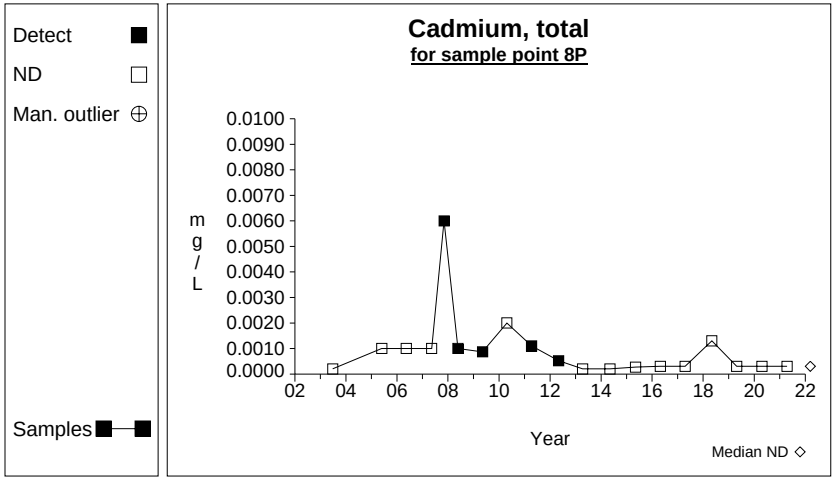


Graph 67

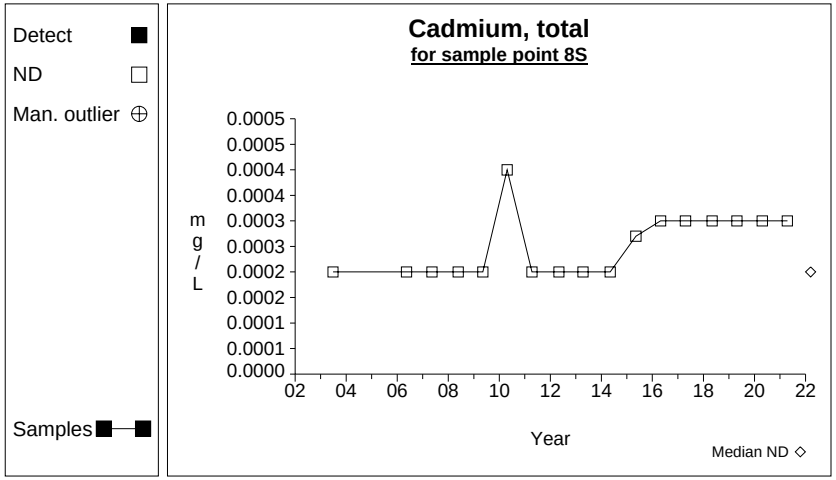


Graph 68

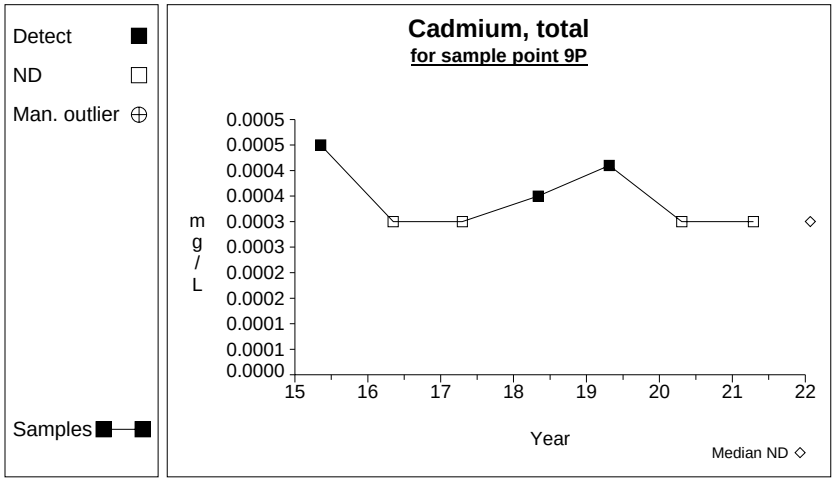
Time Series



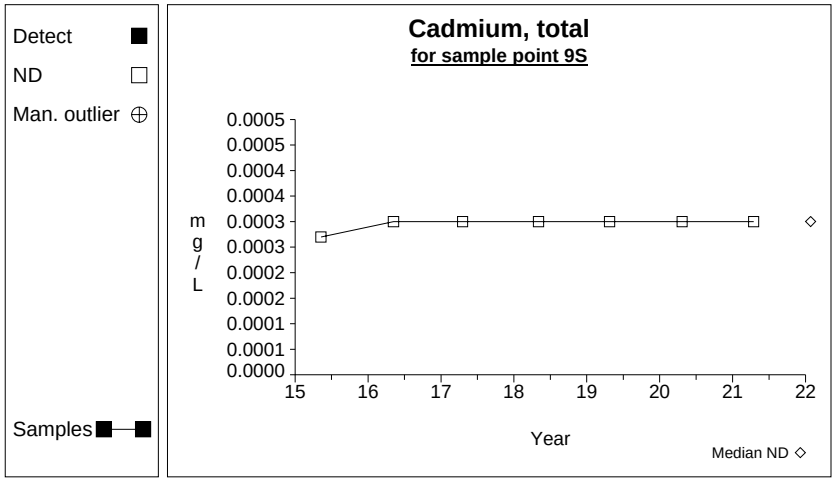
Graph 69



Graph 70

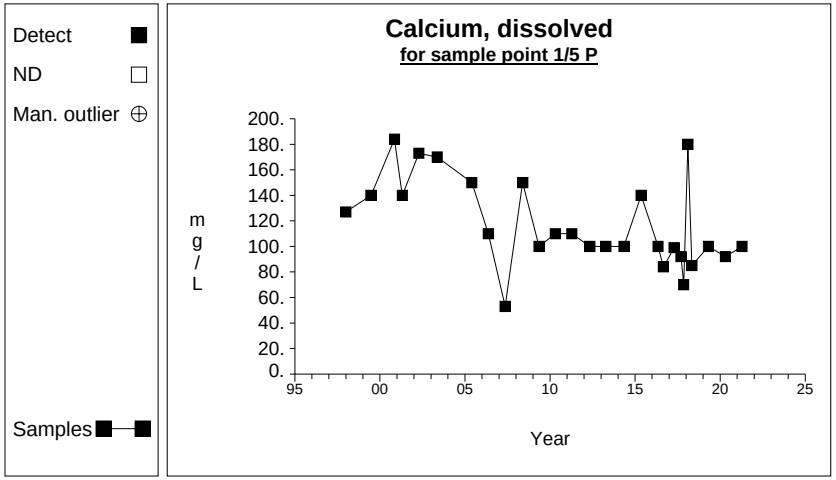


Graph 71

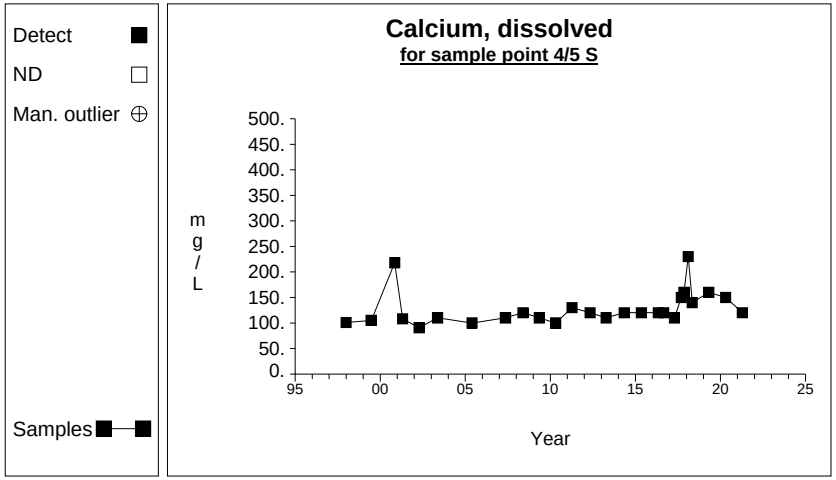


Graph 72

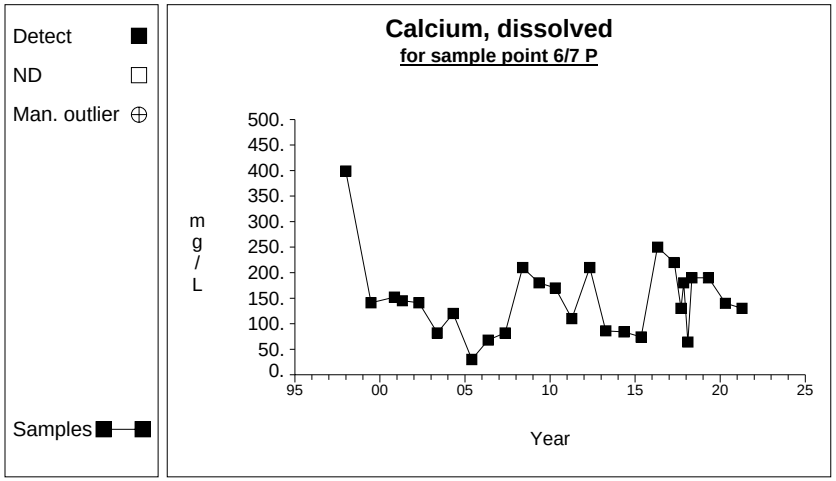
Time Series



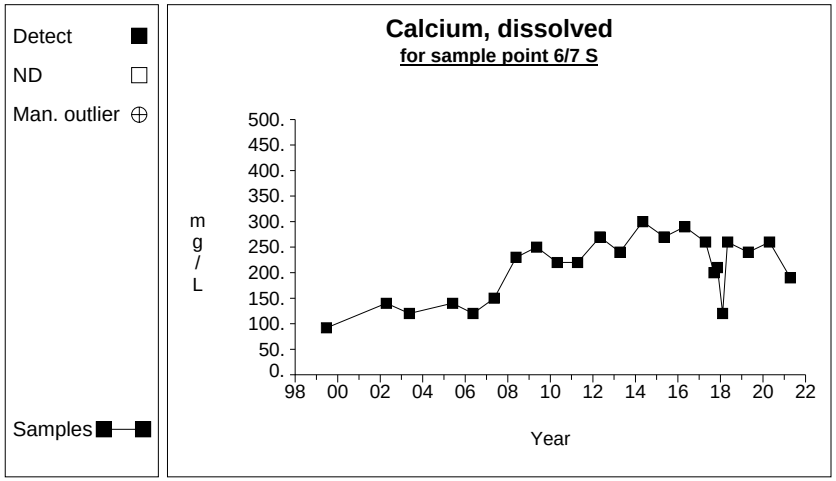
Graph 73



Graph 74

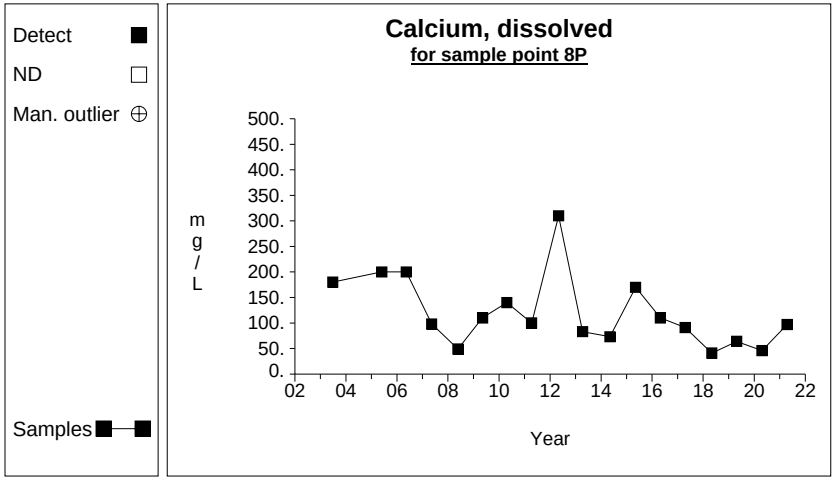


Graph 75

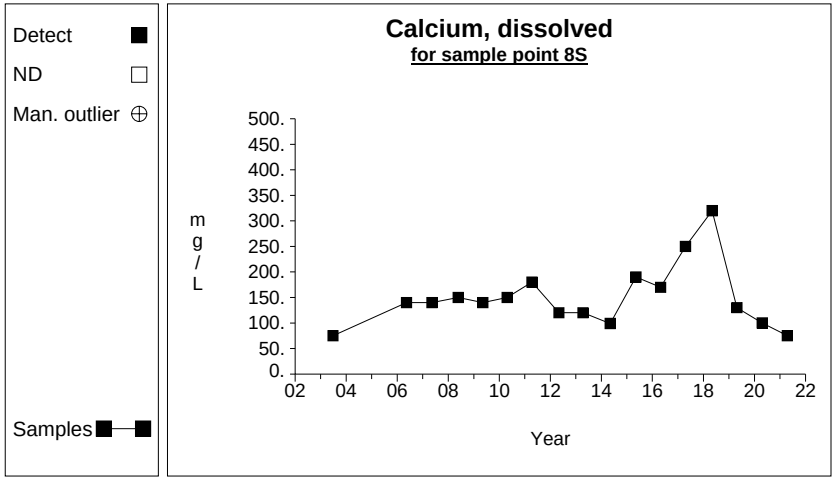


Graph 76

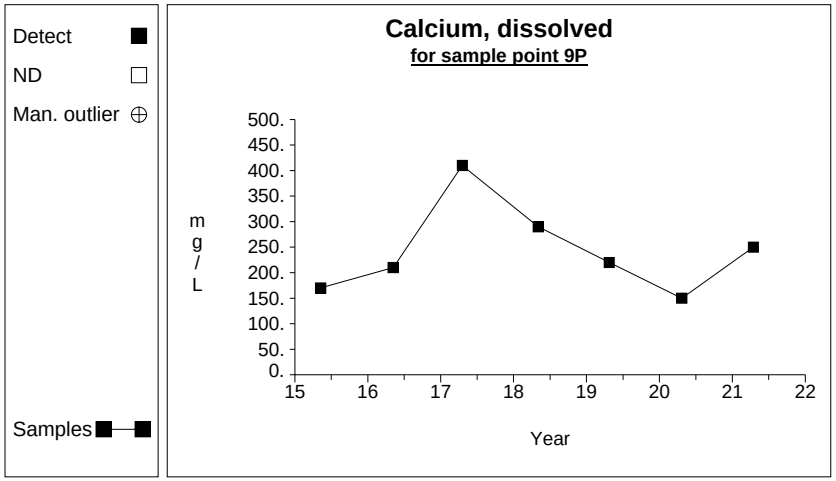
Time Series



Graph 77



Graph 78



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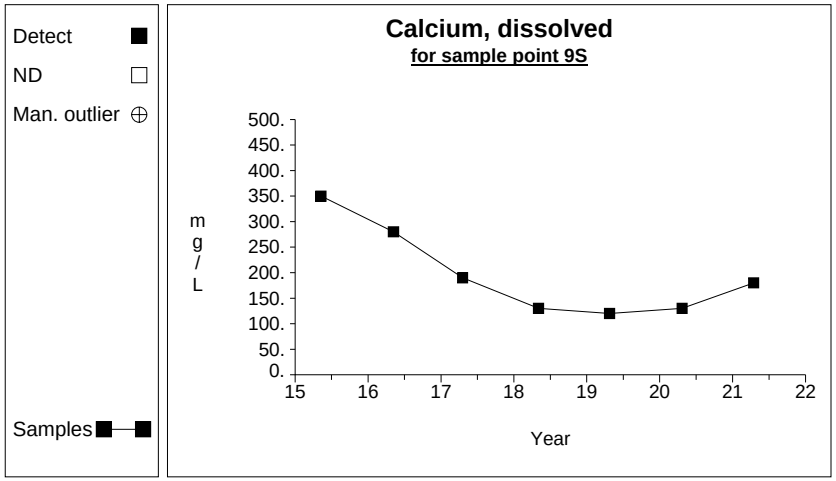
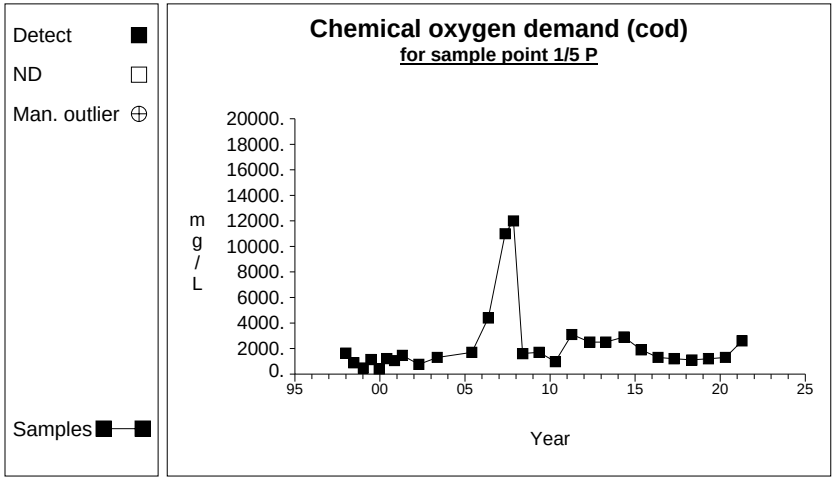


Graph 80

Time Series



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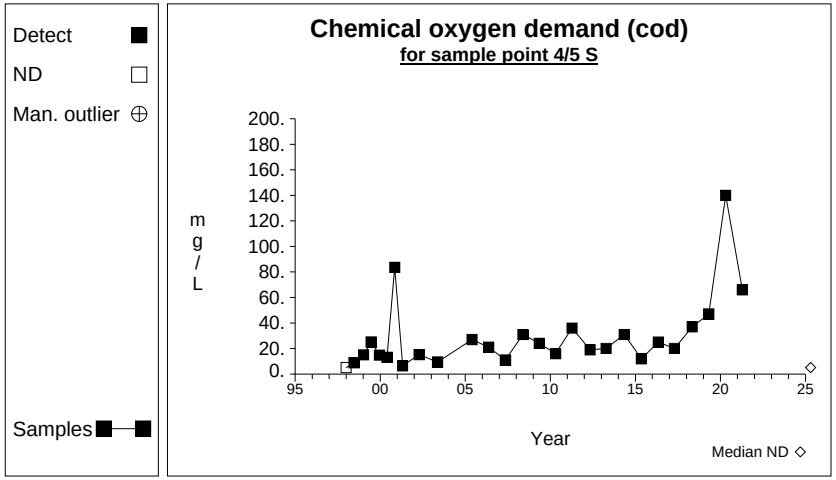

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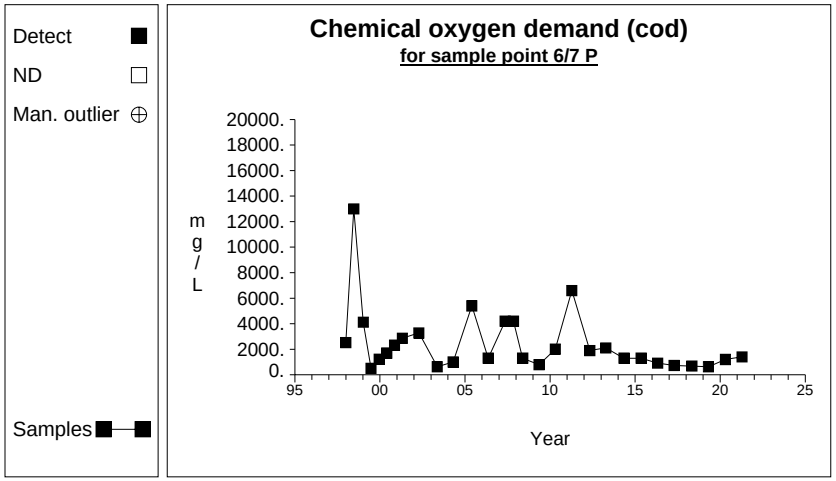

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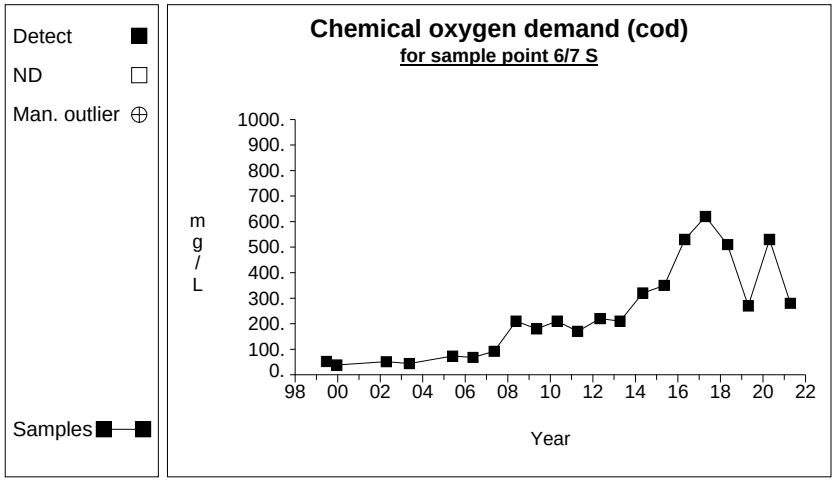
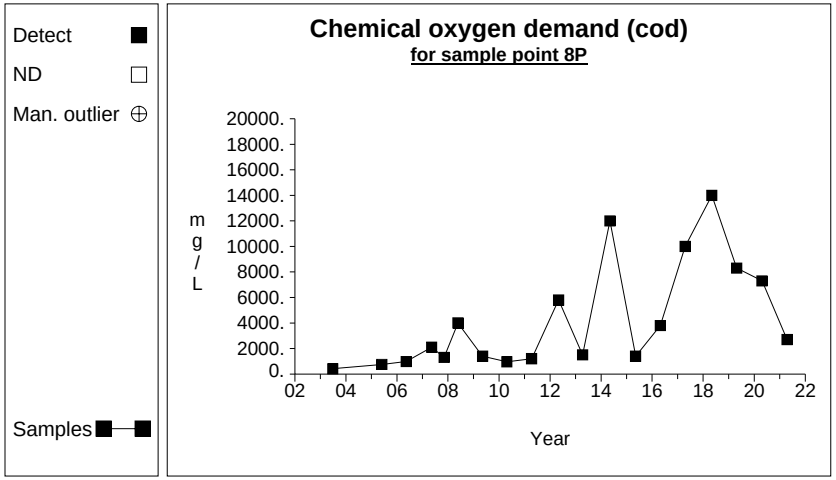
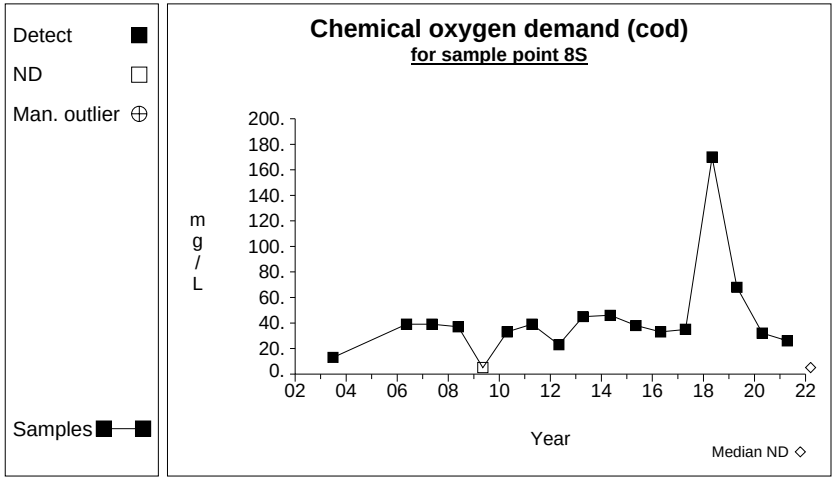


Graph 84

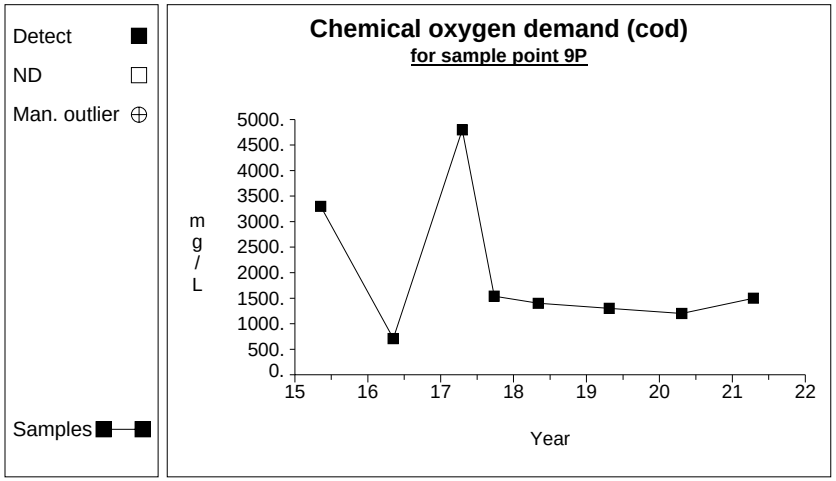
Time Series



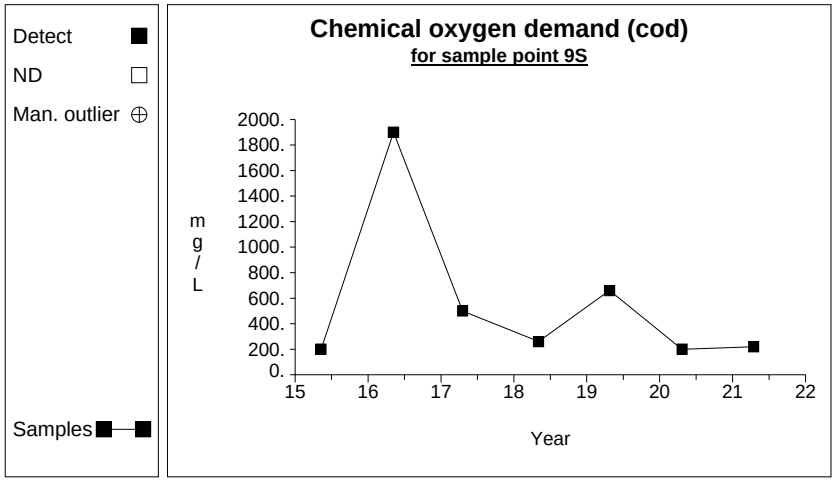
Graph 85



Graph 86

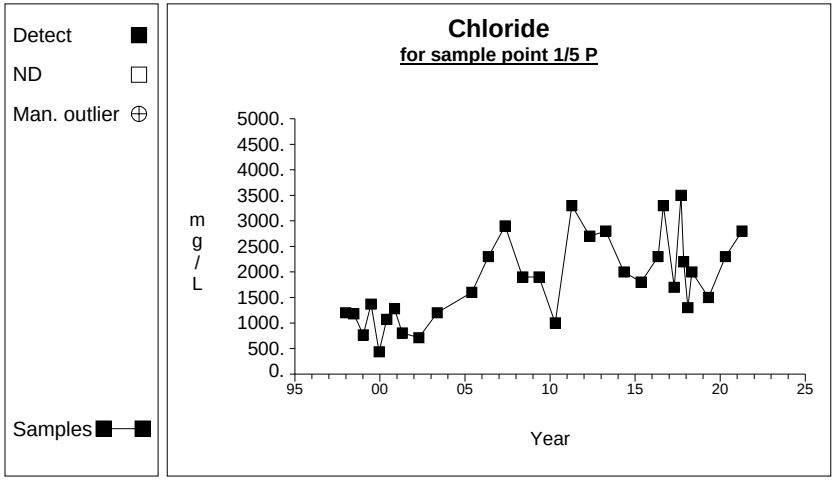


Graph 87

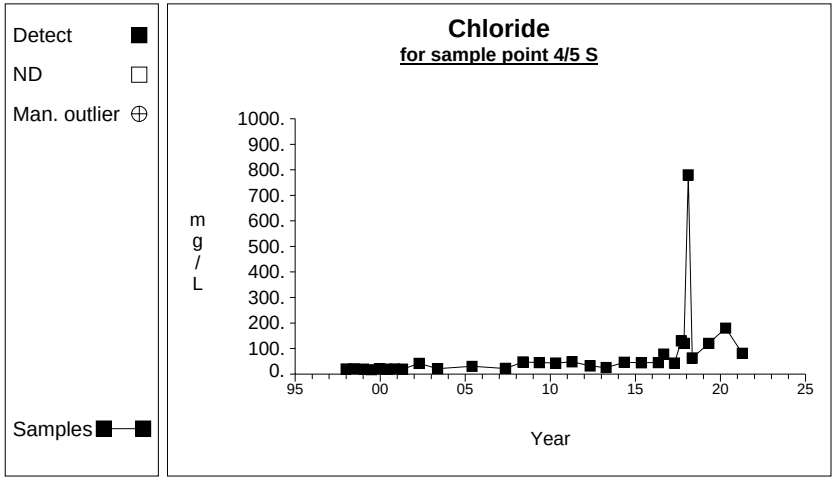


Graph 88

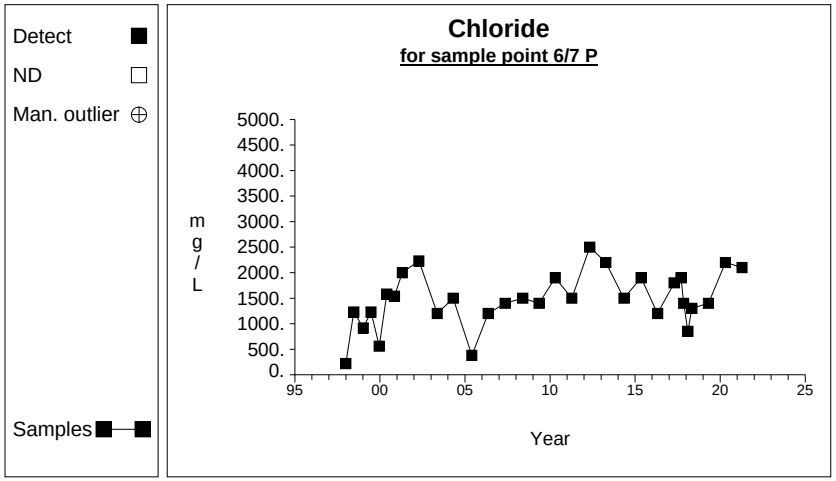
Time Series



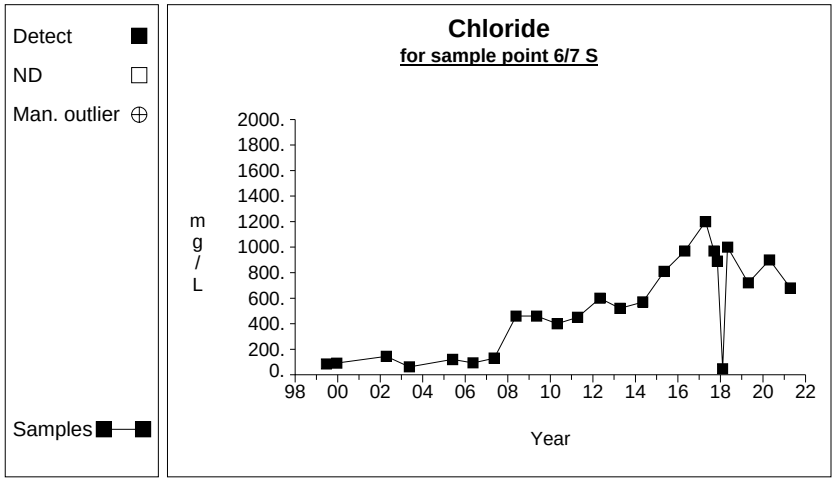
Graph 89



Graph 90

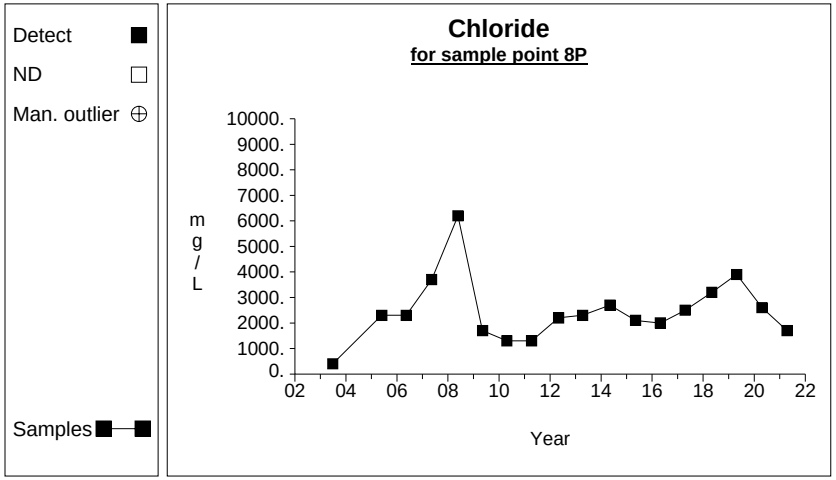


Graph 91



Graph 92

Time Series



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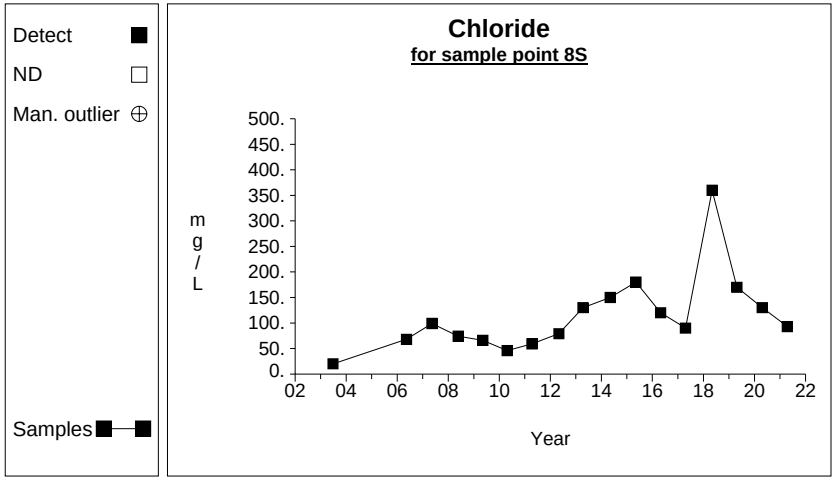
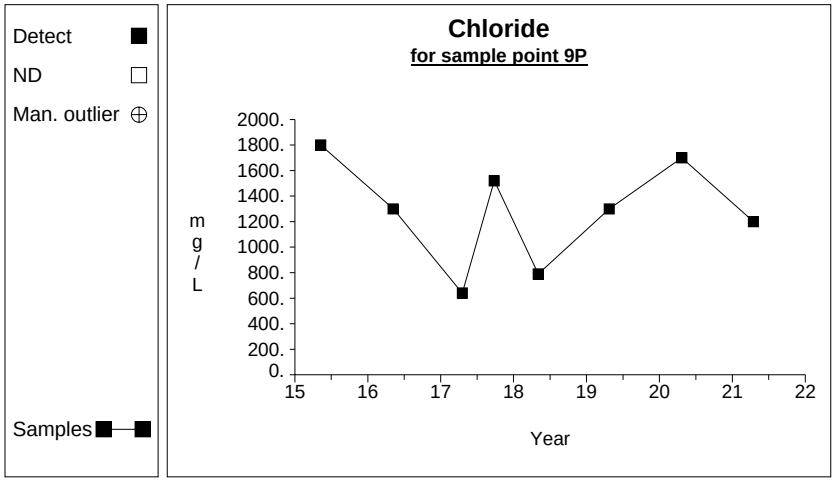
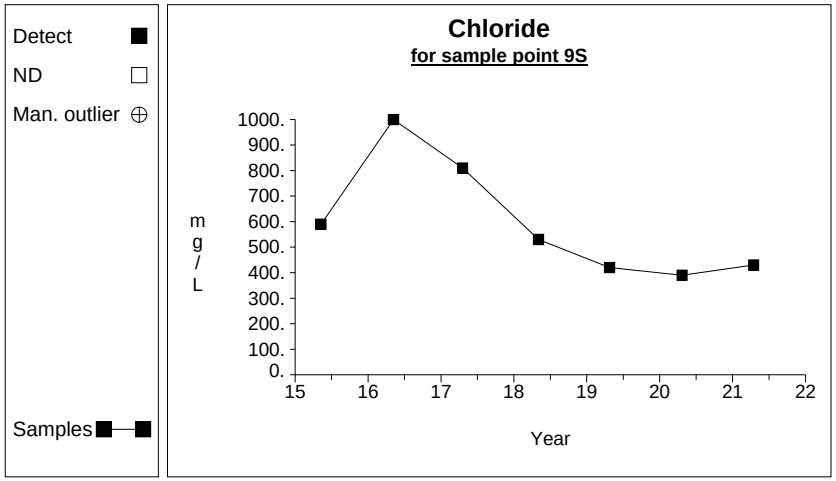


Graph 94

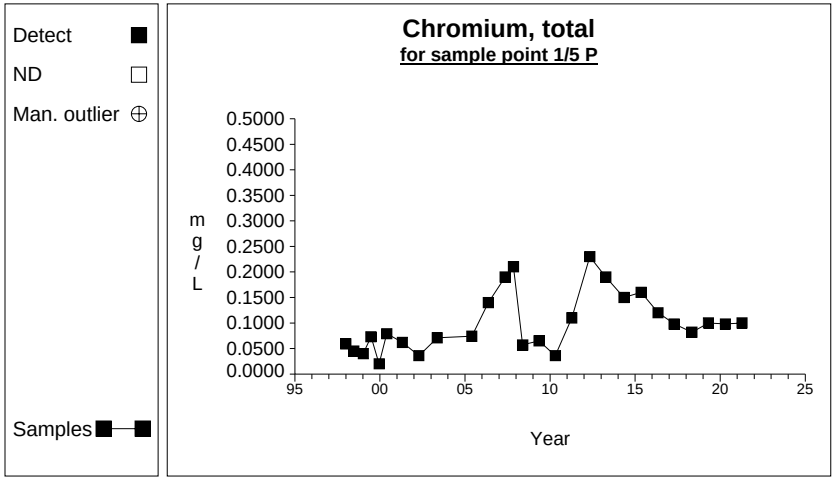


Graph 95

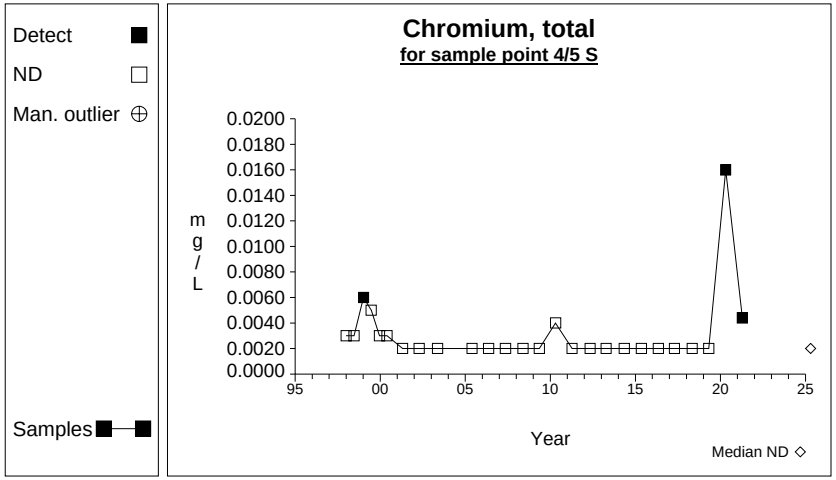


Graph 96

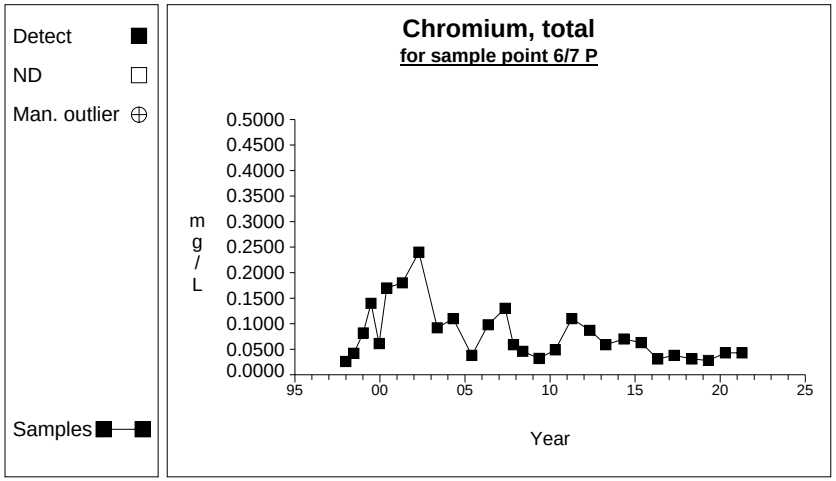
Time Series



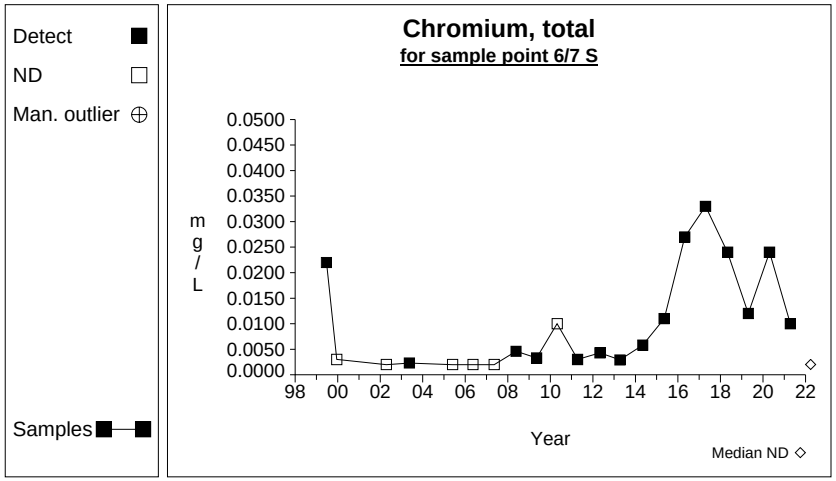
Graph 97



Graph 98

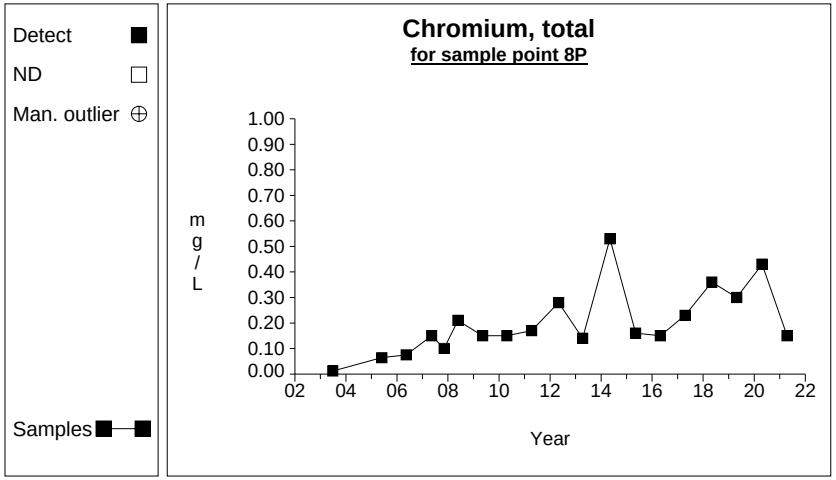


Graph 99

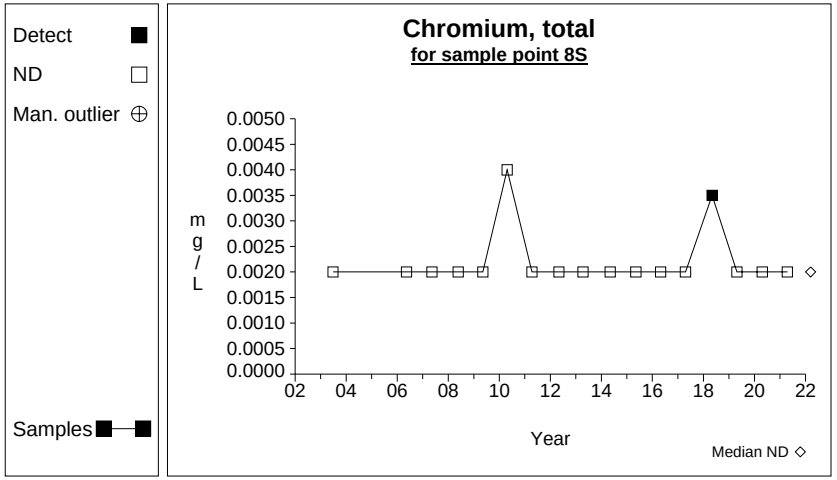


Graph 100

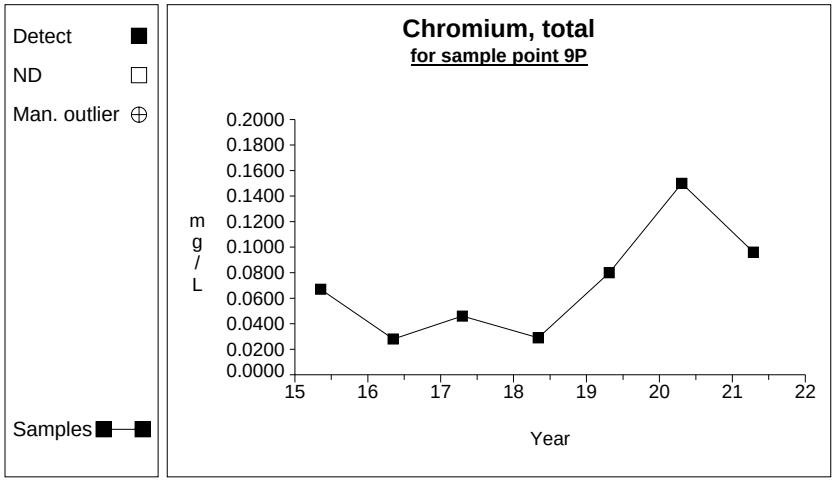
Time Series



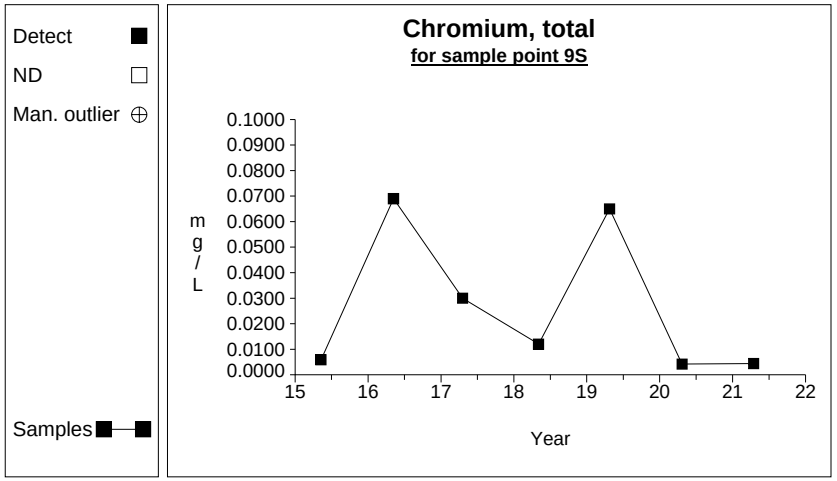
Graph 101



Graph 102

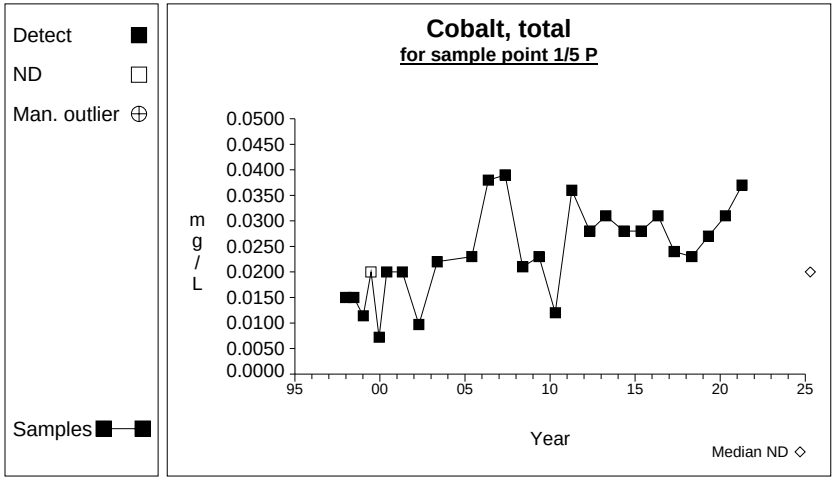


Graph 103

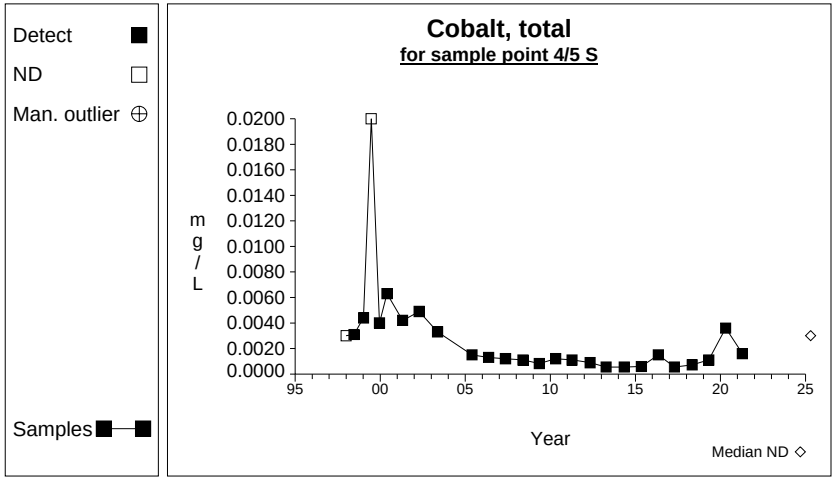


Graph 104

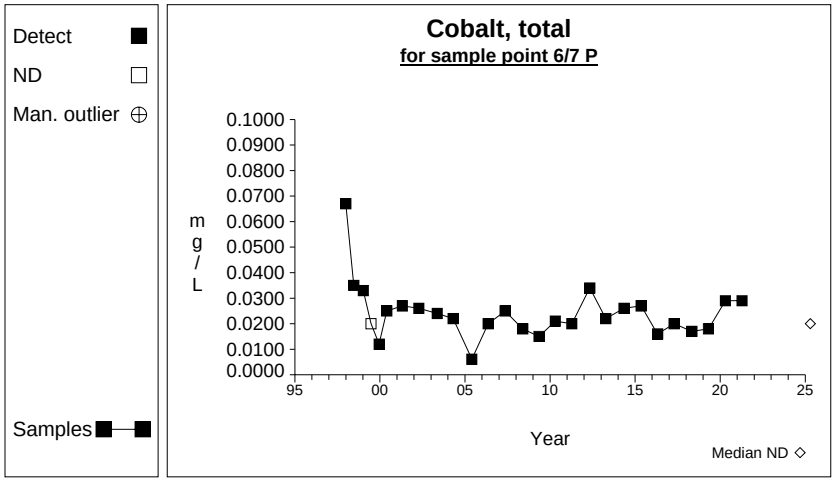
Time Series



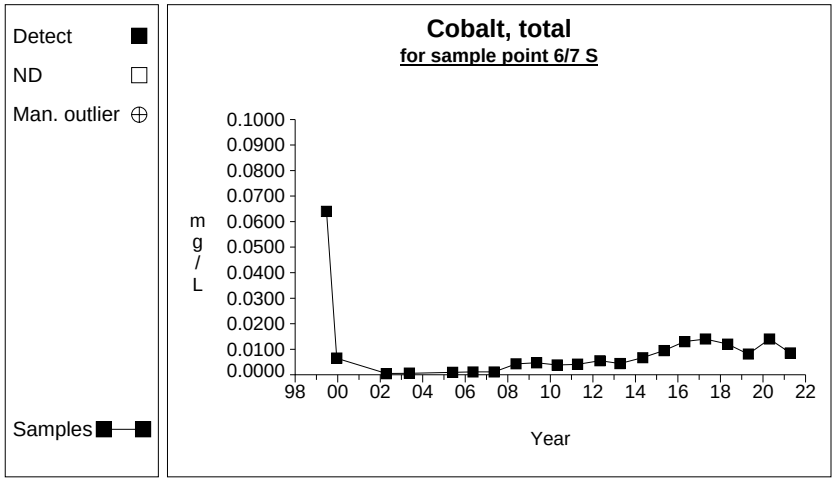
Graph 105



Graph 106

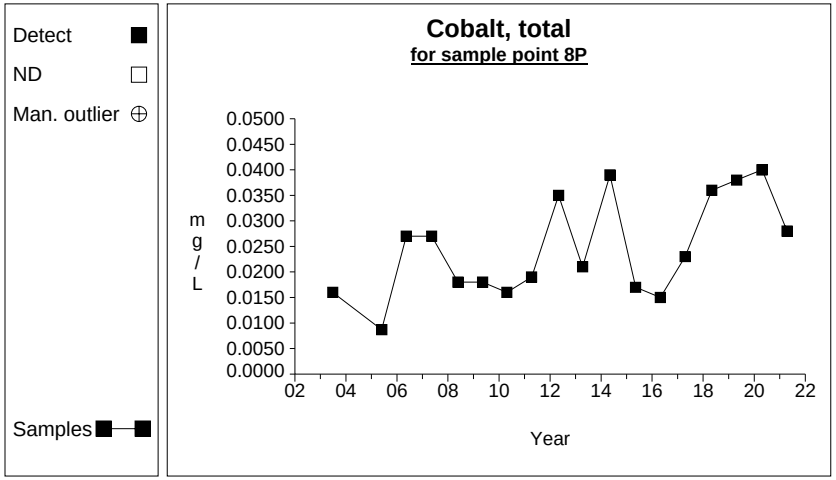


Graph 107

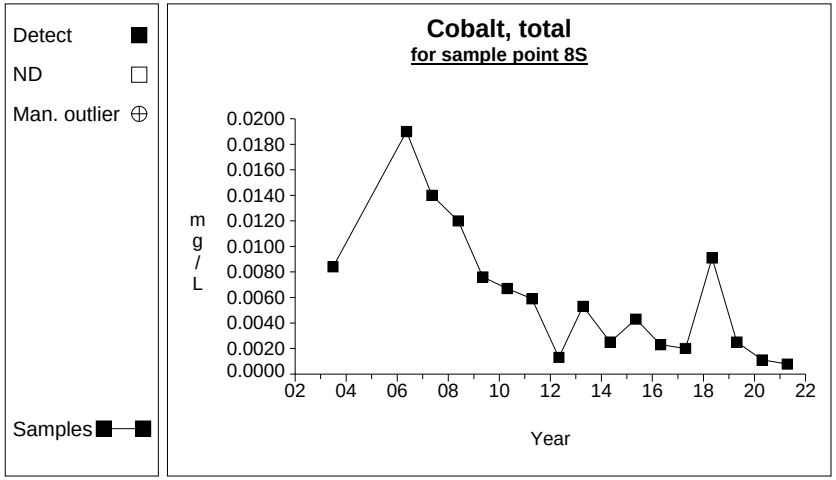


Graph 108

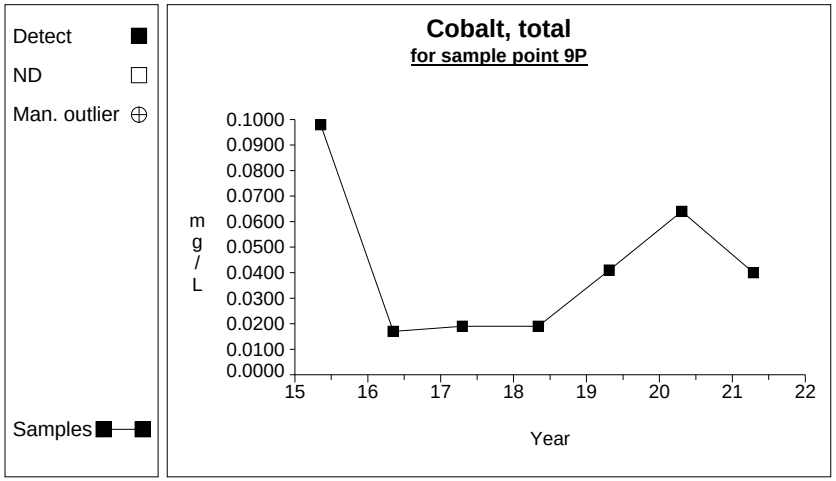
Time Series



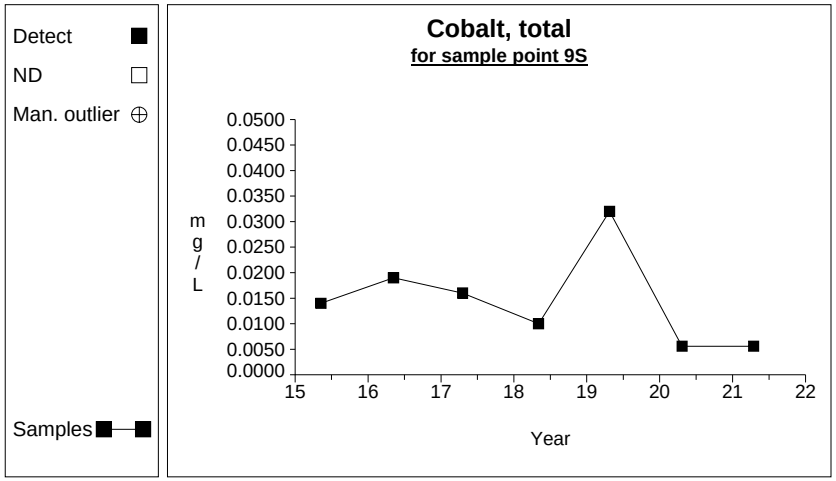
Graph 109



Graph 110

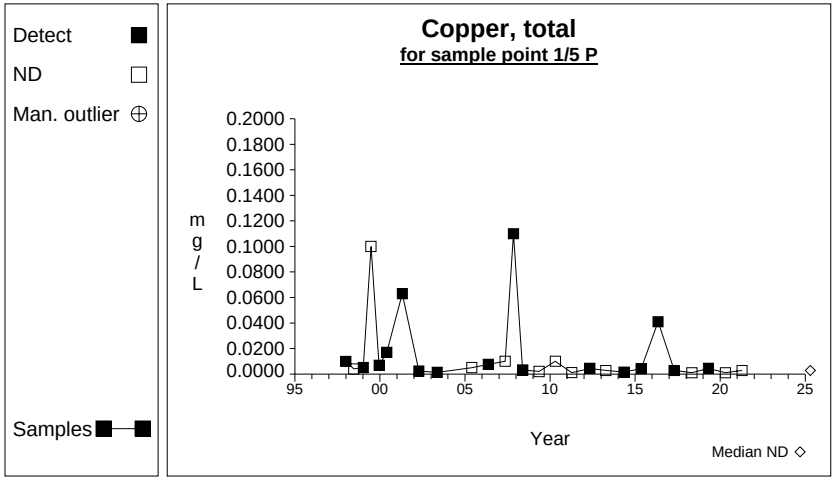


Graph 111

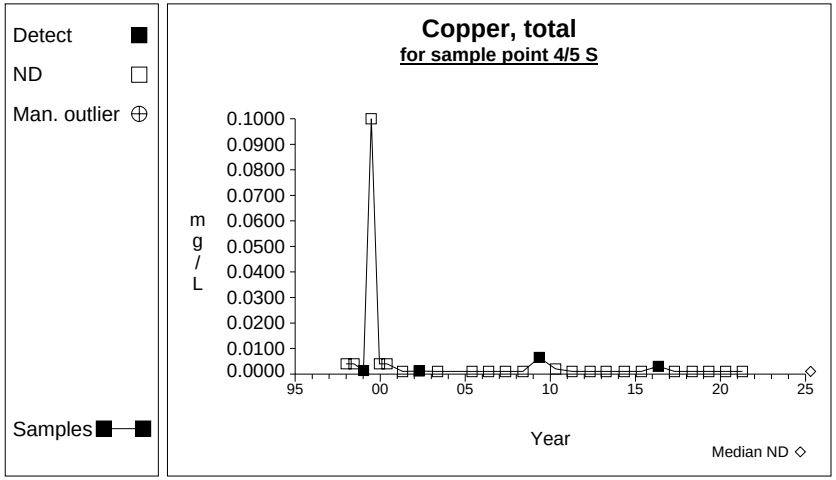


Graph 112

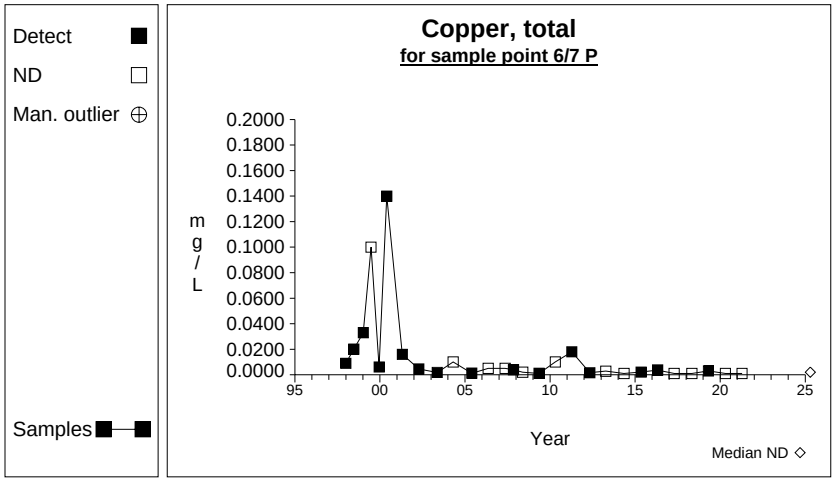
Time Series



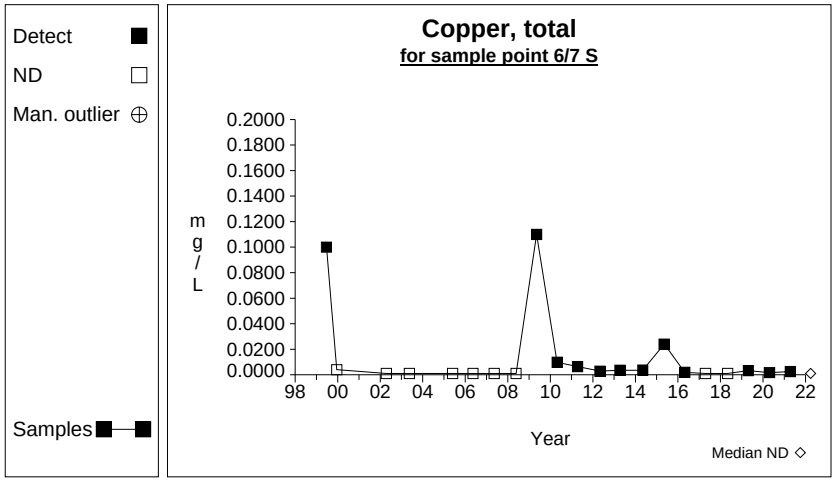
Graph 113



Graph 114

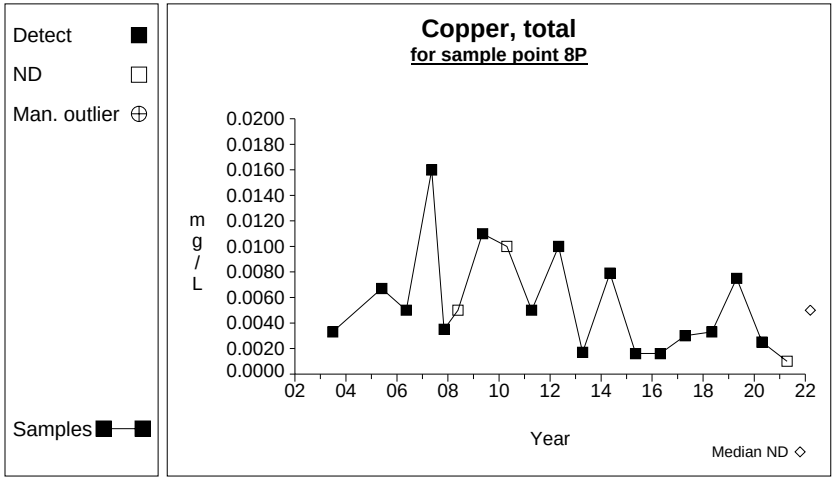


Graph 115

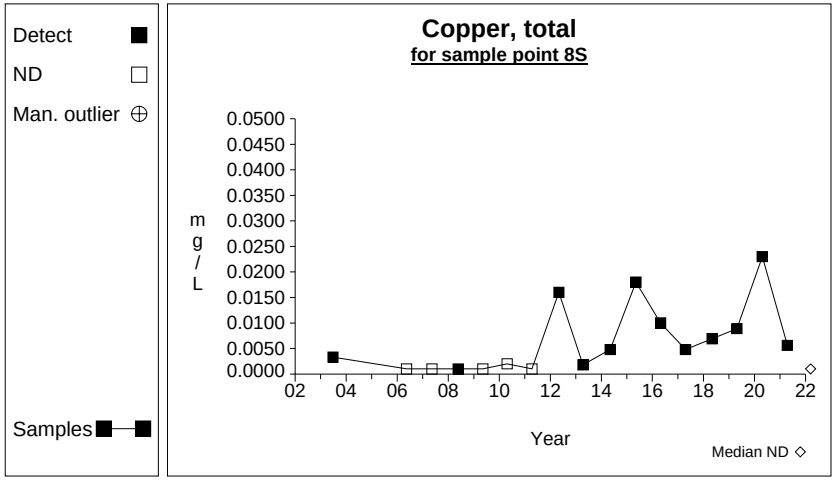


Graph 116

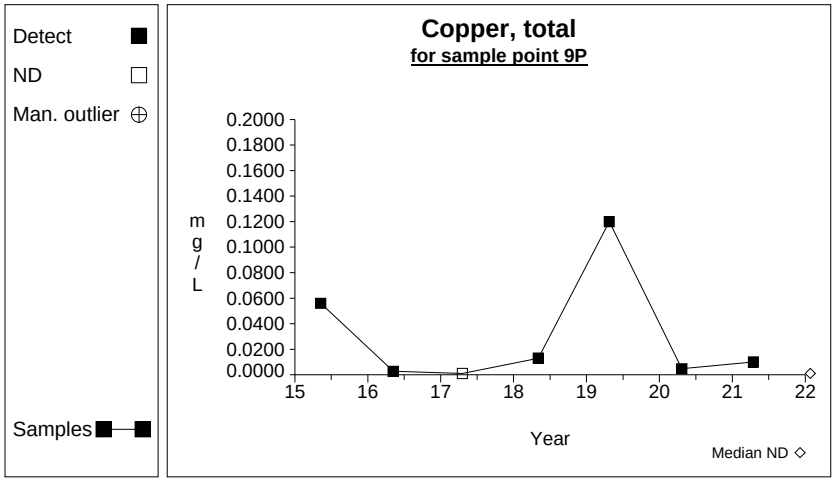
Time Series



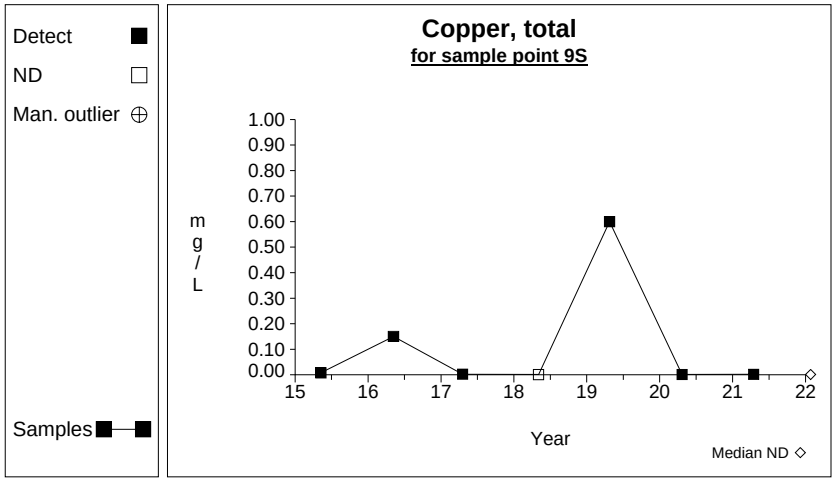
Graph 117



Graph 118

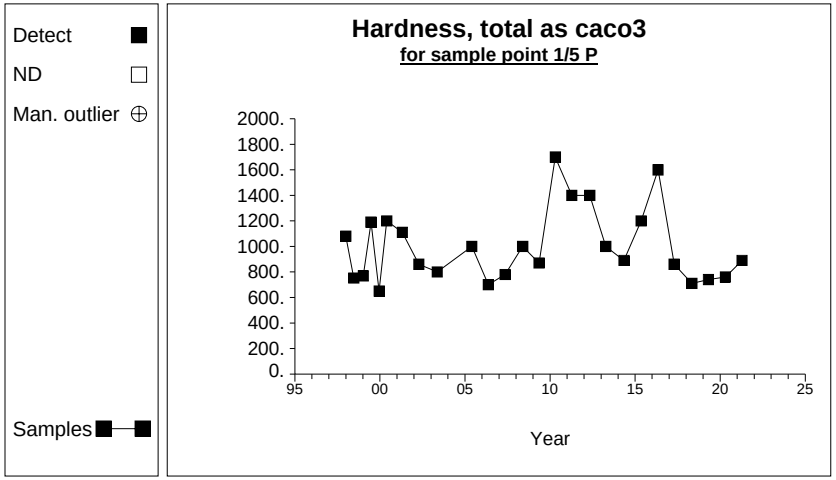


Graph 119

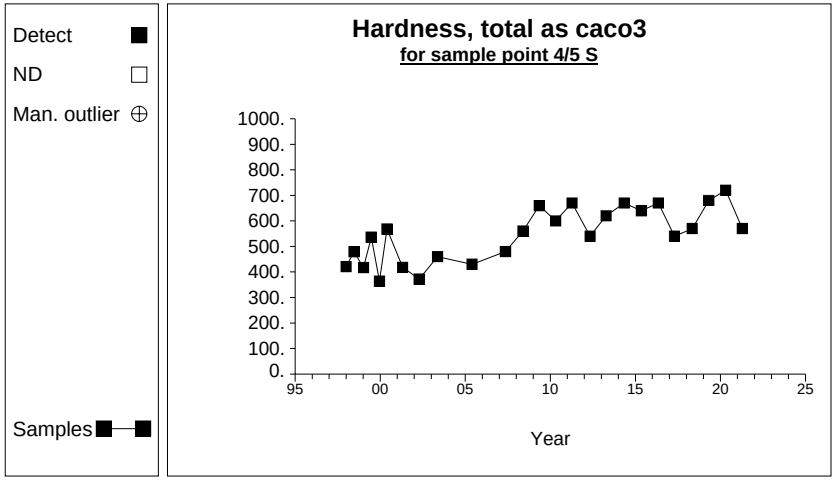


Graph 120

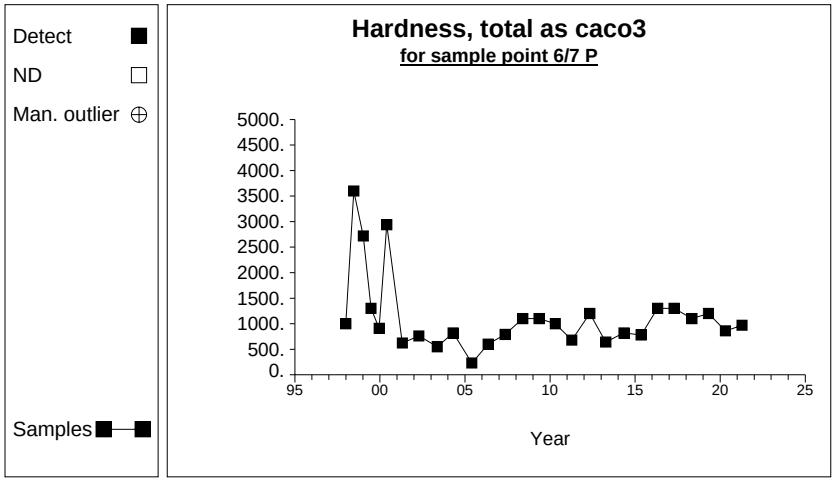
Time Series



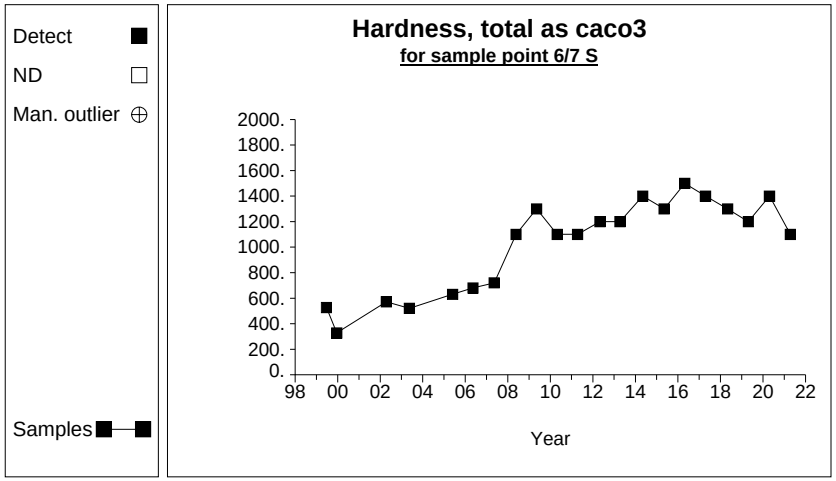
Graph 121



Graph 122

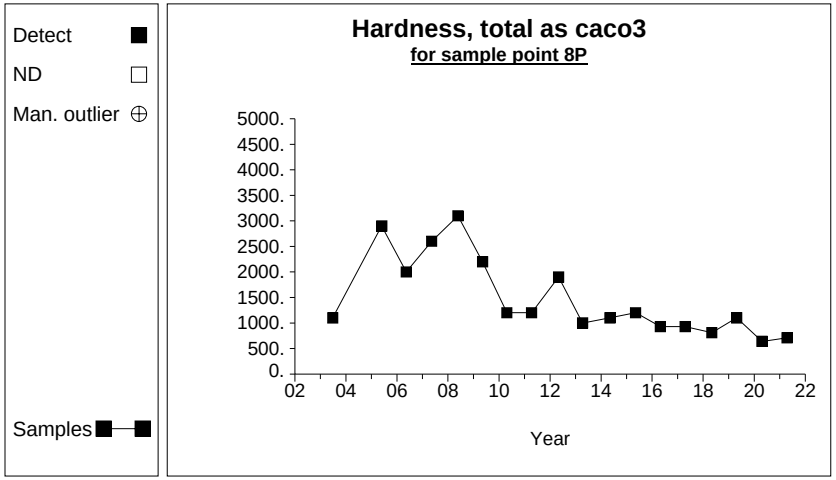


Graph 123

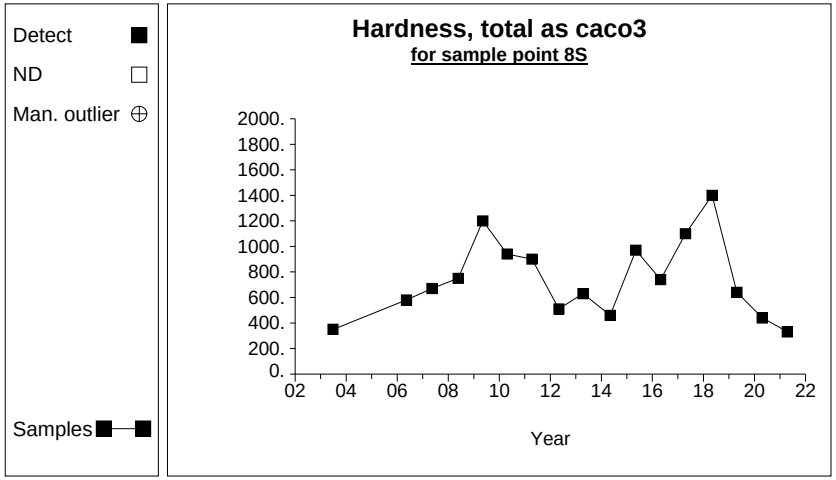


Graph 124

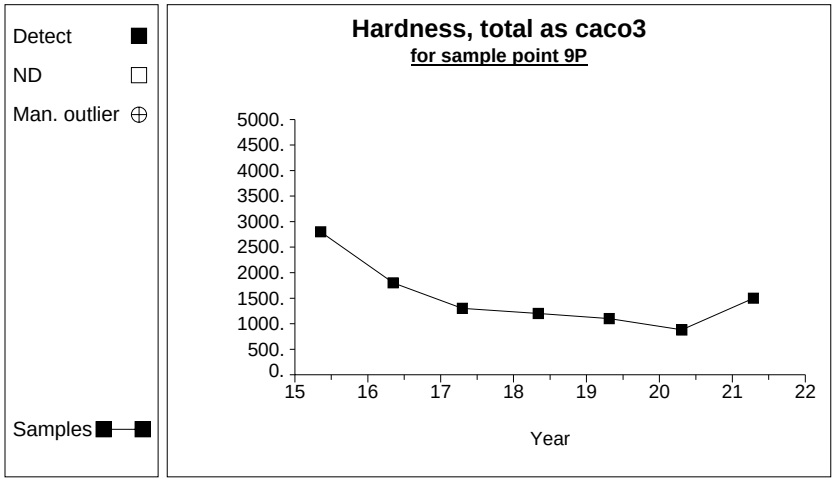
Time Series



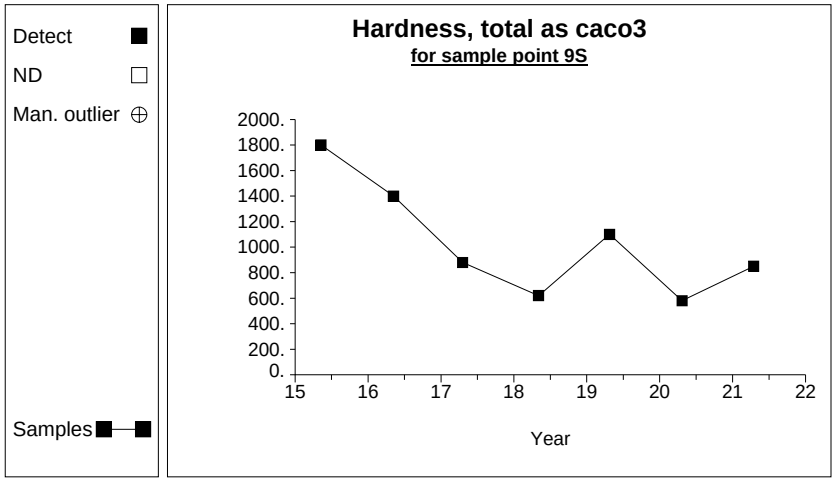
Graph 125



Graph 126

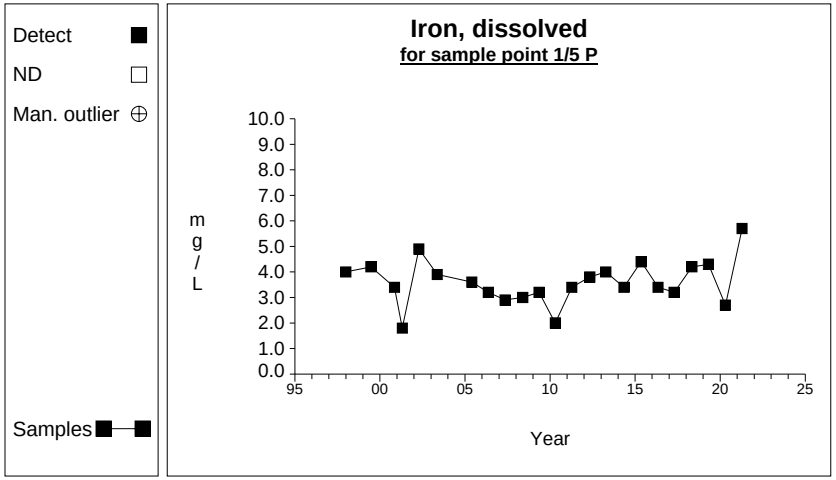


Graph 127



Graph 128

Time Series



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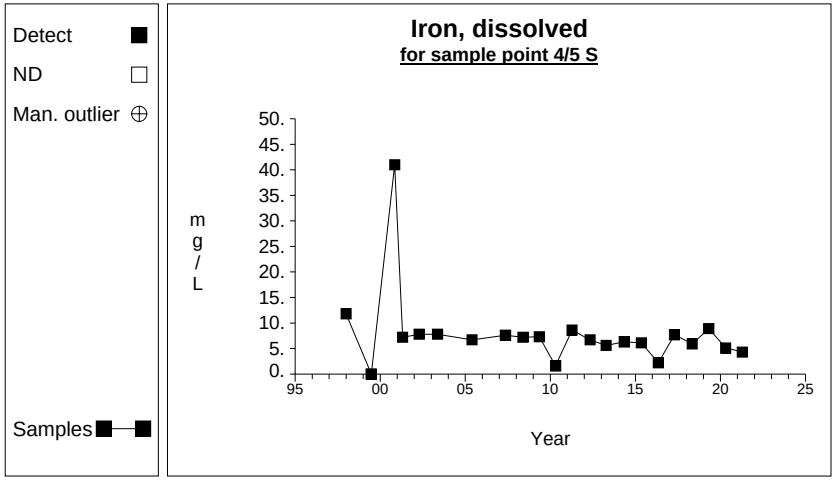
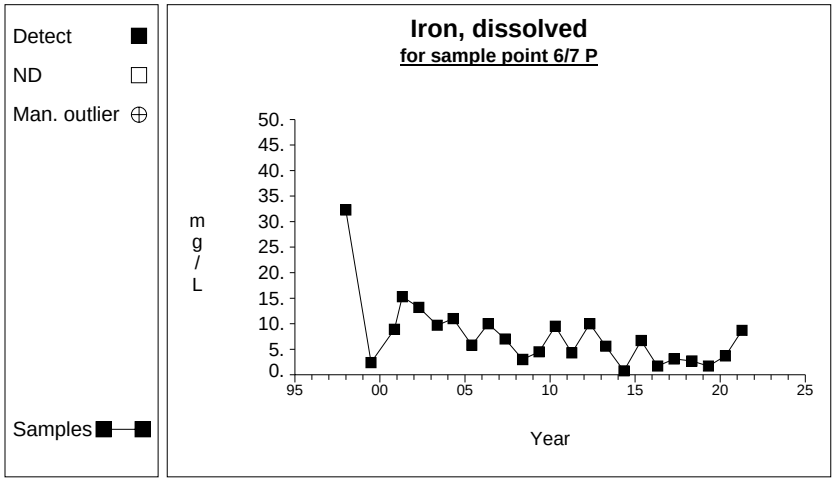


Graph 130



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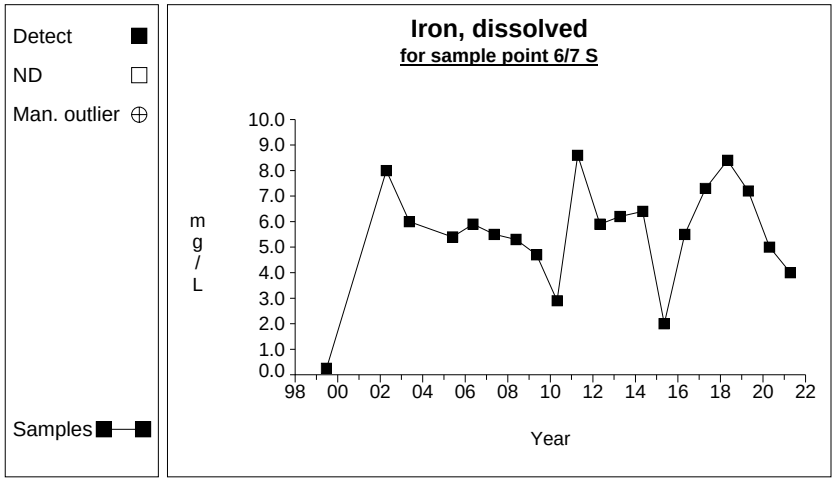
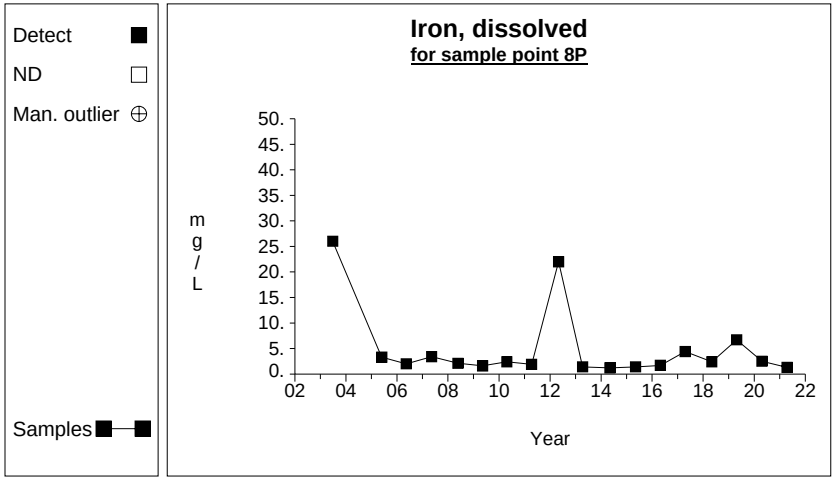


Graph 132

Time Series



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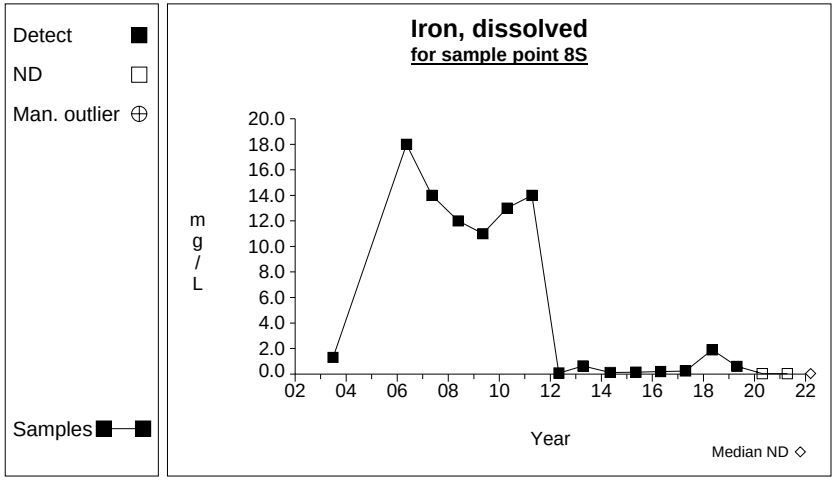
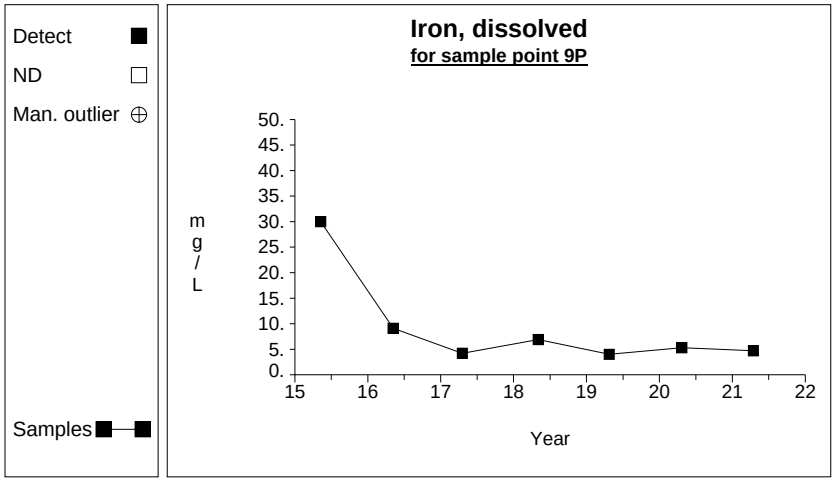


Graph 134



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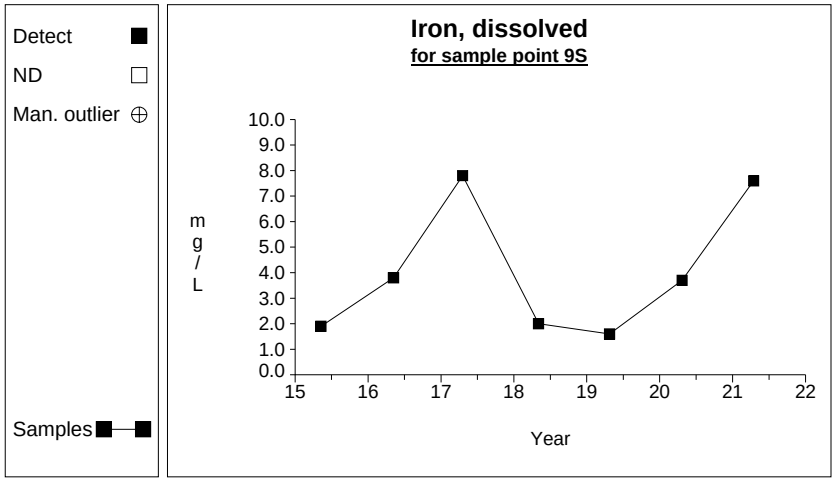
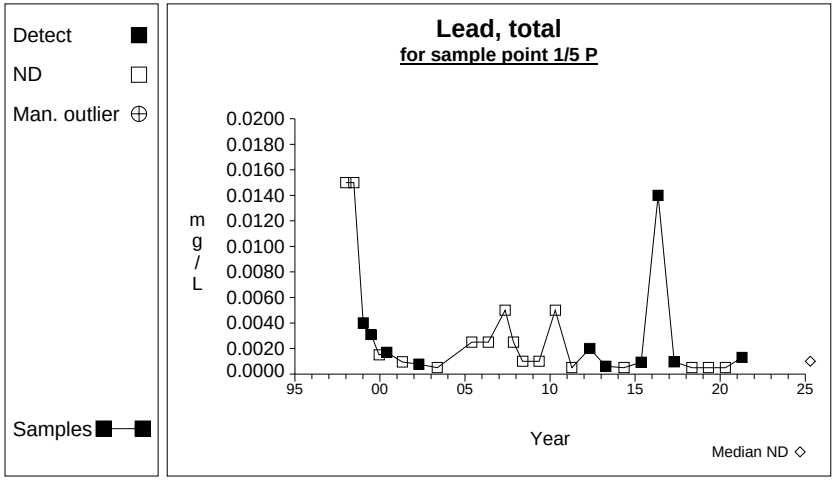


Graph 136

Time Series



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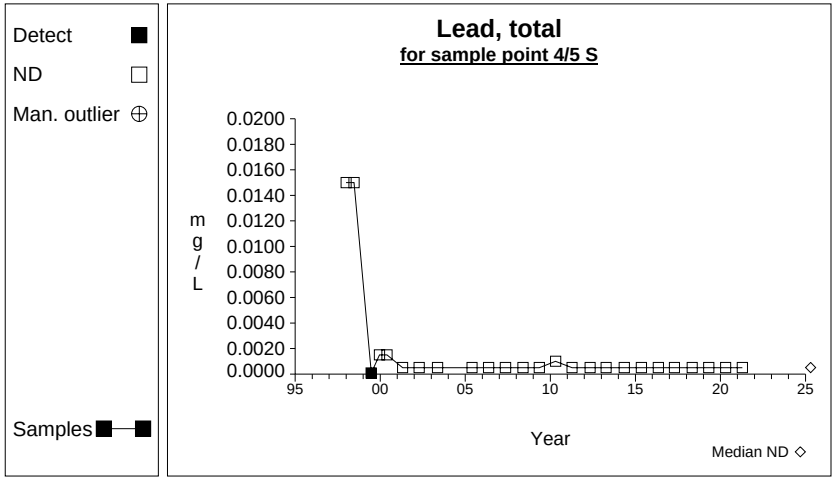
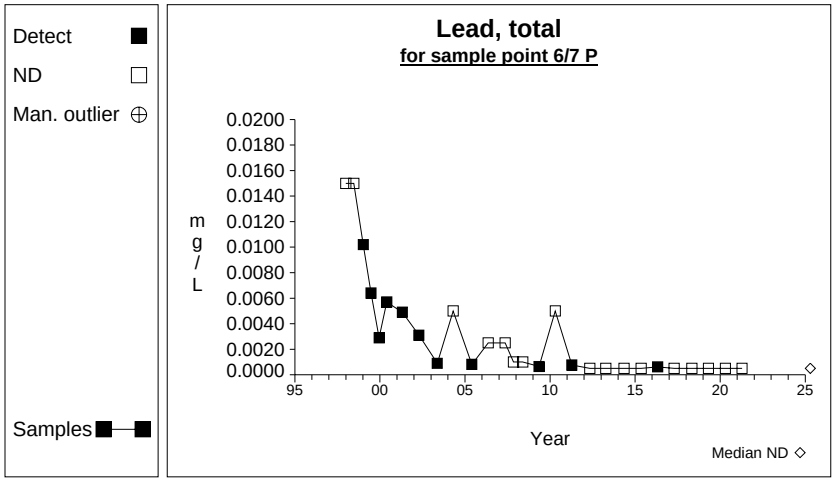
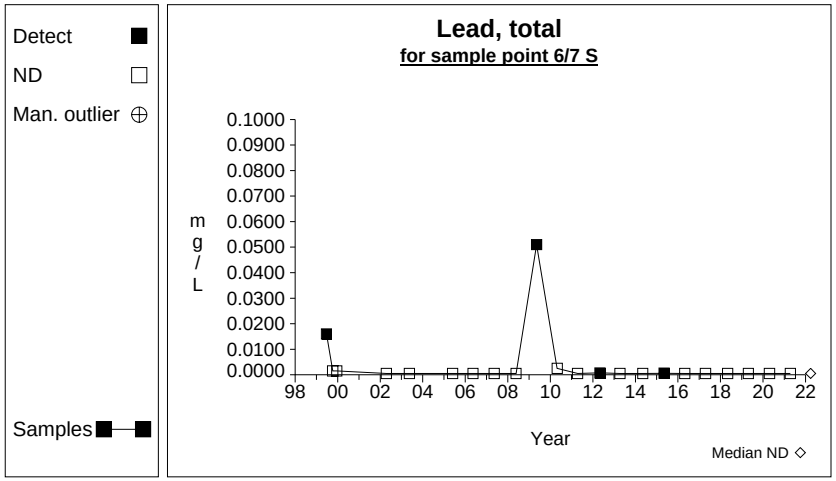


Graph 138

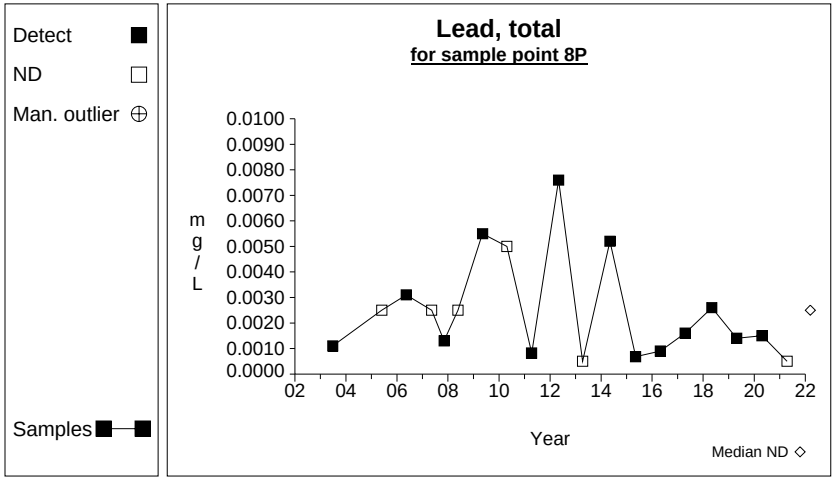


Graph 139

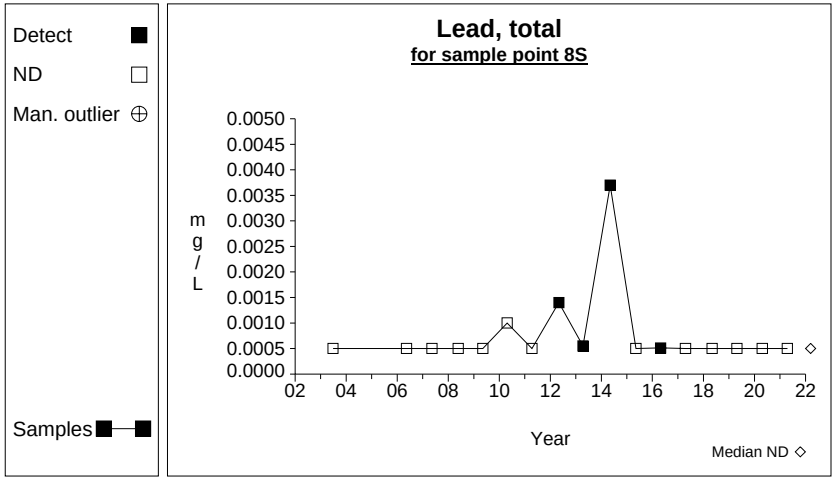


Graph 140

Time Series



Graph 141



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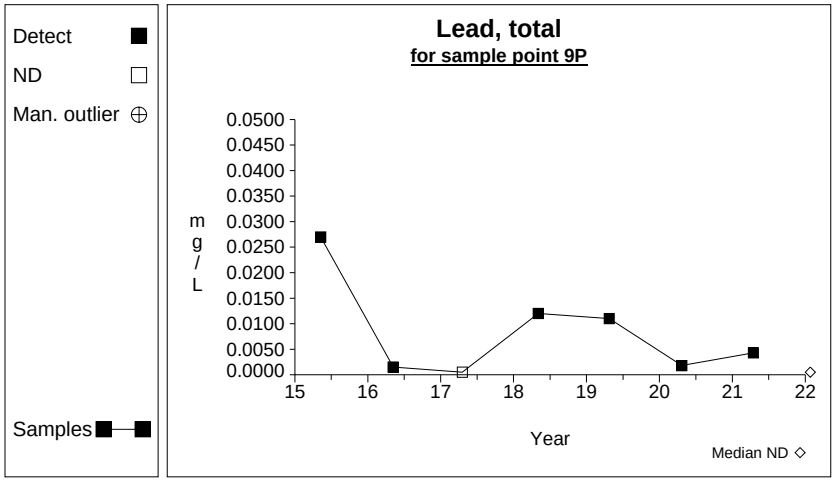
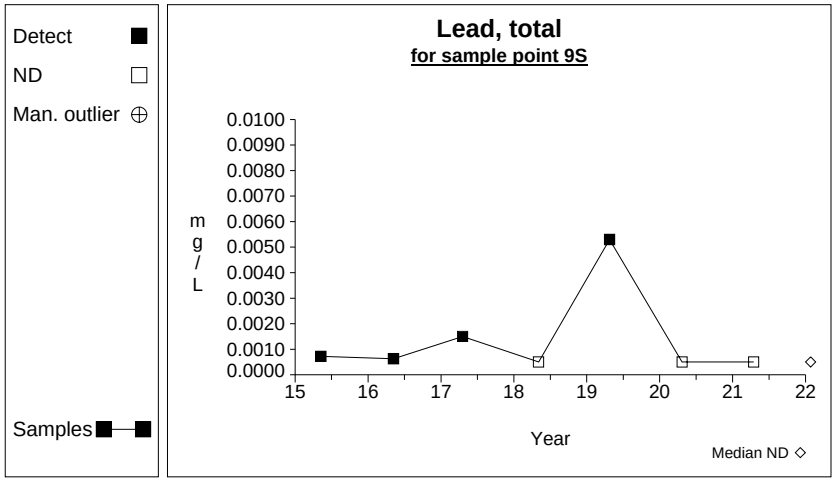
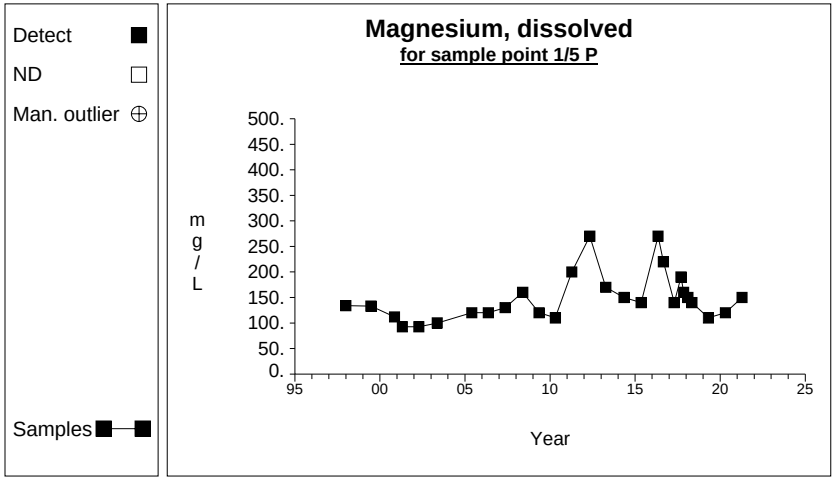


Graph 143

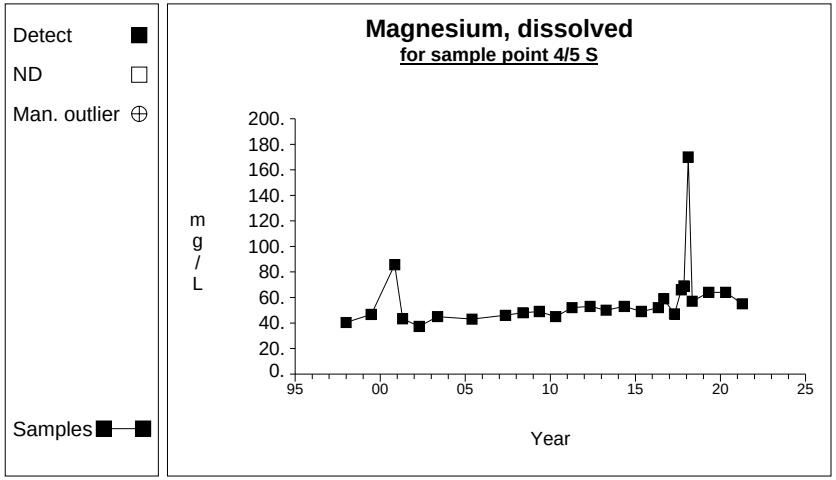


Graph 144

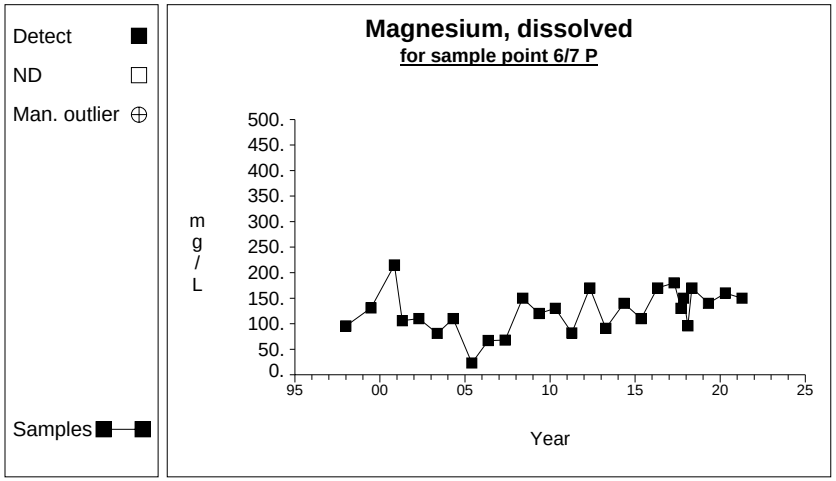
Time Series



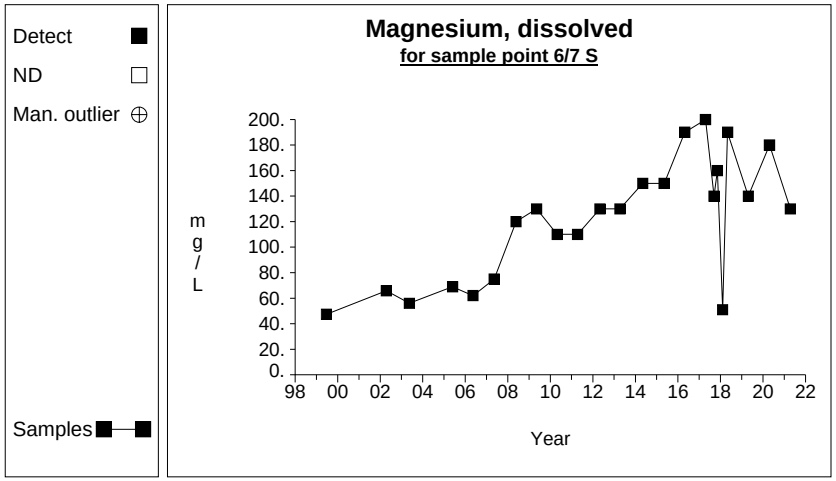
Graph 145



Graph 146

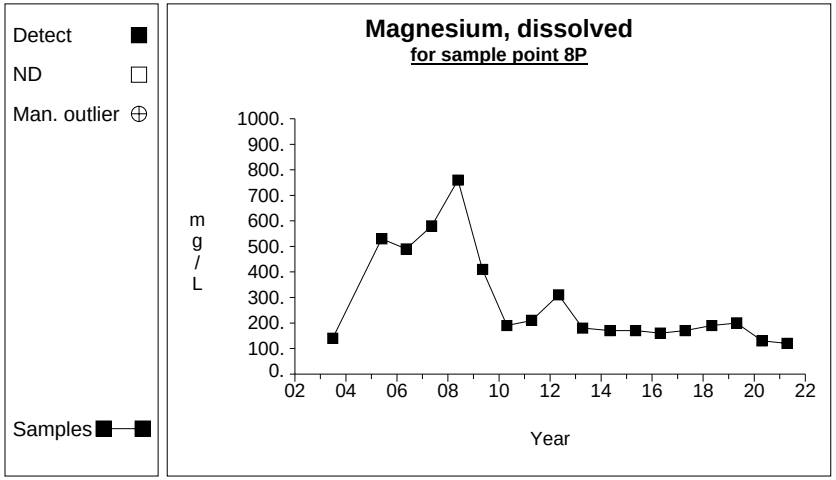


Graph 147

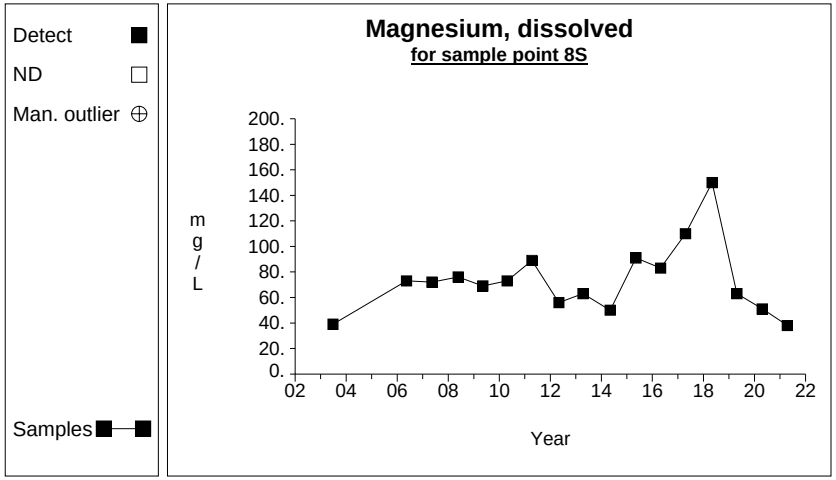


Graph 148

Time Series



Graph 149



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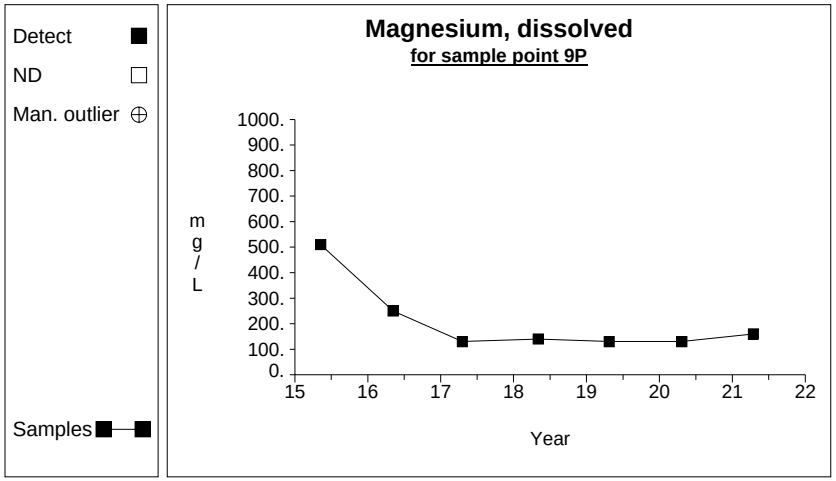
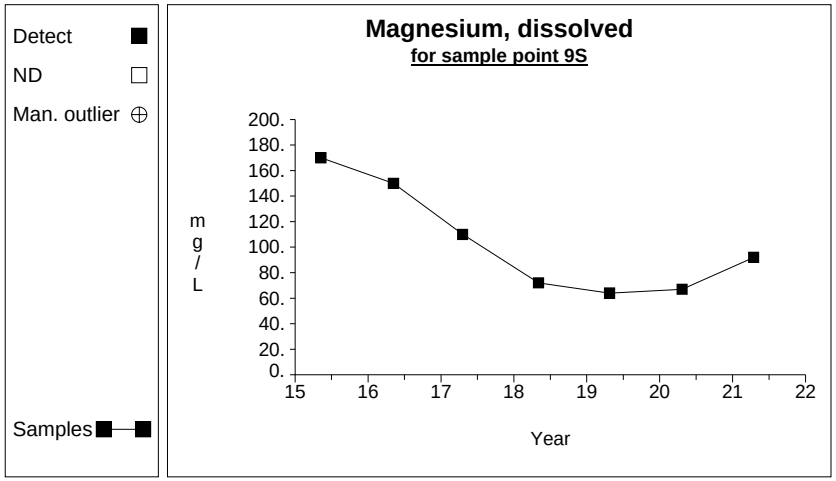
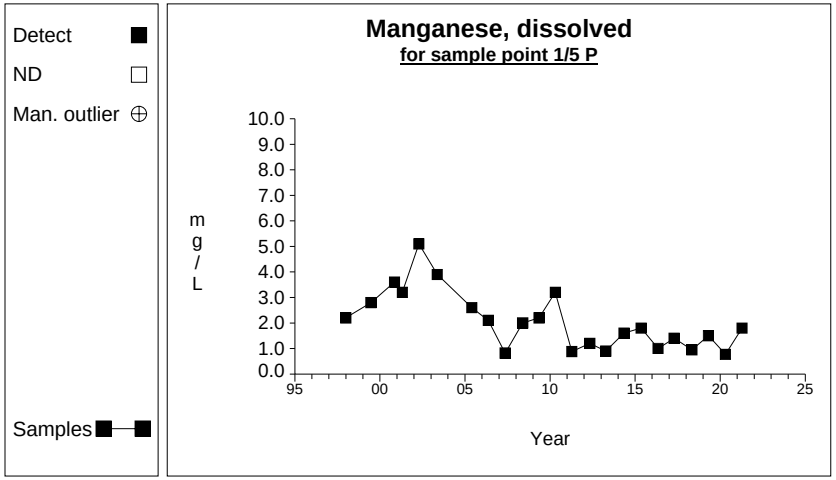


Graph 151

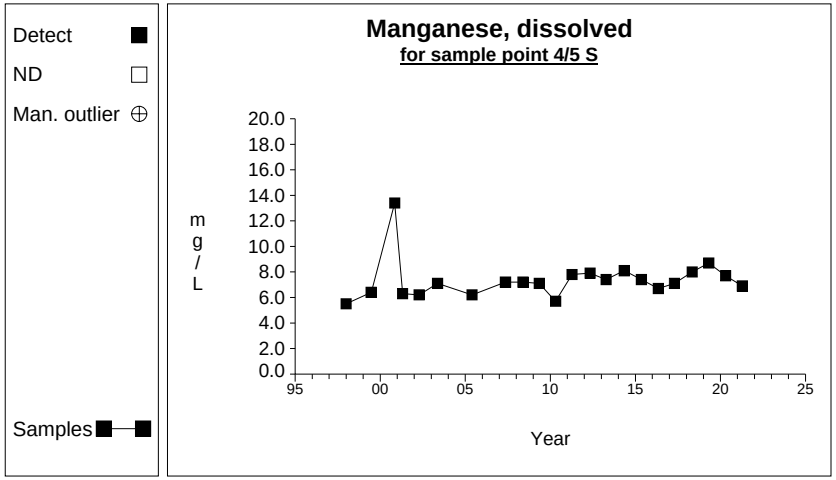


Graph 152

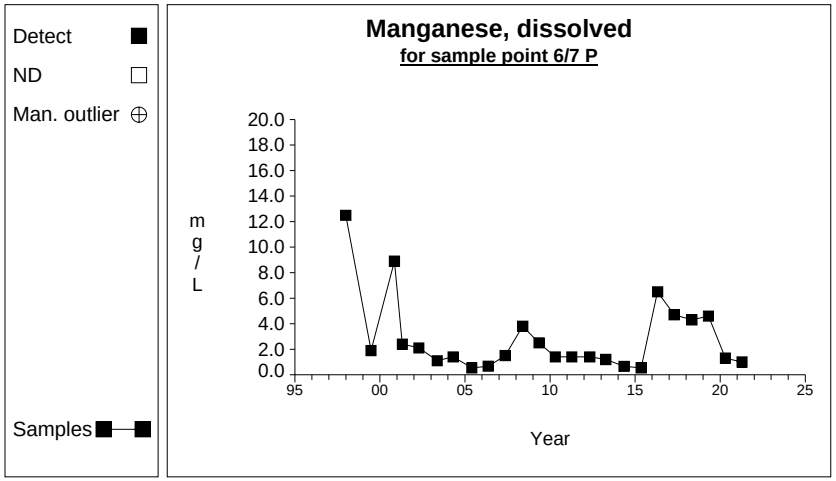
Time Series



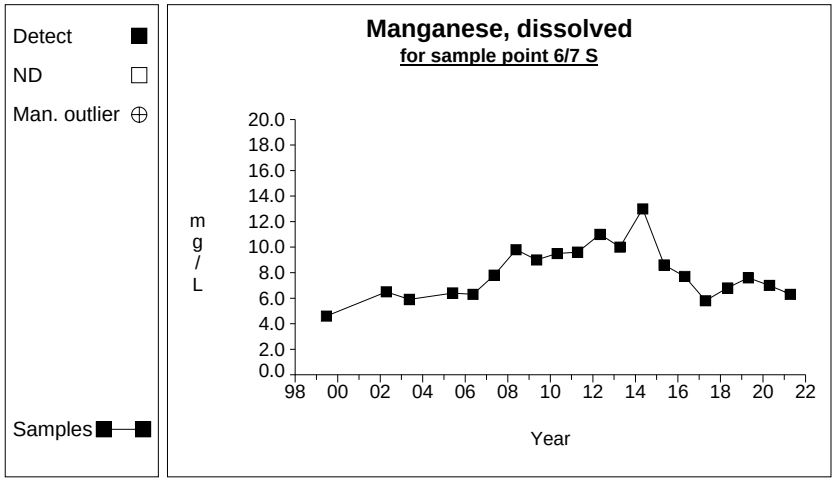
Graph 153



Graph 154

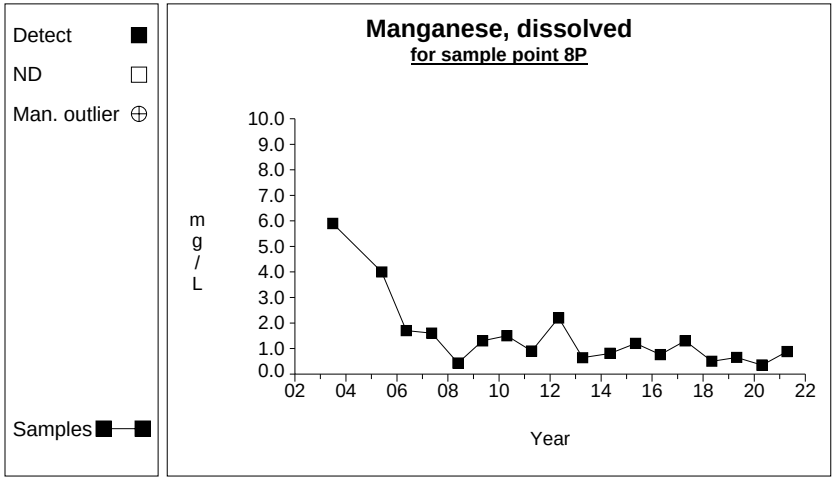


Graph 155

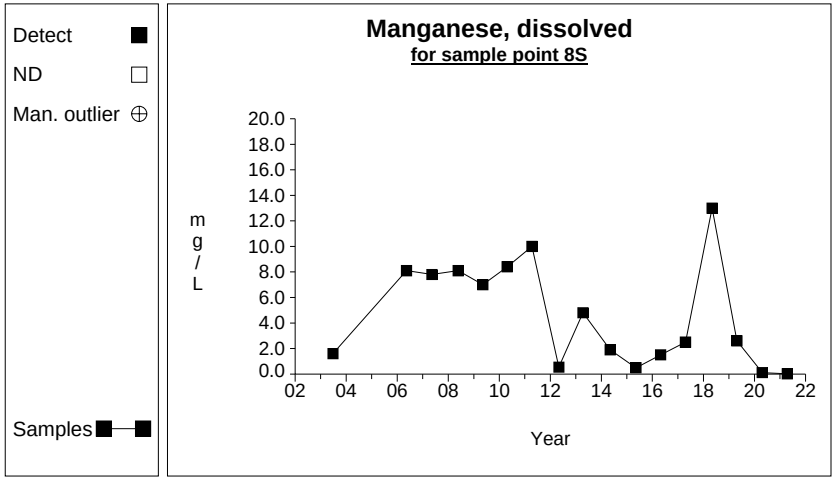


Graph 156

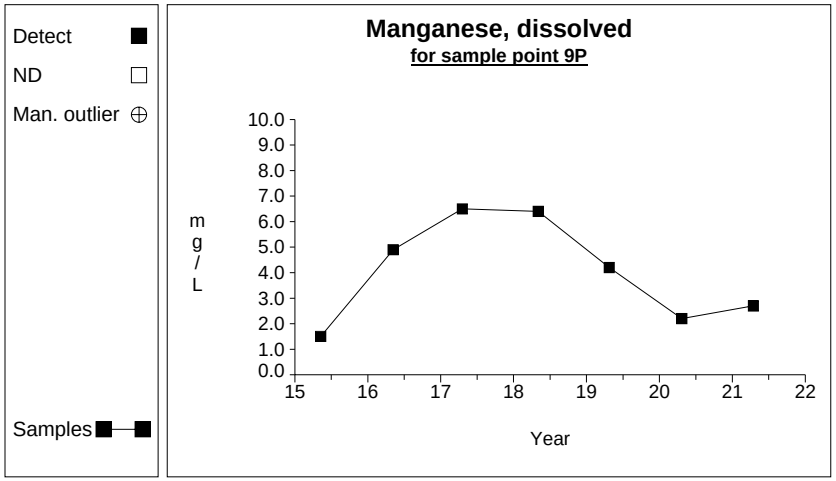
Time Series



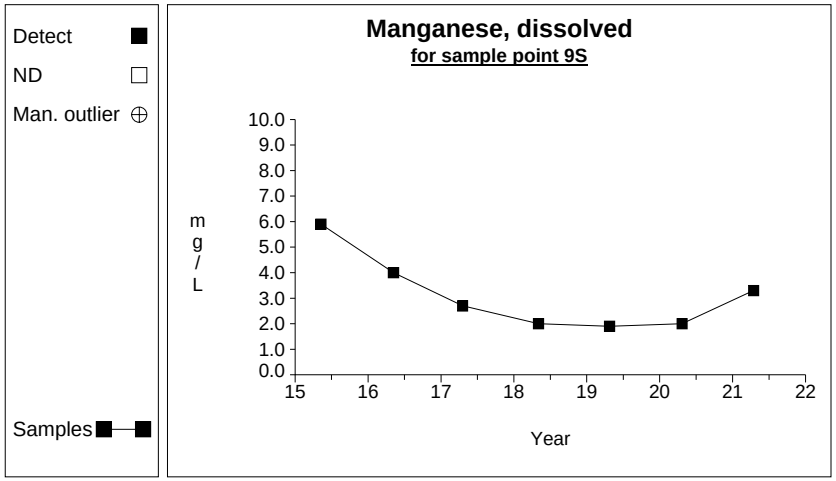
Graph 157



Graph 158

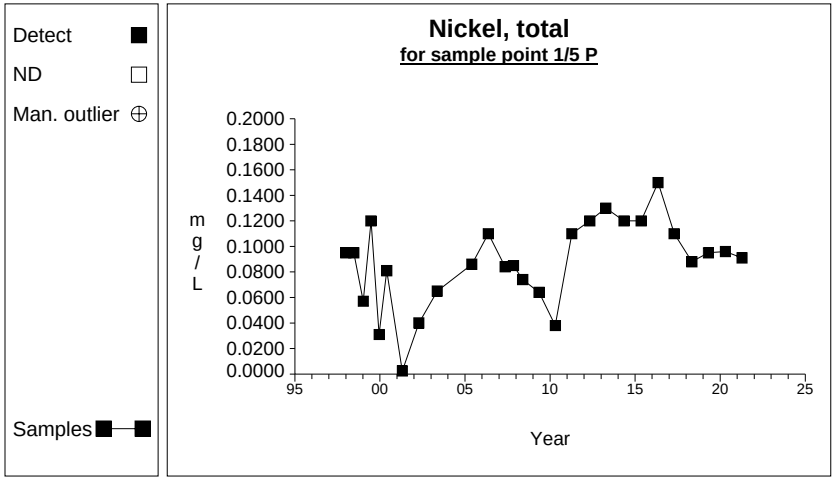


Graph 159

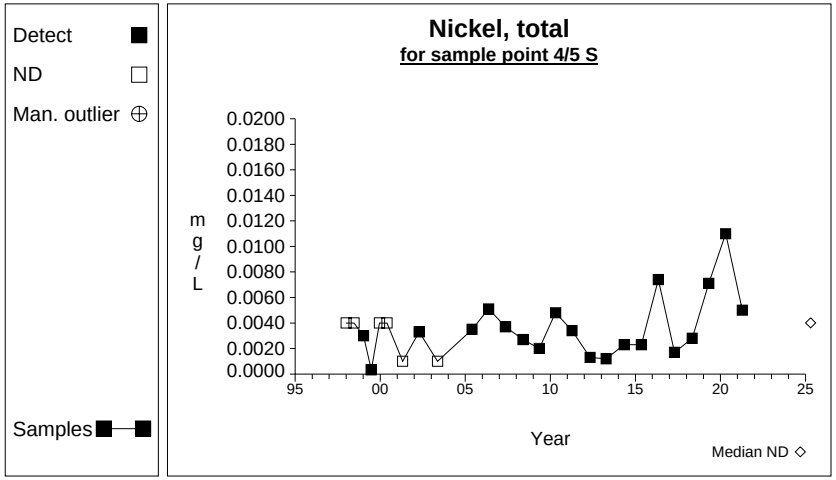


Graph 160

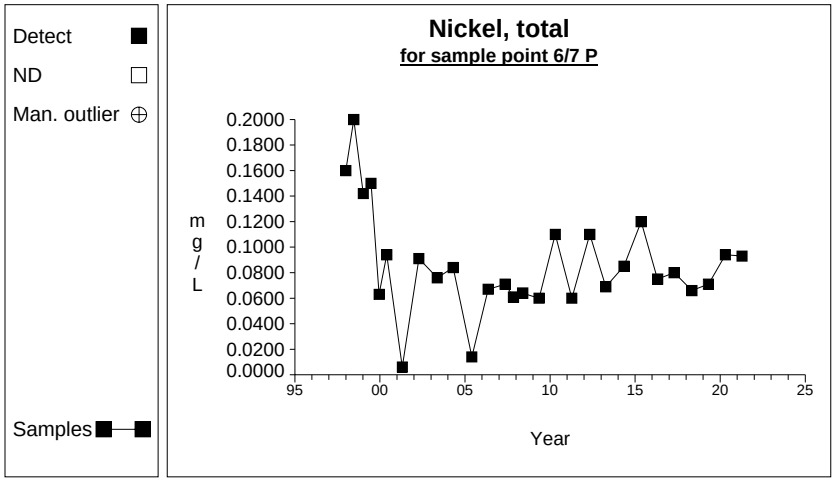
Time Series



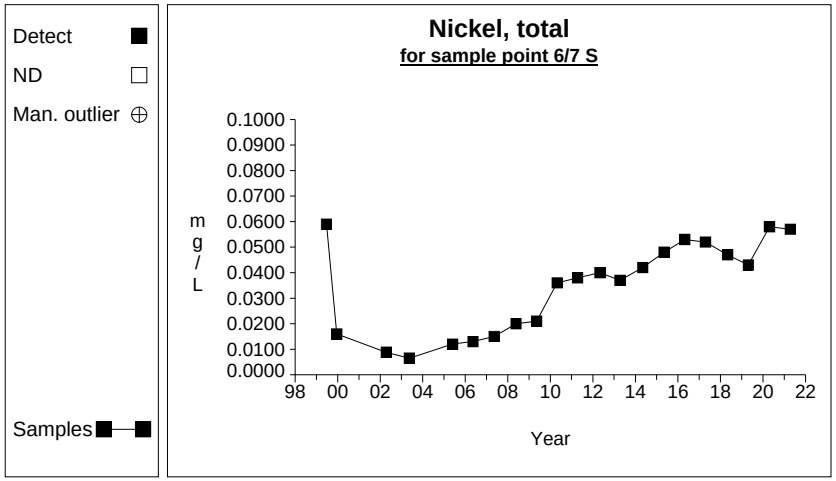
Graph 161



Graph 162

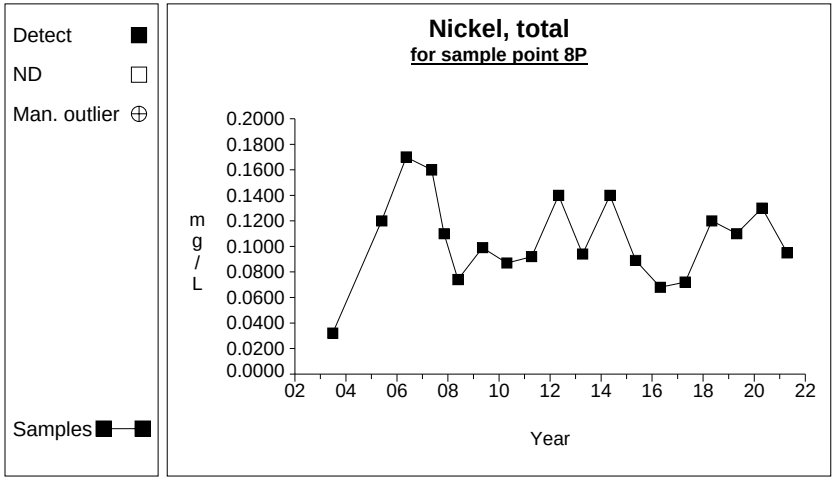


Graph 163

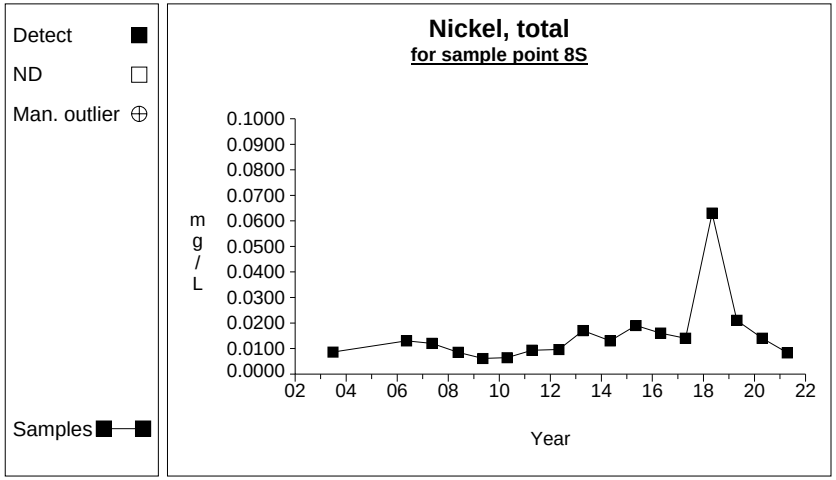


Graph 164

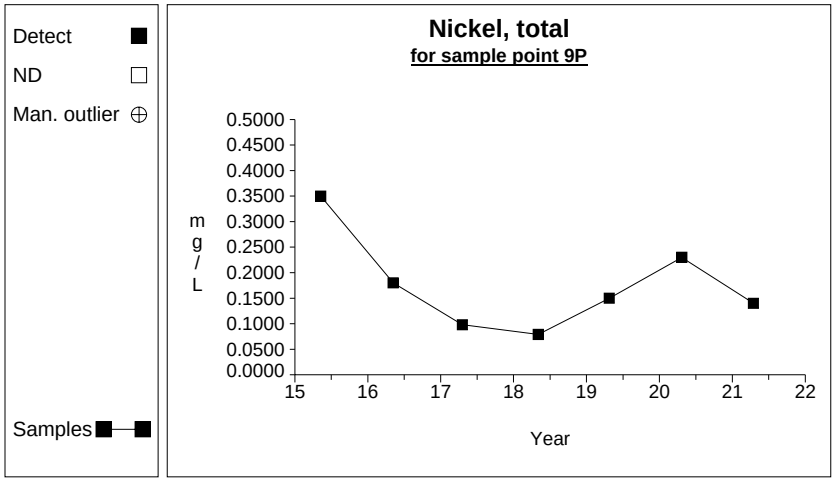
Time Series



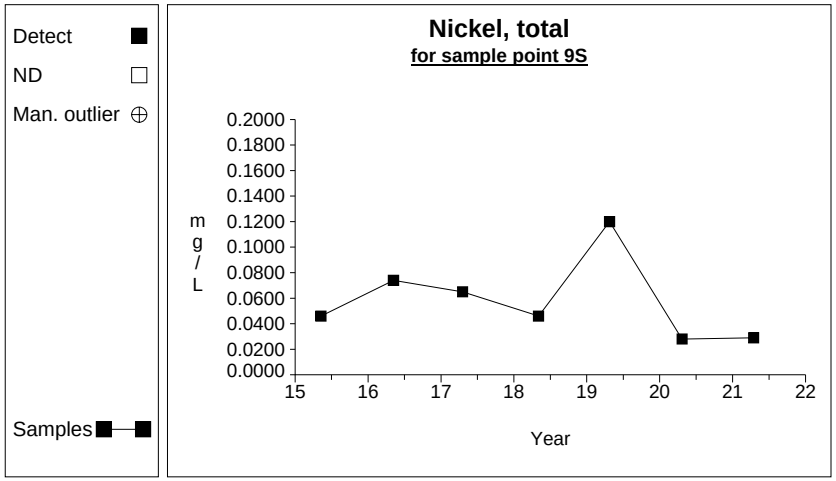
Graph 165



Graph 166

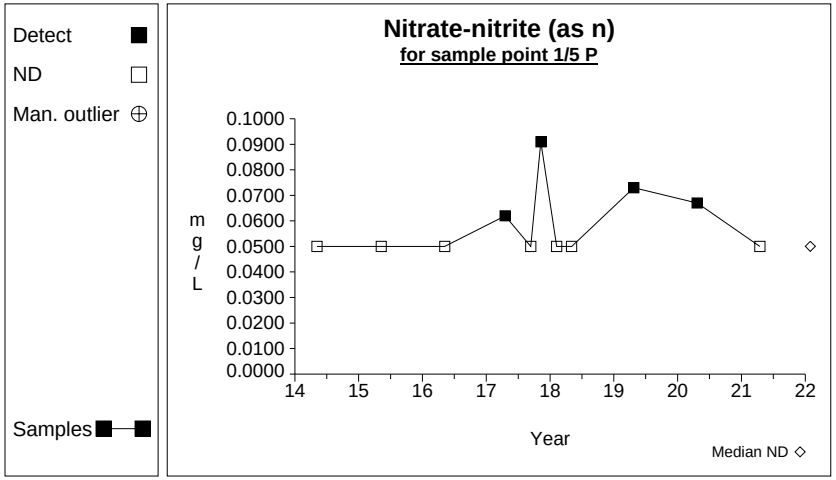


Graph 167

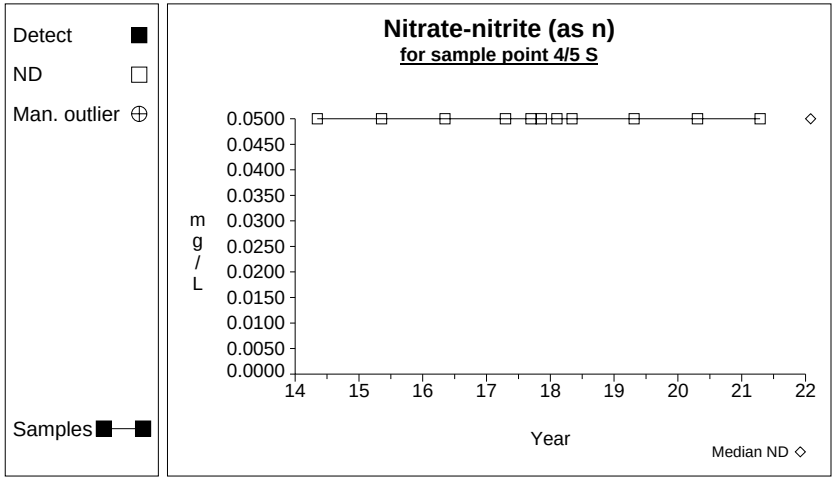


Graph 168

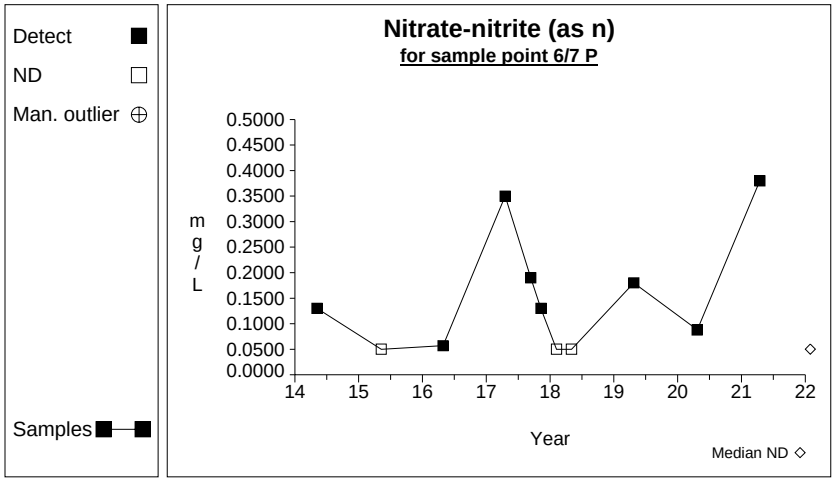
Time Series



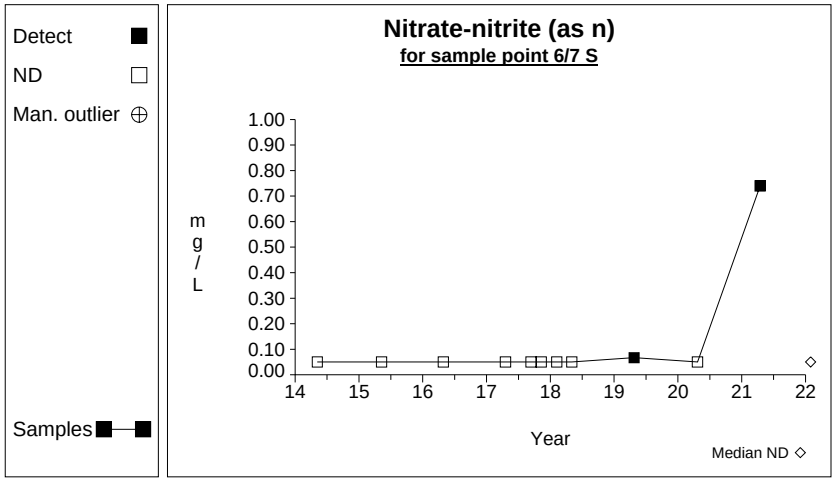
Graph 169



Graph 170

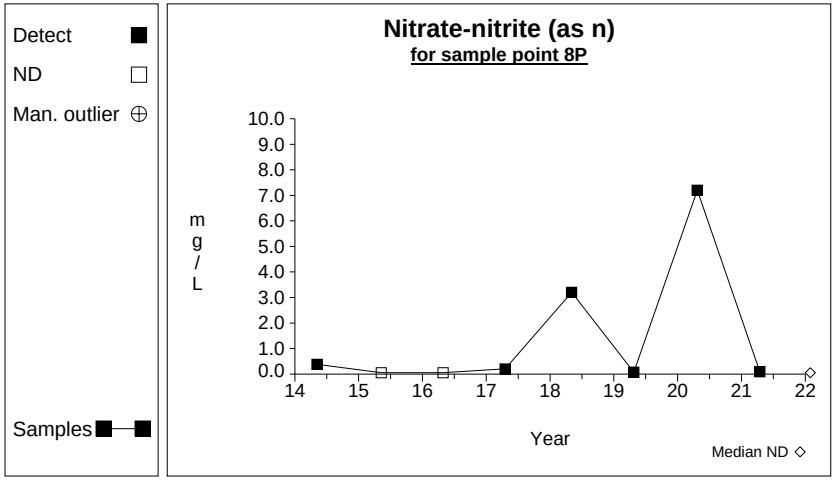


Graph 171



Graph 172

Time Series



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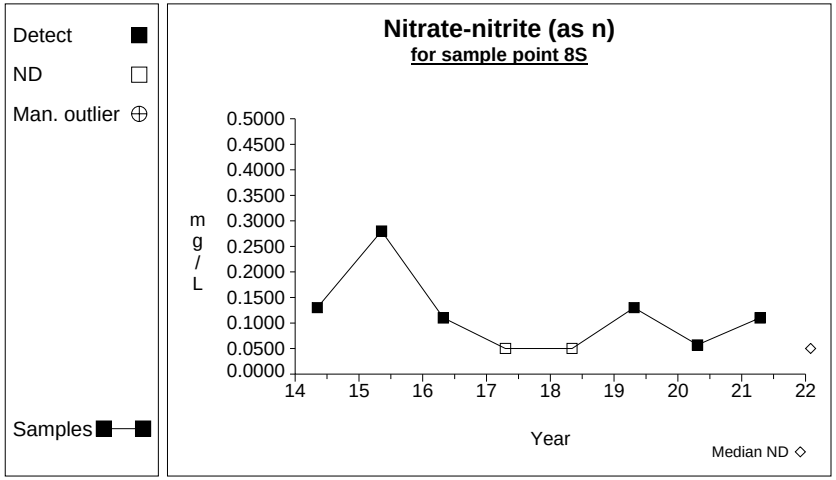
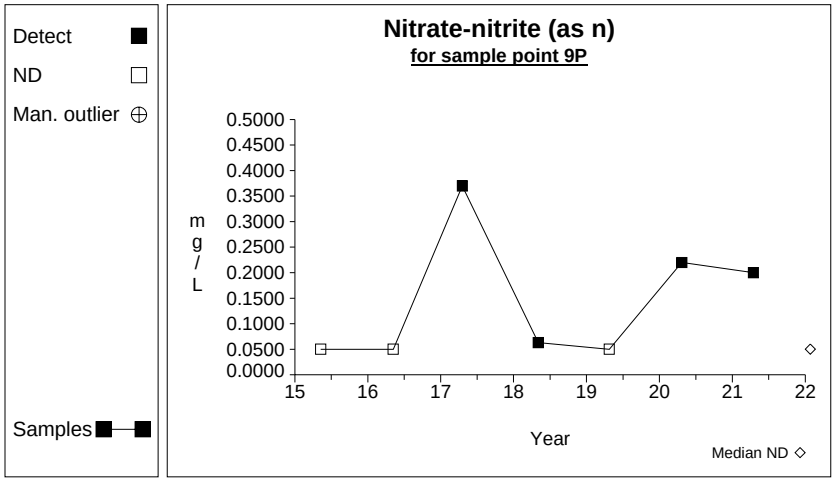
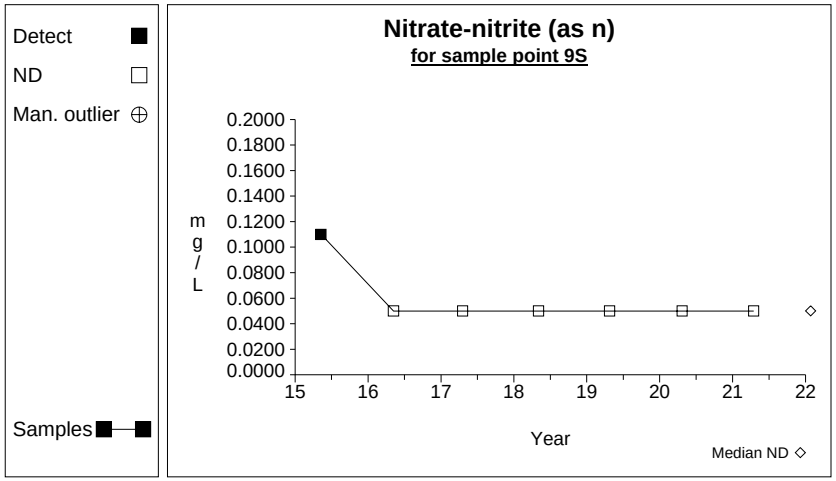


Graph 174

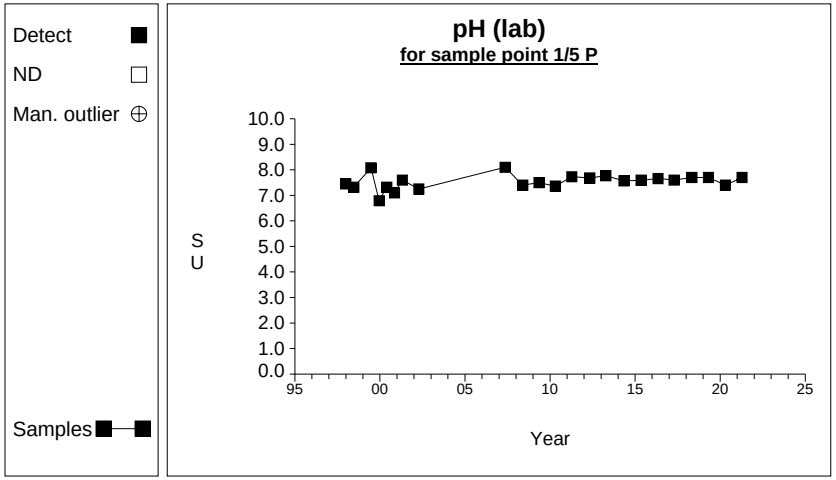


Graph 175

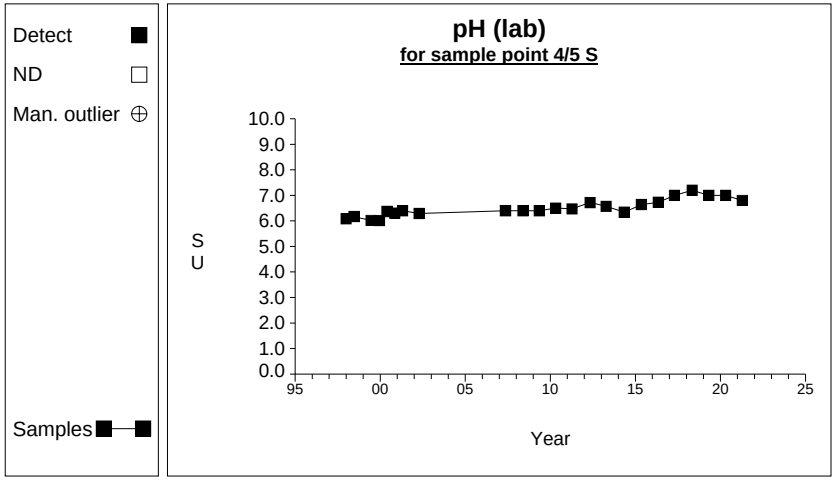


Graph 176

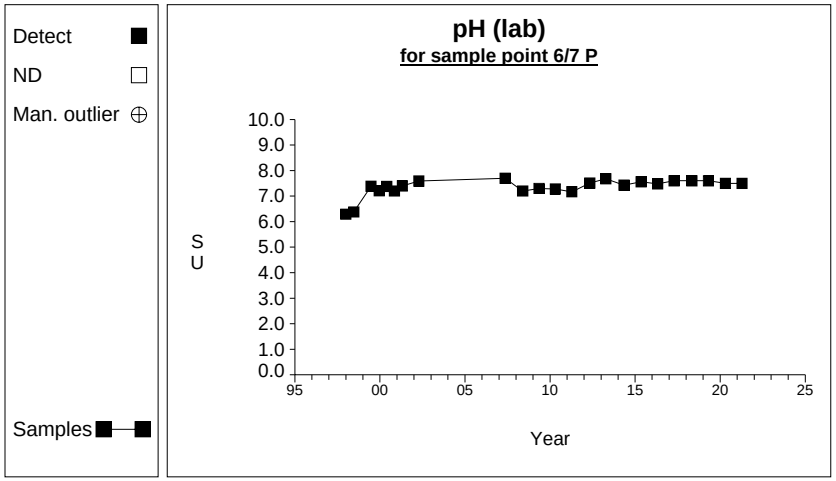
Time Series



Graph 177



Graph 178



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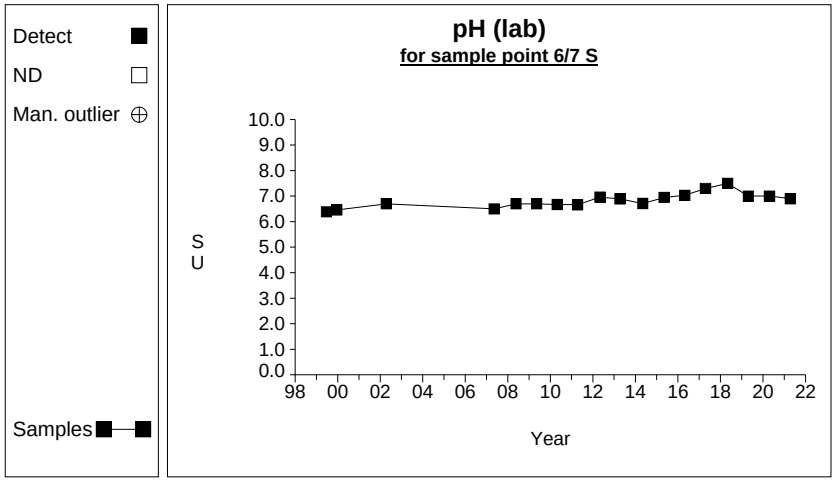
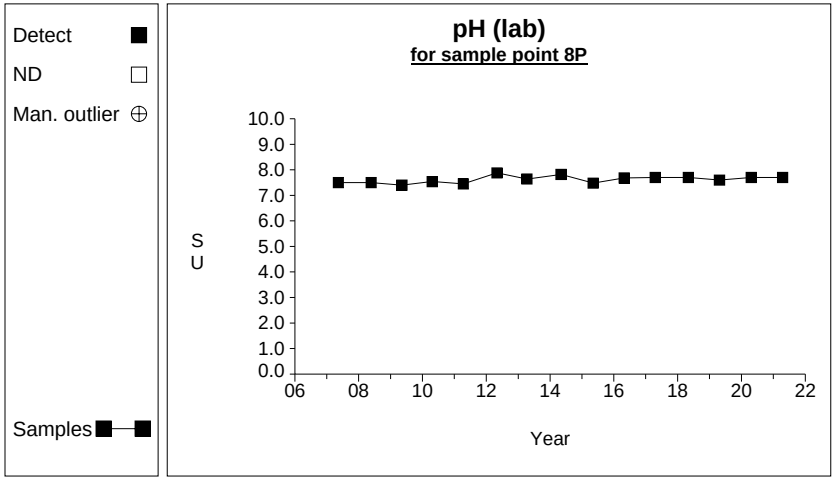


Graph 180

Time Series



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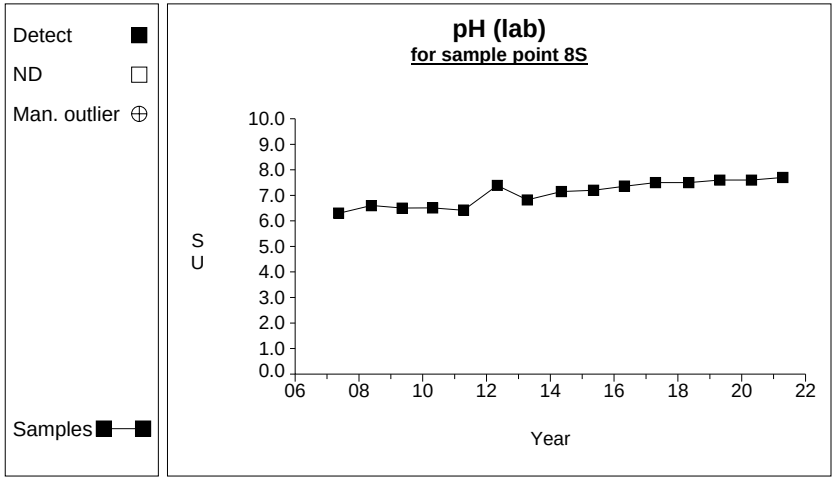
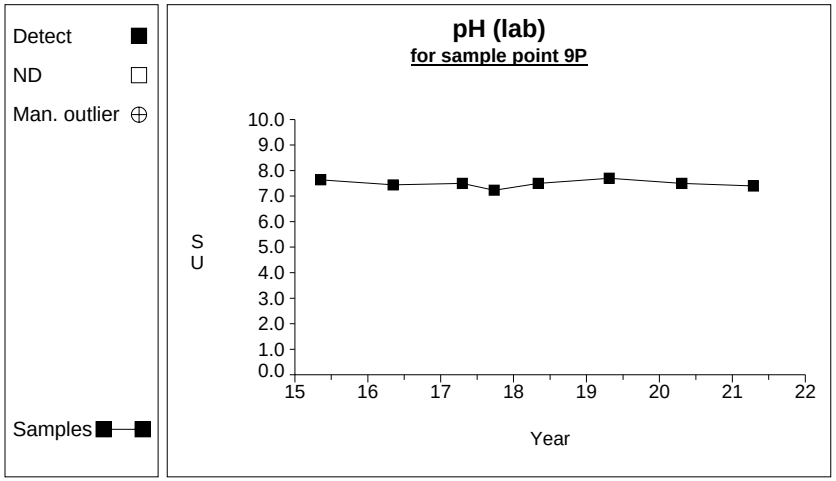


Graph 182



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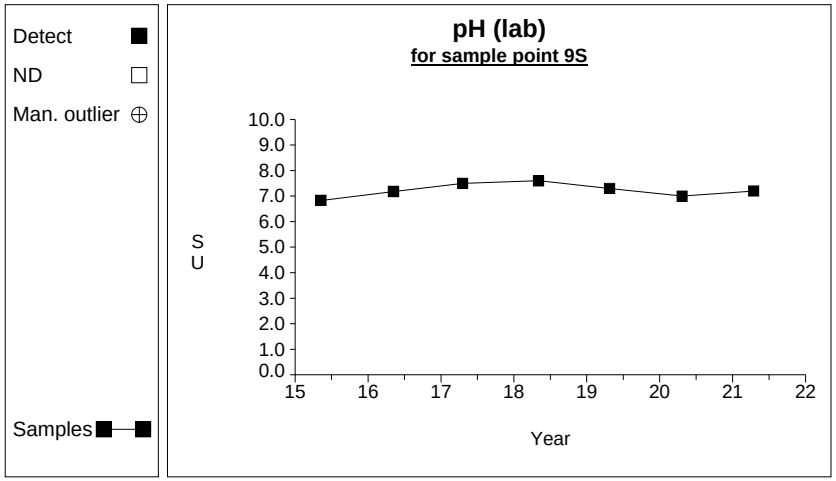
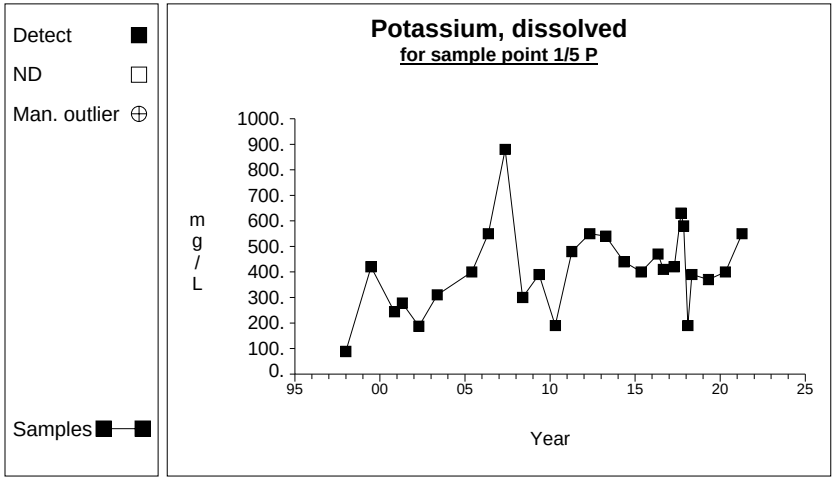
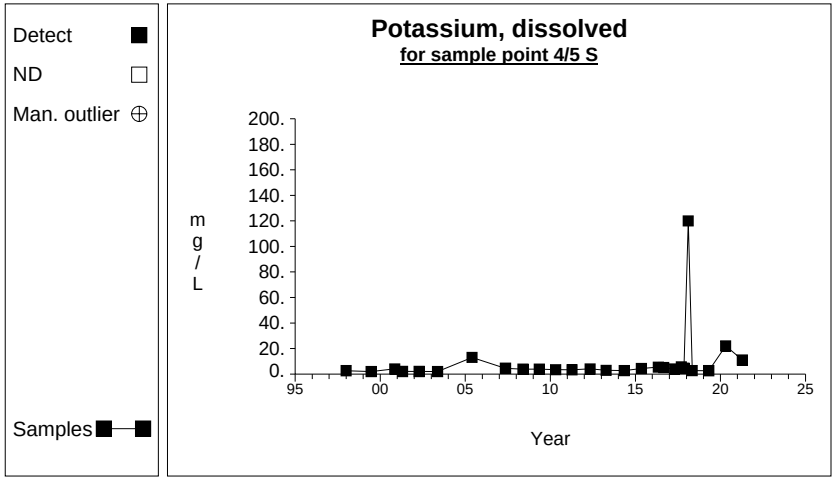


Graph 184

Time Series



Graph 185



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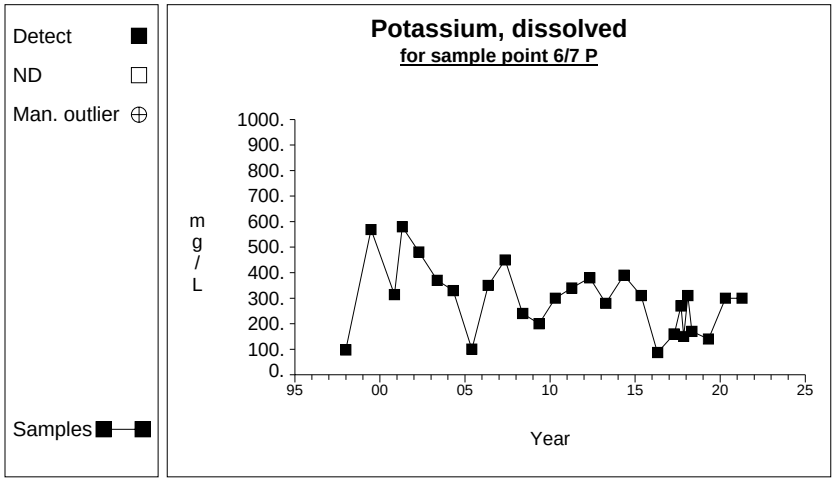
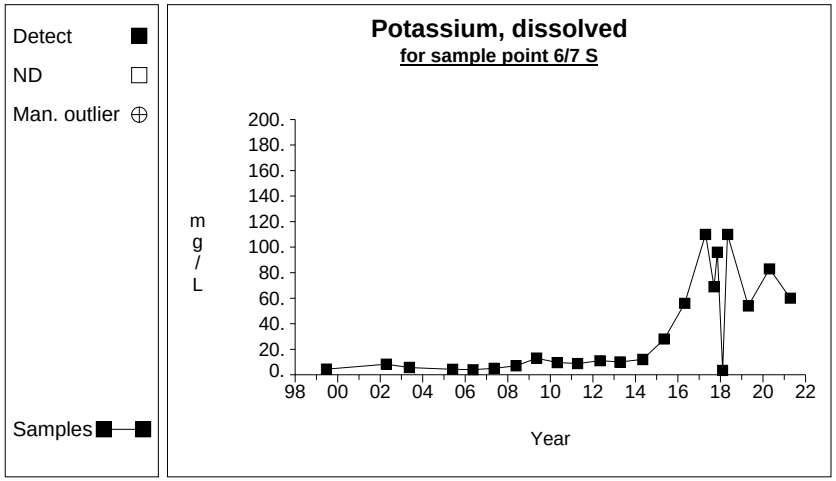
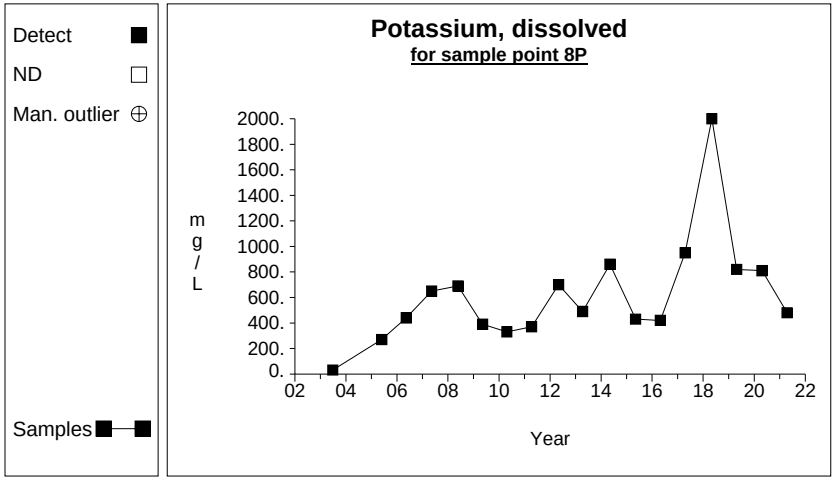


Graph 187



Graph 188

Time Series



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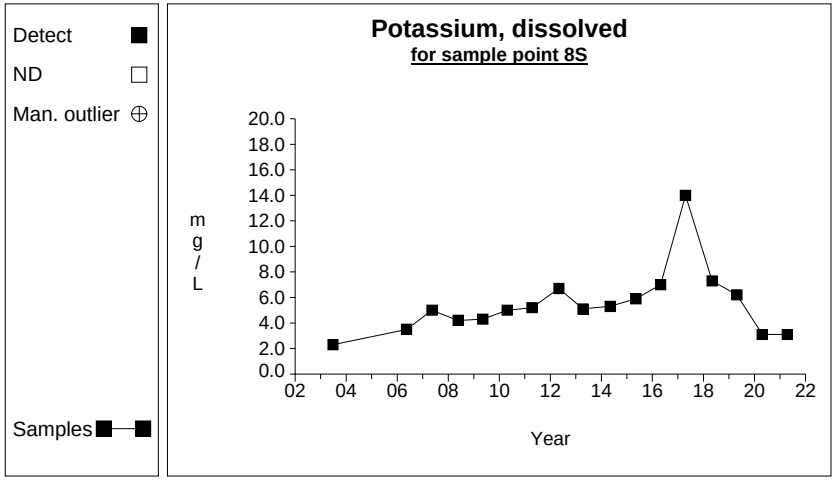

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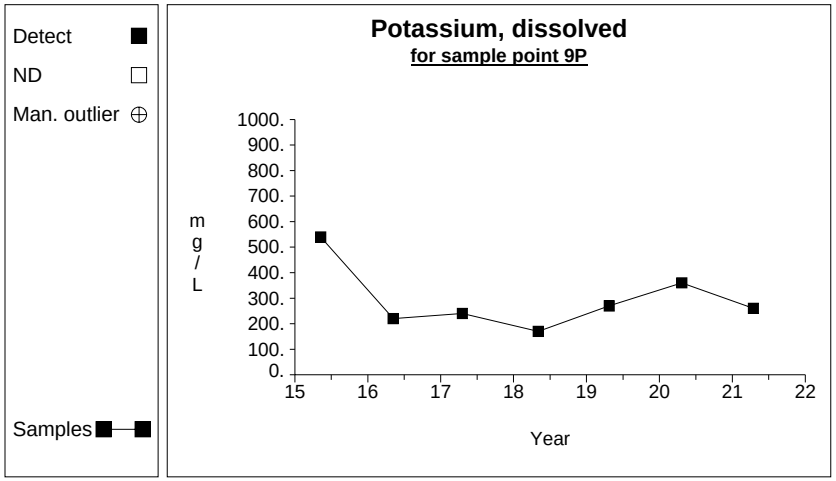

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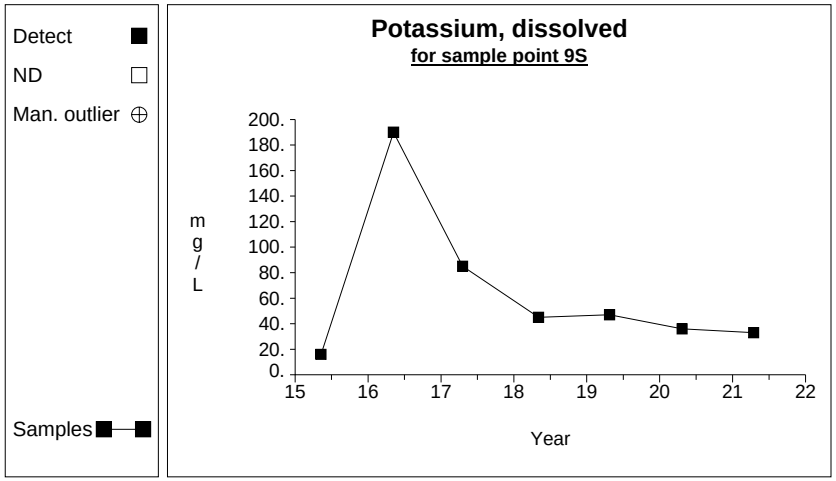

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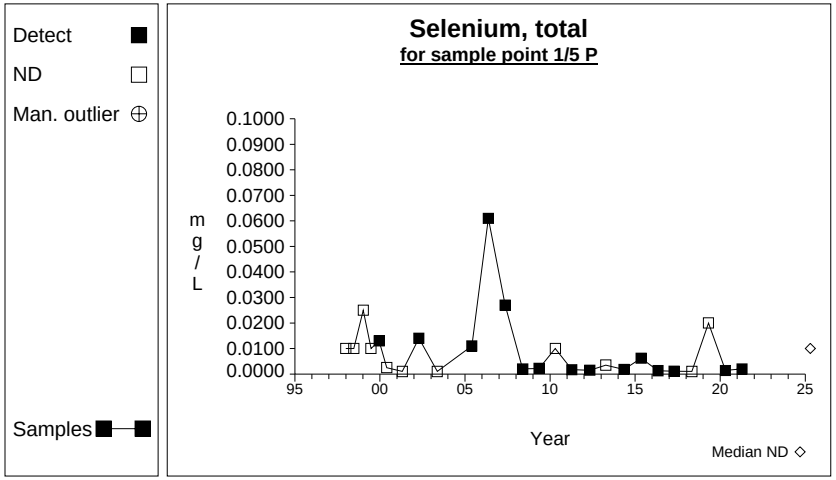

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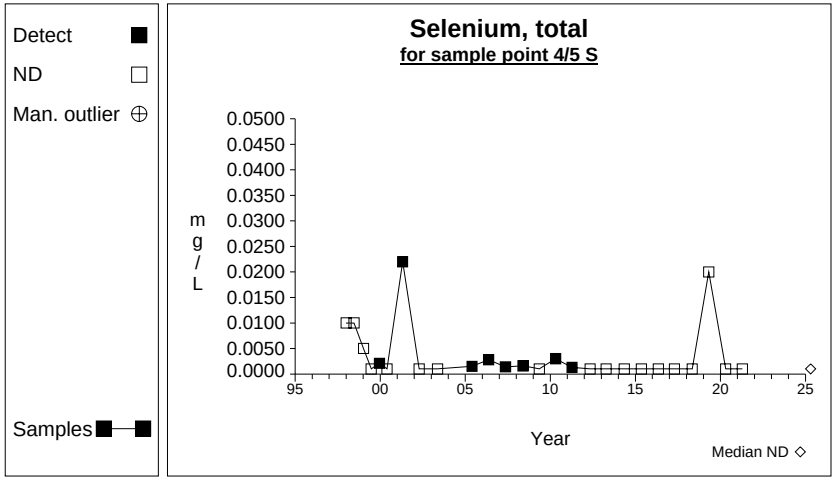

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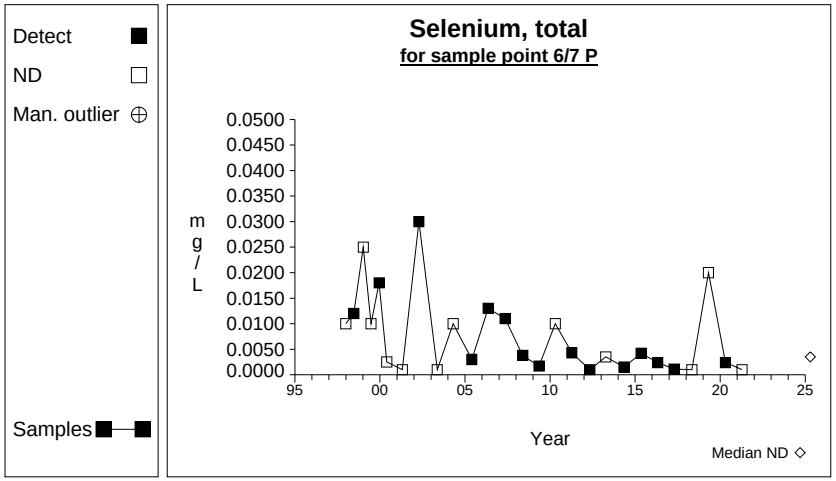

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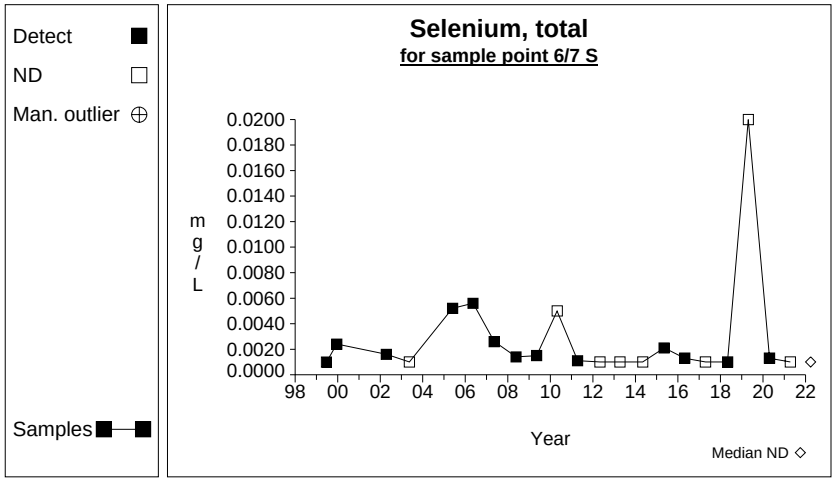
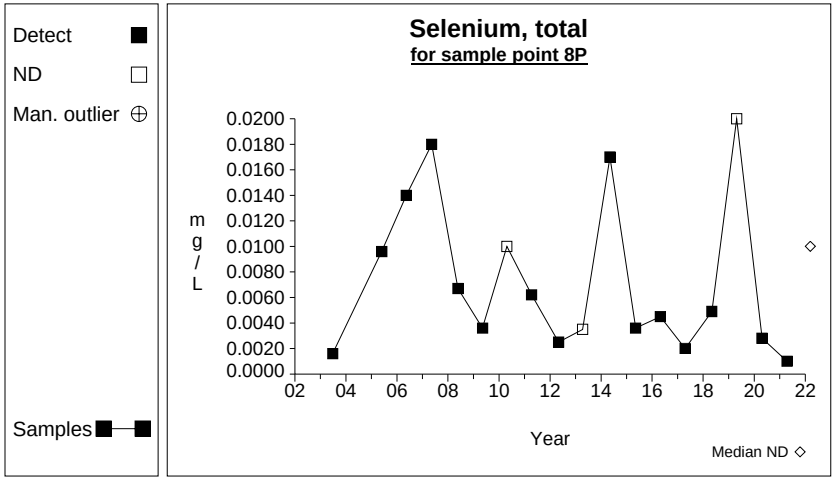


Graph 196

Time Series



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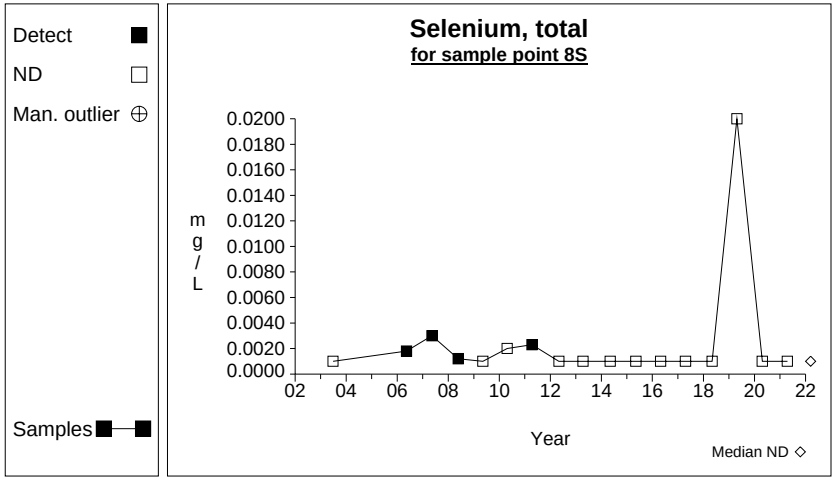

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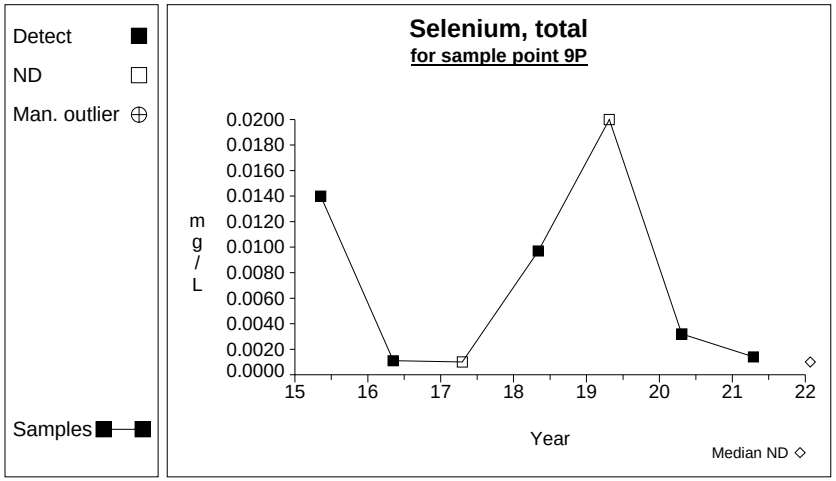

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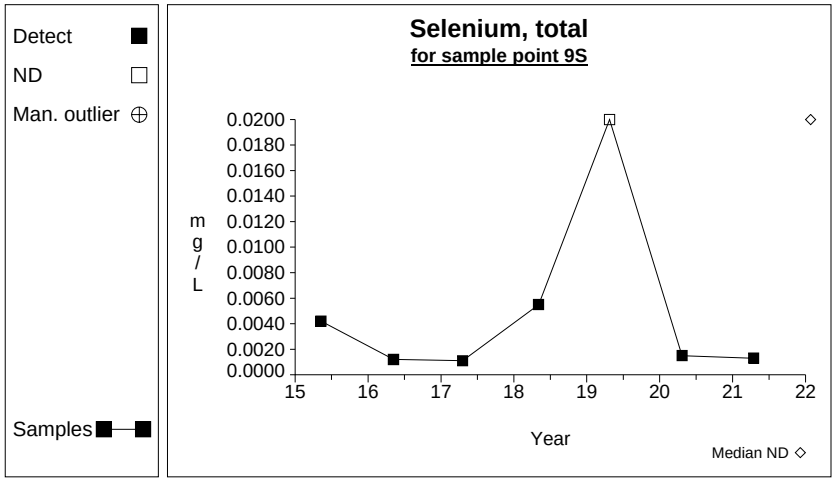
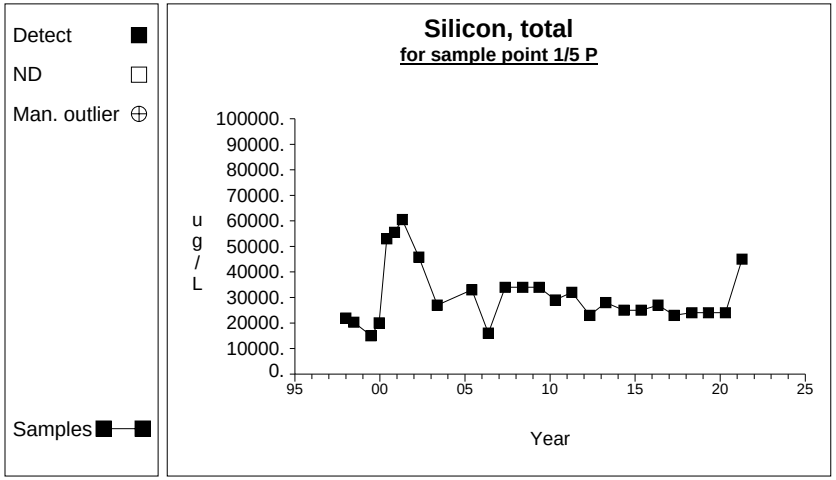
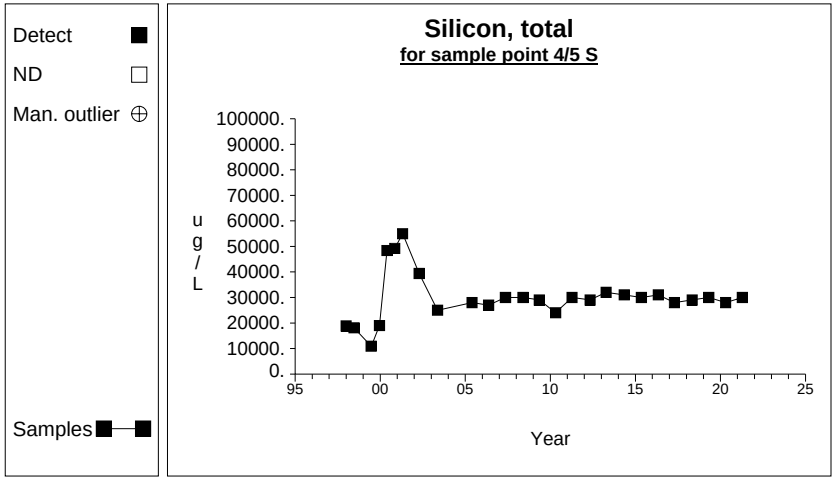


Graph 200

Time Series



Graph 201



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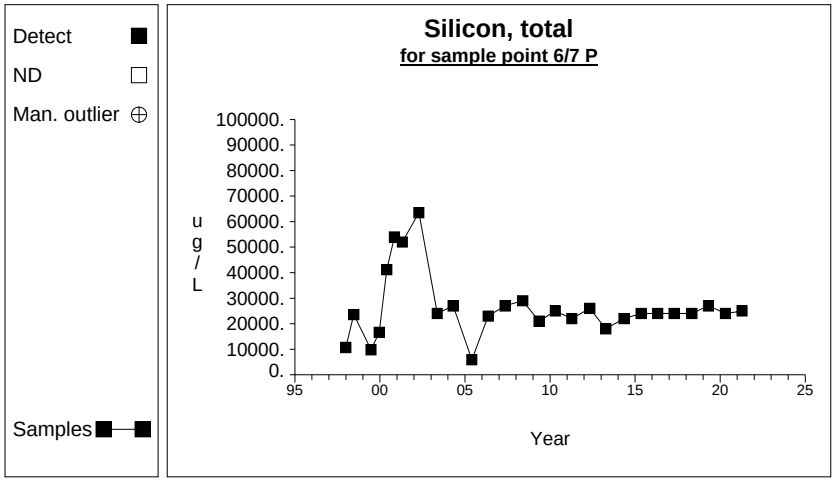

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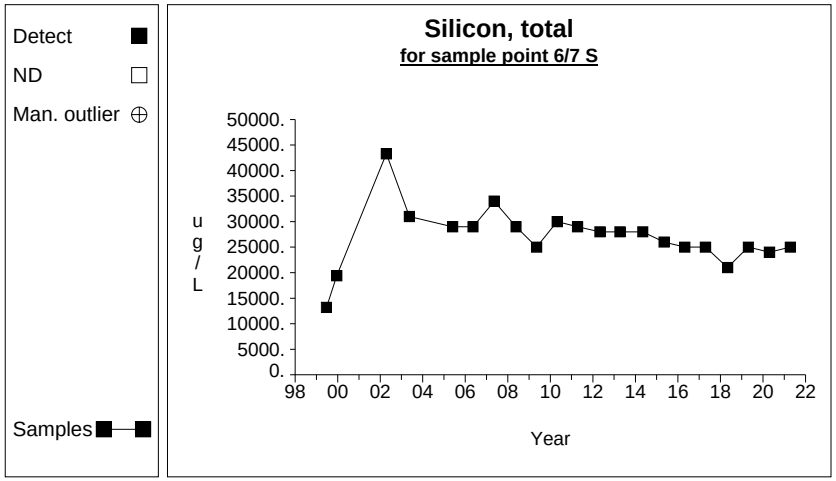
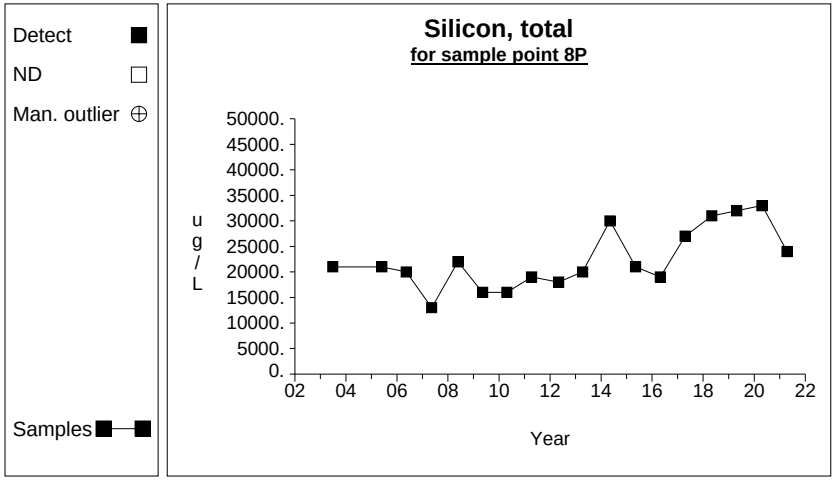


Graph 204

Time Series



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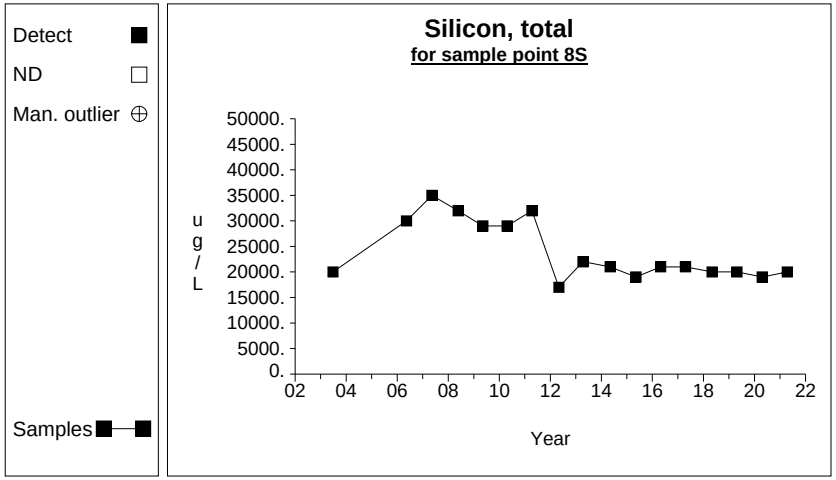

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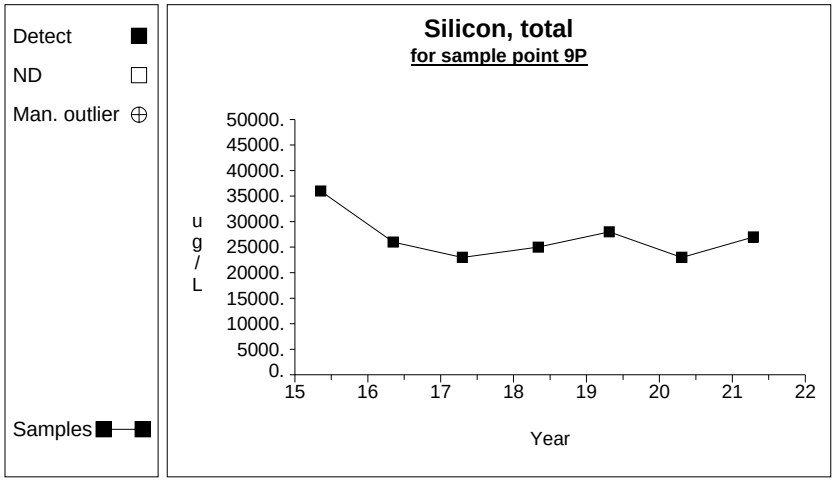
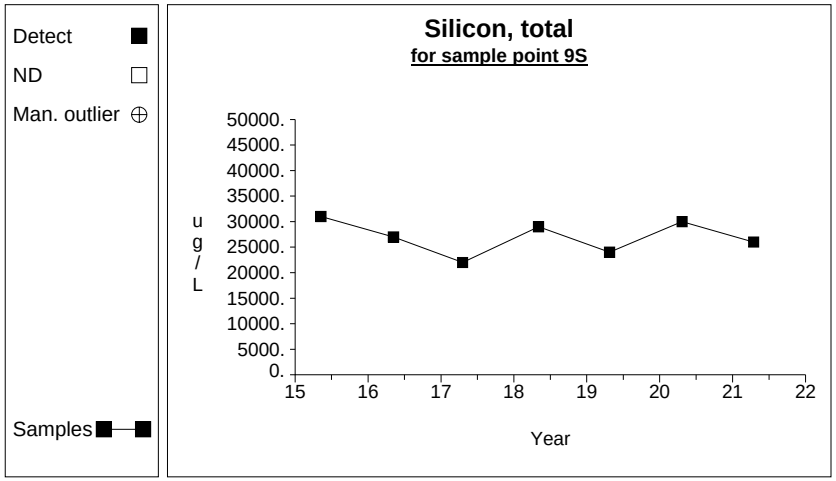
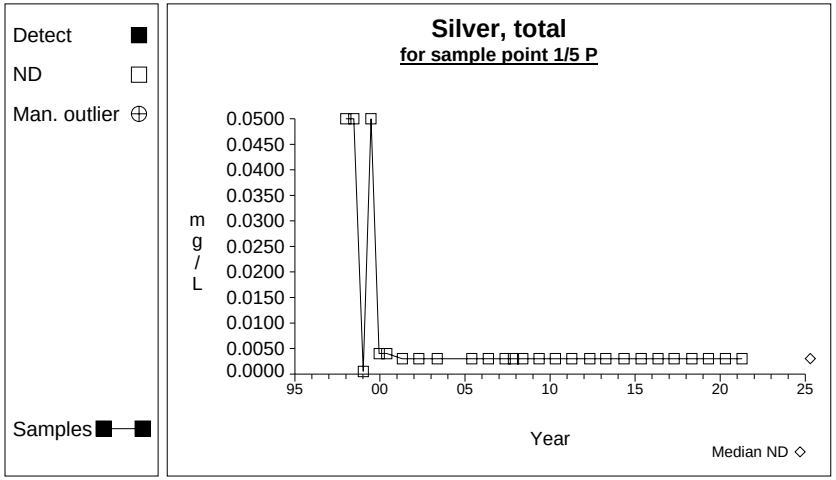


Graph 207

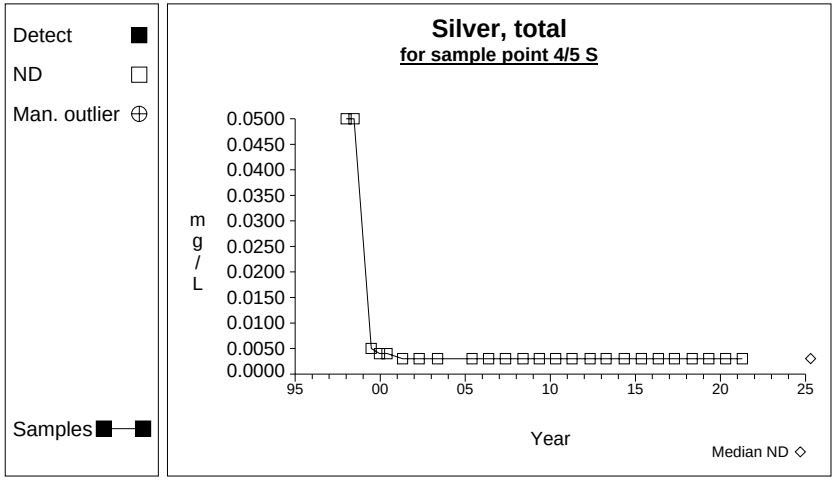


Graph 208

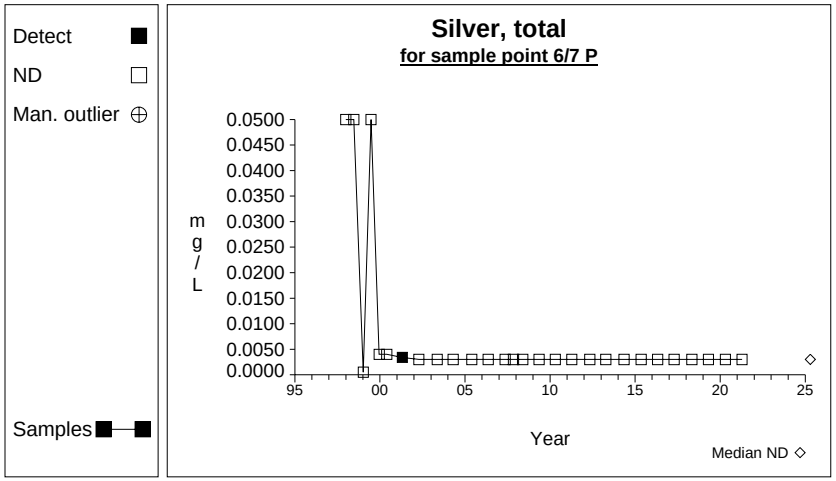
Time Series



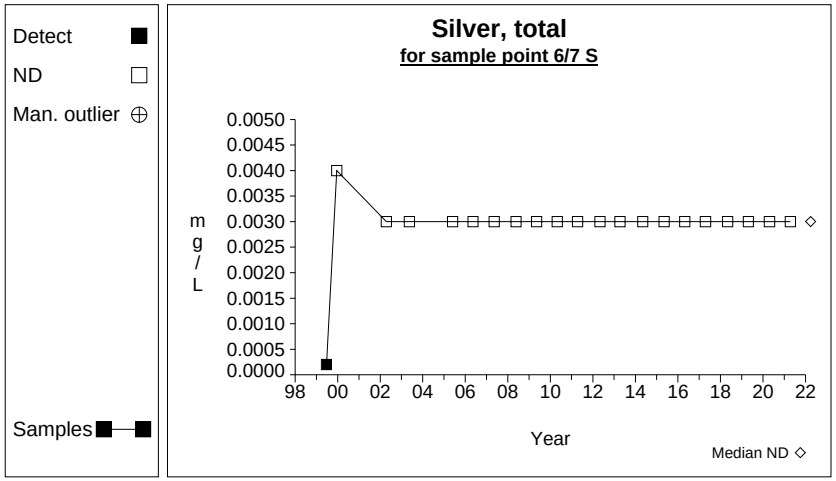
Graph 209



Graph 210

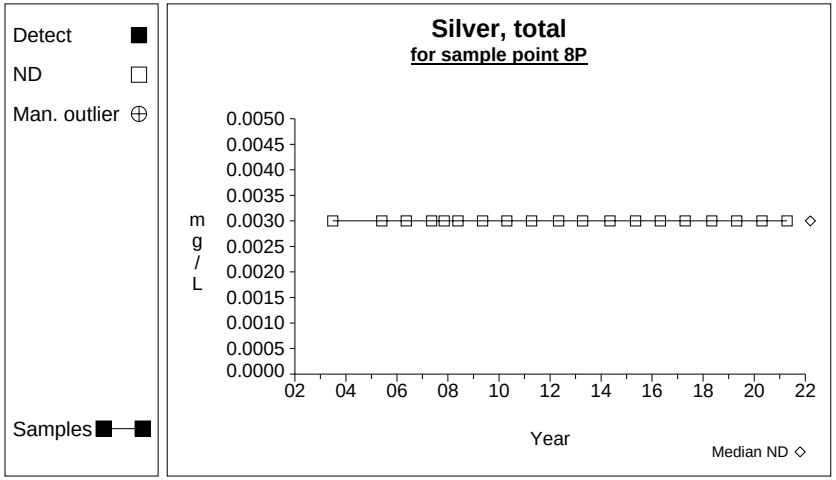


Graph 211

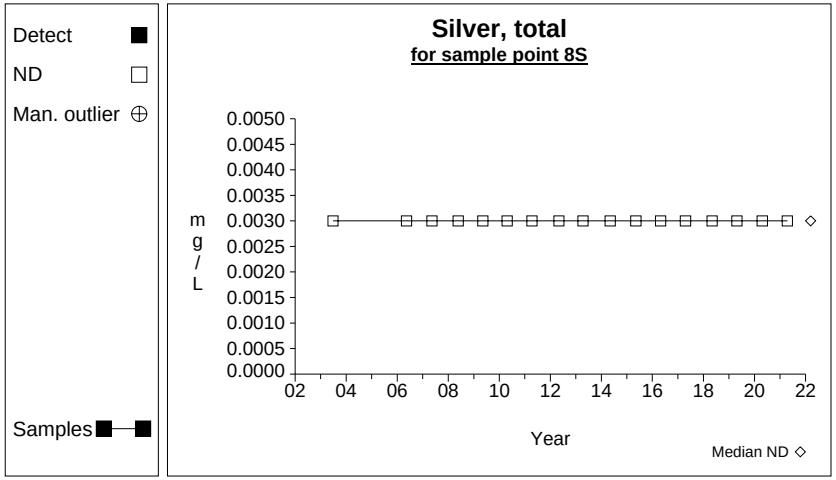


Graph 212

Time Series



Graph 213



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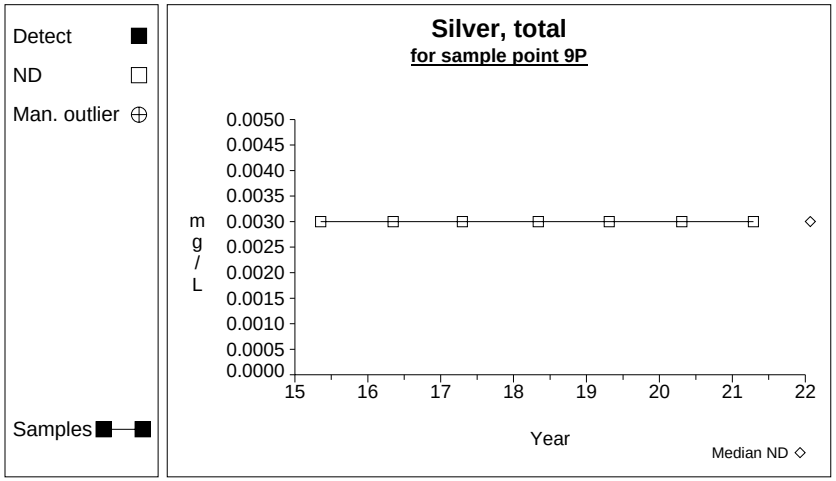
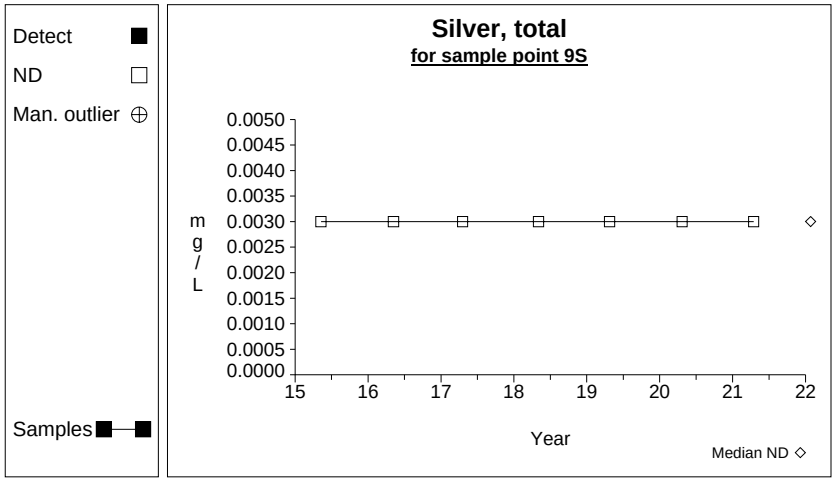
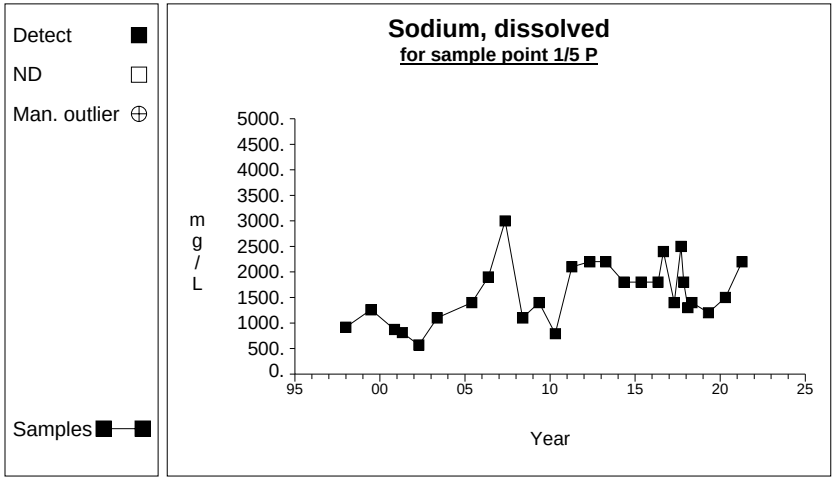


Graph 215

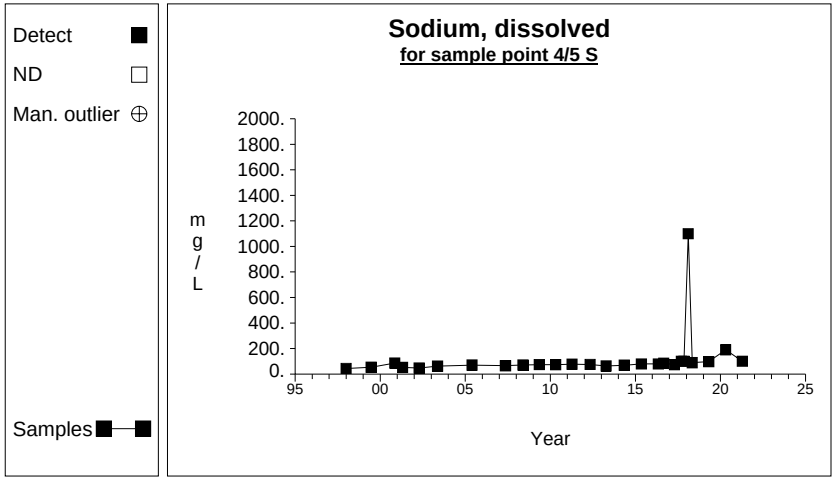


Graph 216

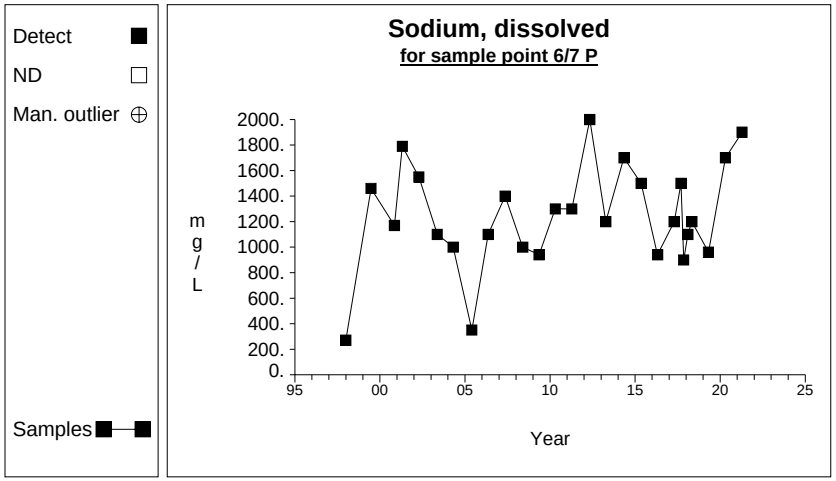
Time Series



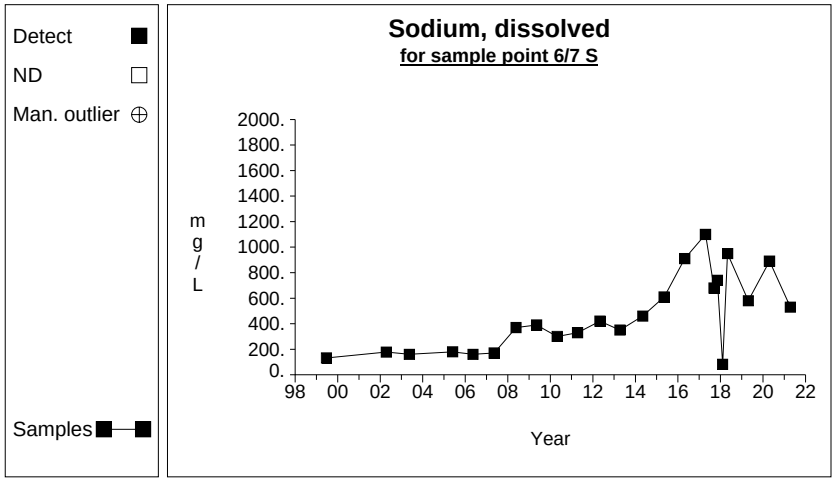
Graph 217



Graph 218

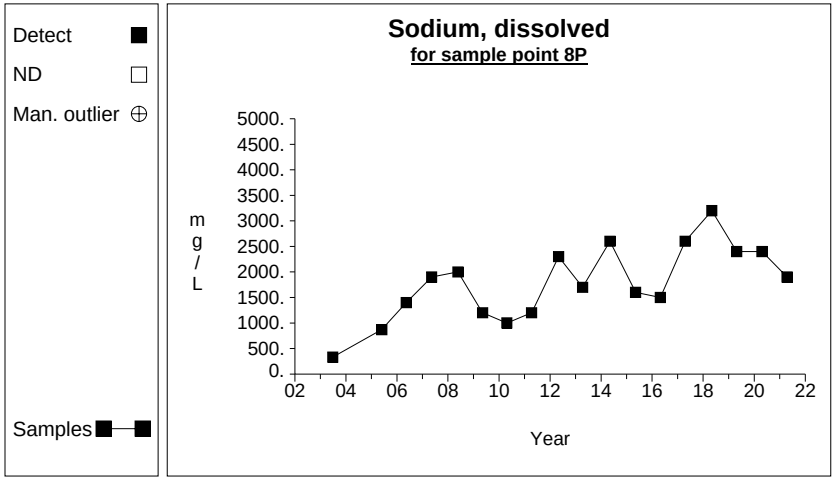


Graph 219

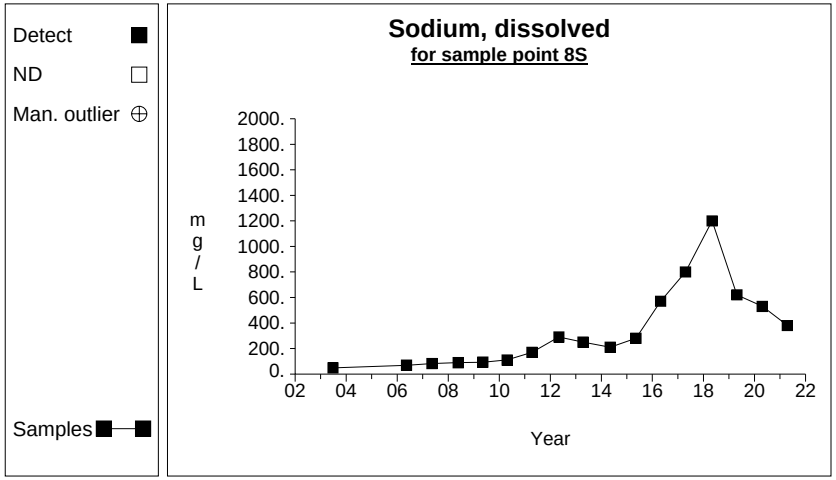


Graph 220

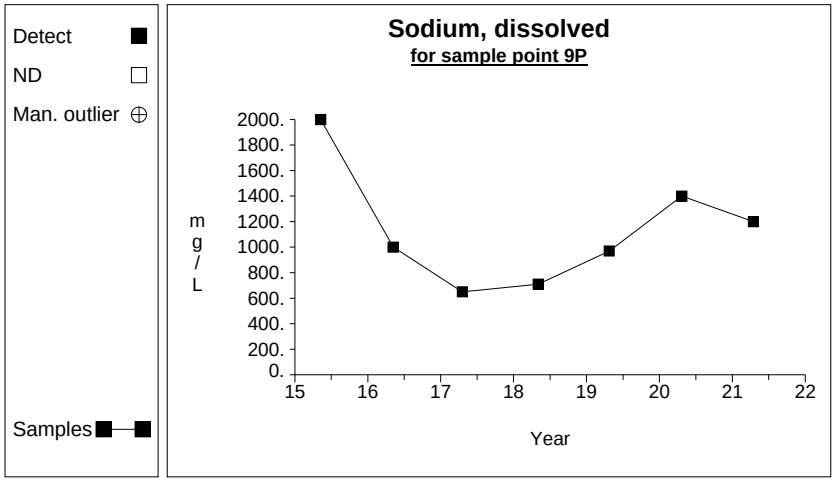
Time Series



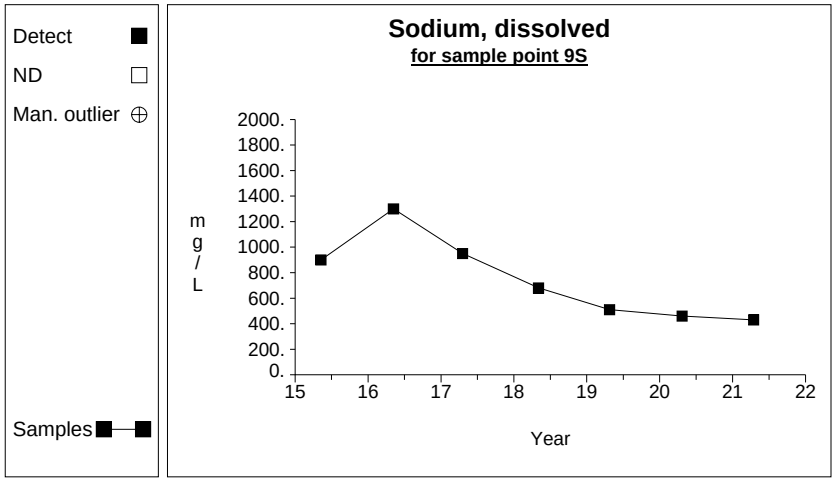
Graph 221



Graph 222

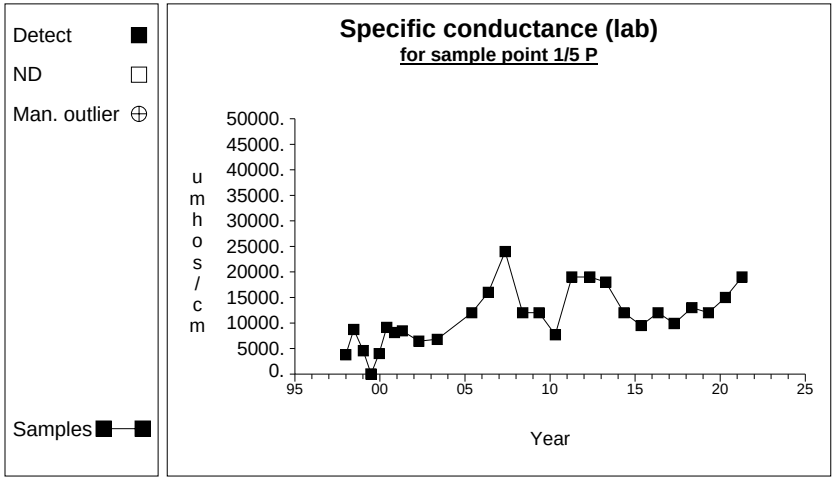


Graph 223

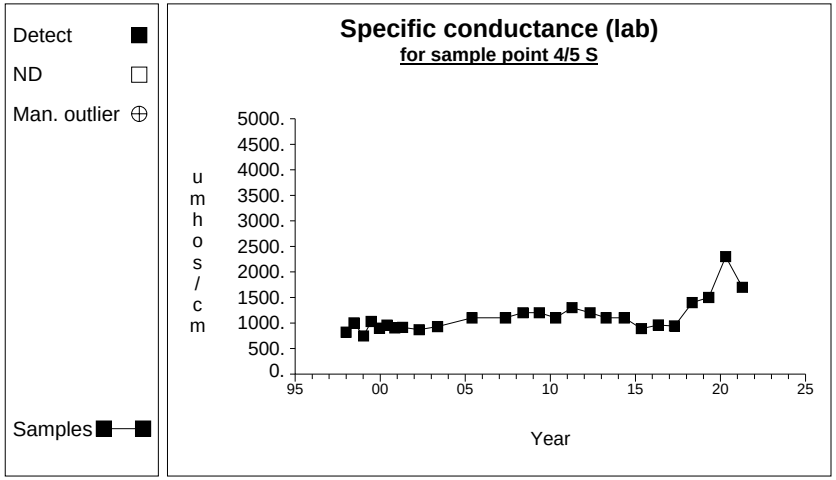


Graph 224

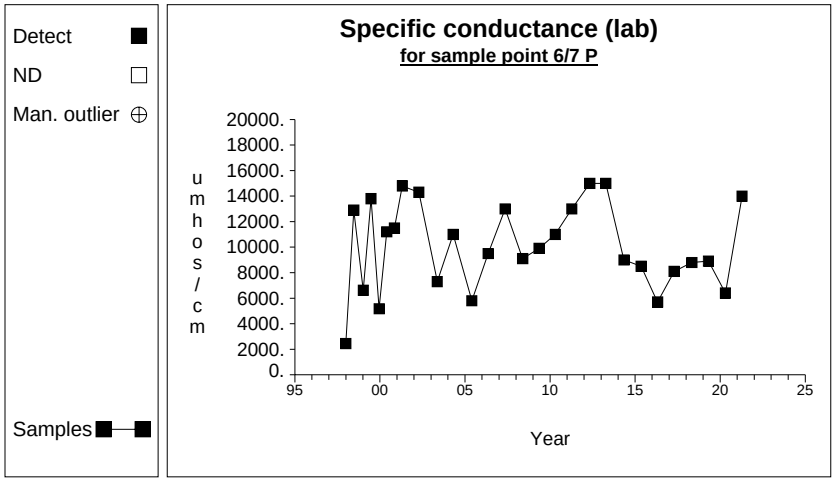
Time Series



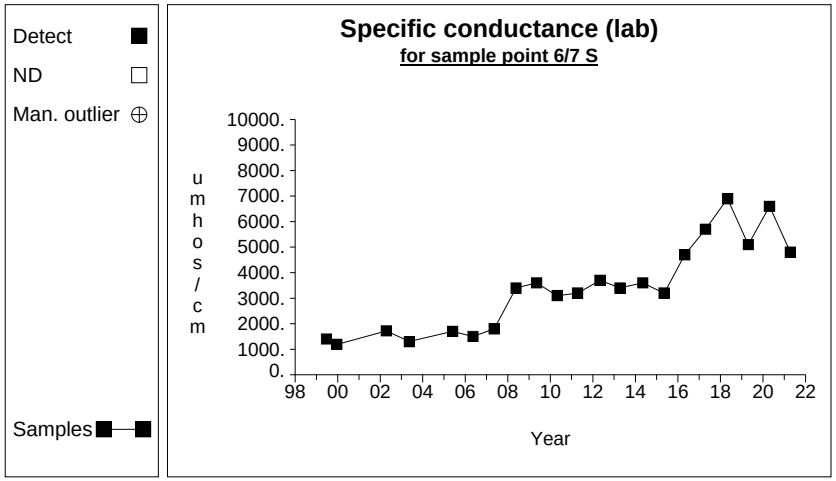
Graph 225



Graph 226

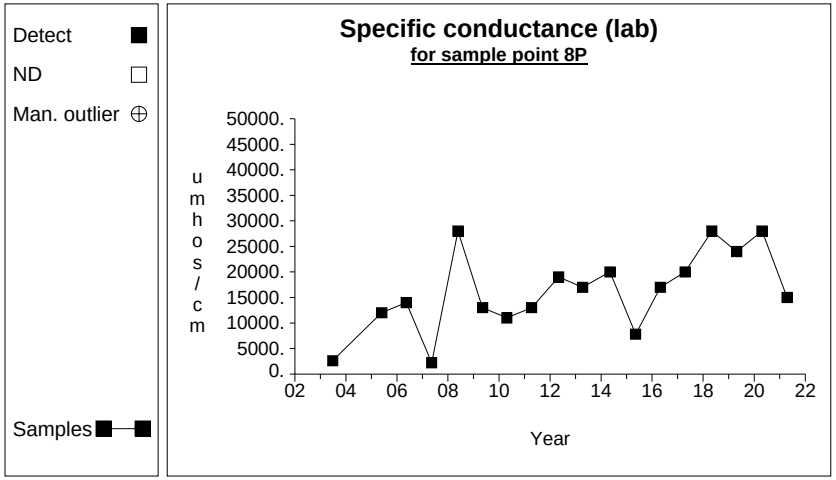


Graph 227



Graph 228

Time Series



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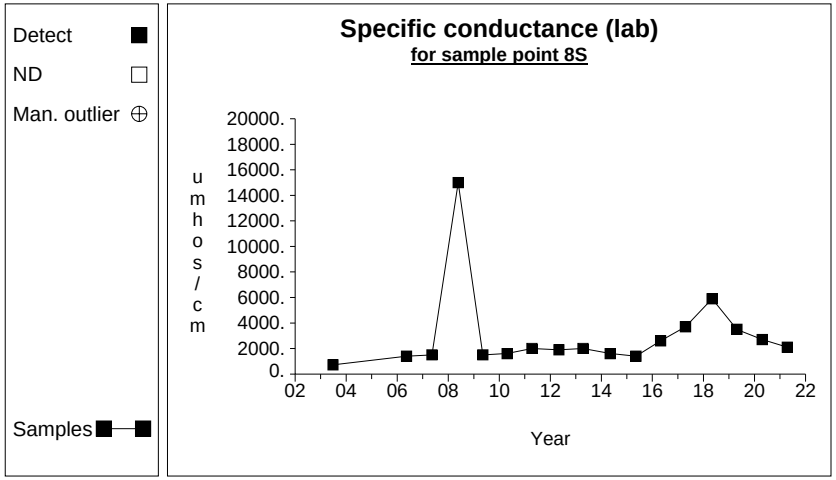
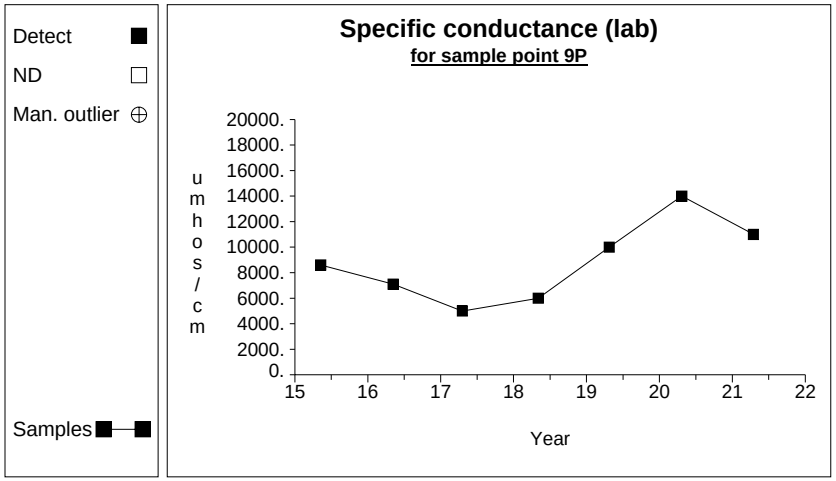


Graph 230



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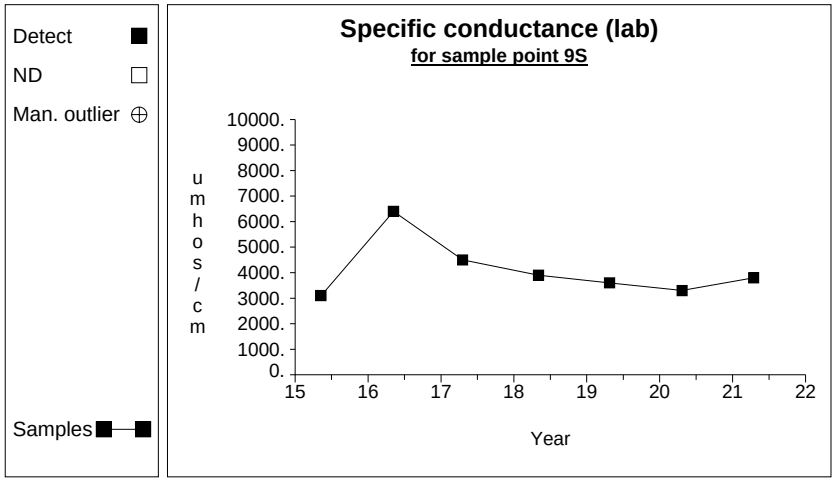
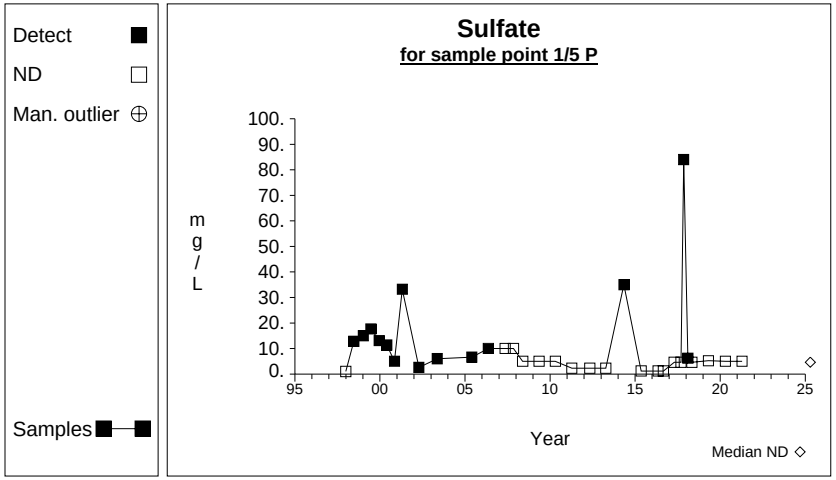


Graph 232

Time Series



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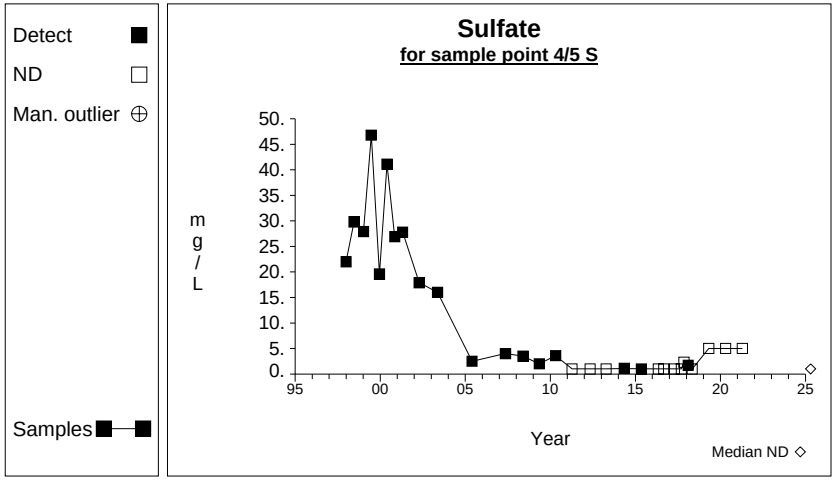

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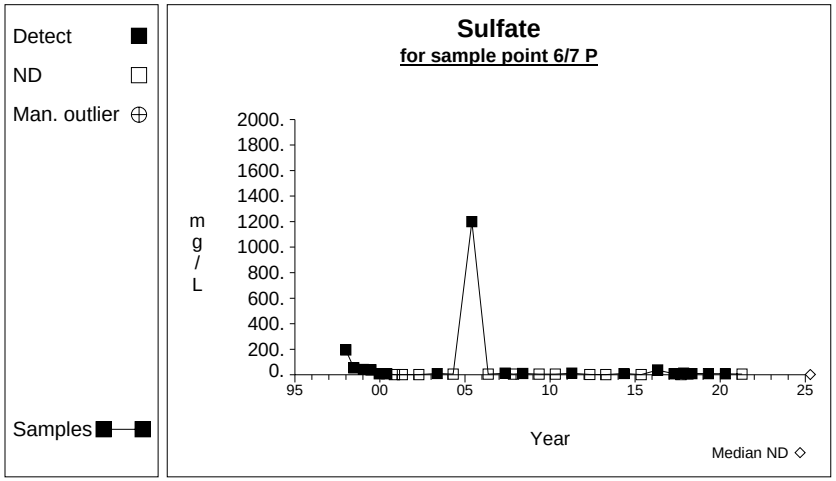
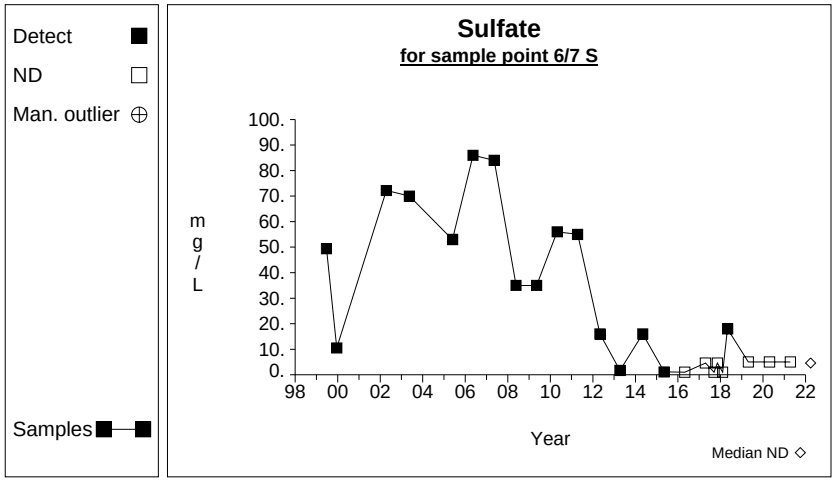
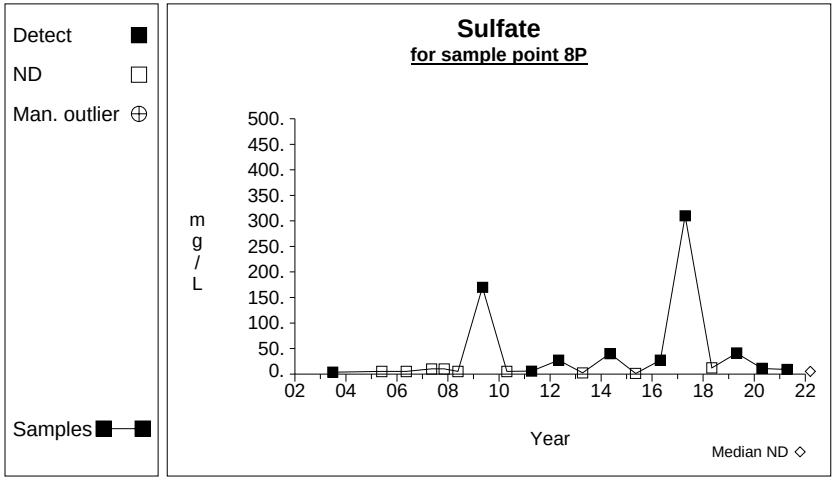


Graph 235



Graph 236

Time Series



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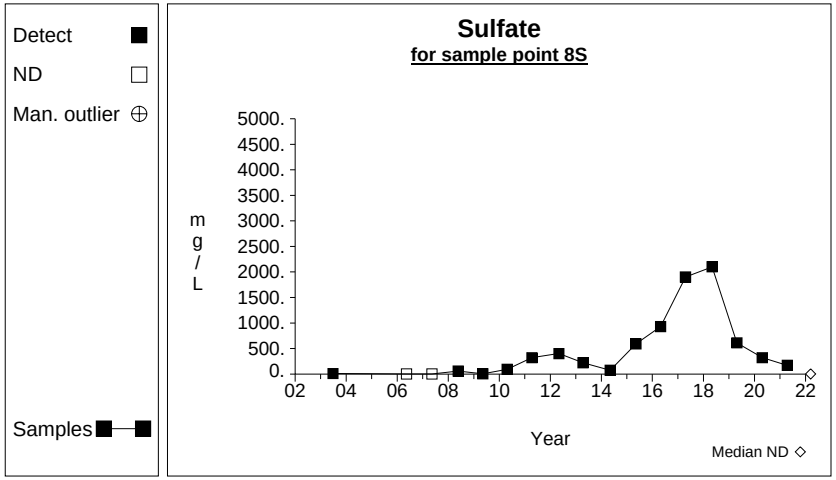
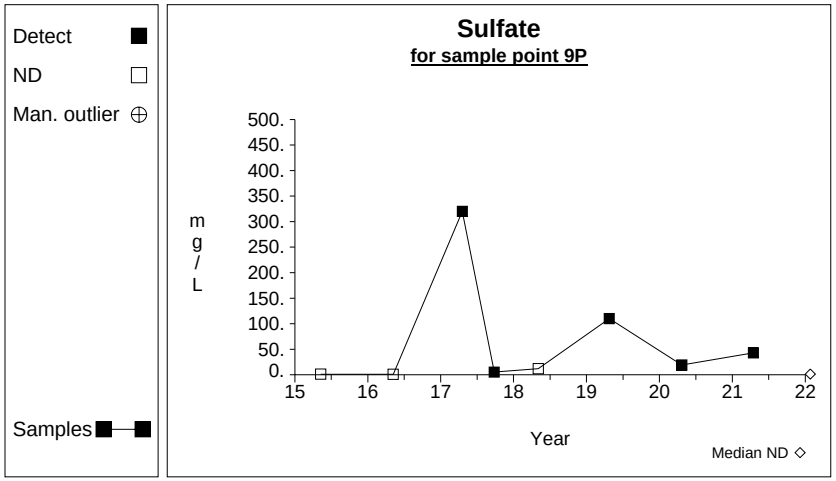


Graph 238



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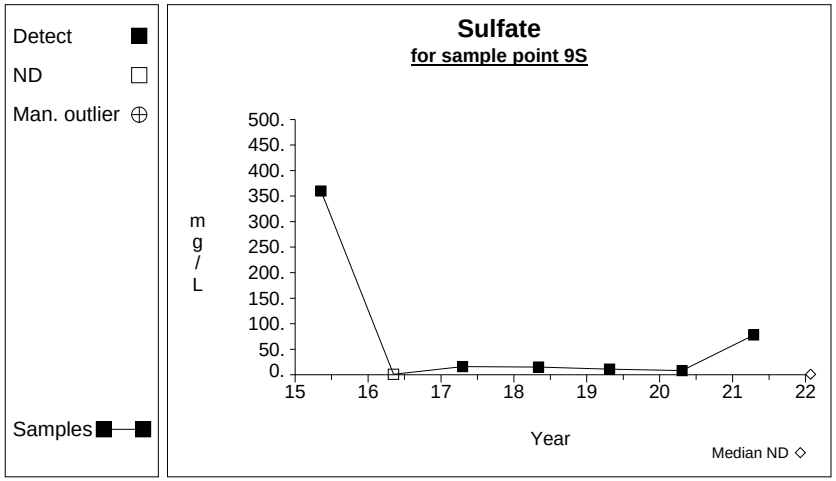
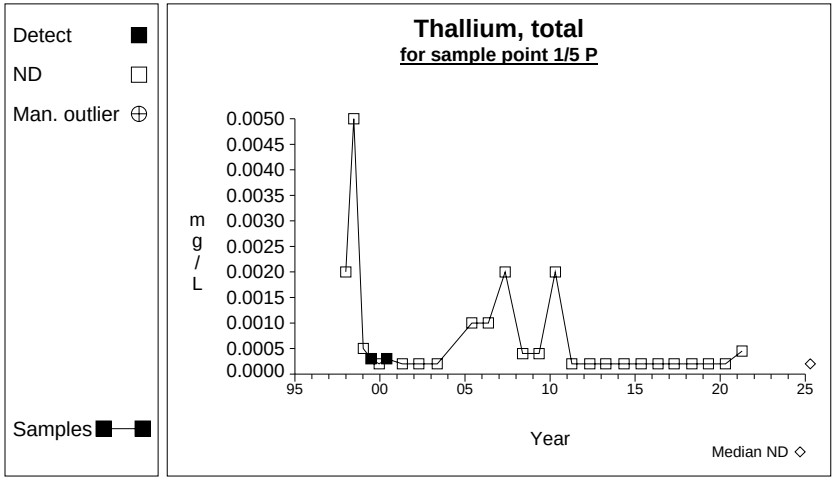


Graph 240

Time Series



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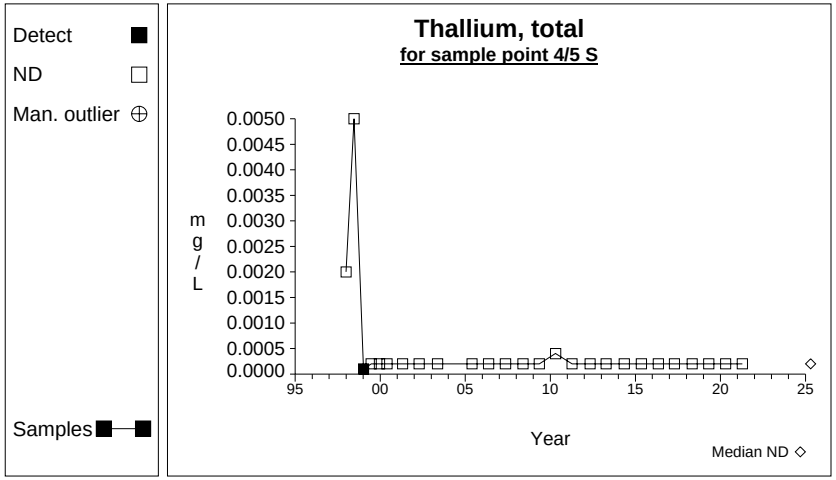

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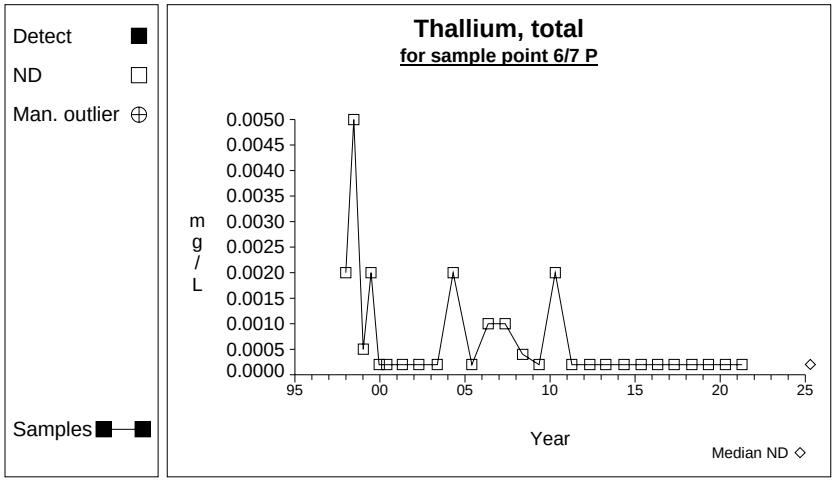

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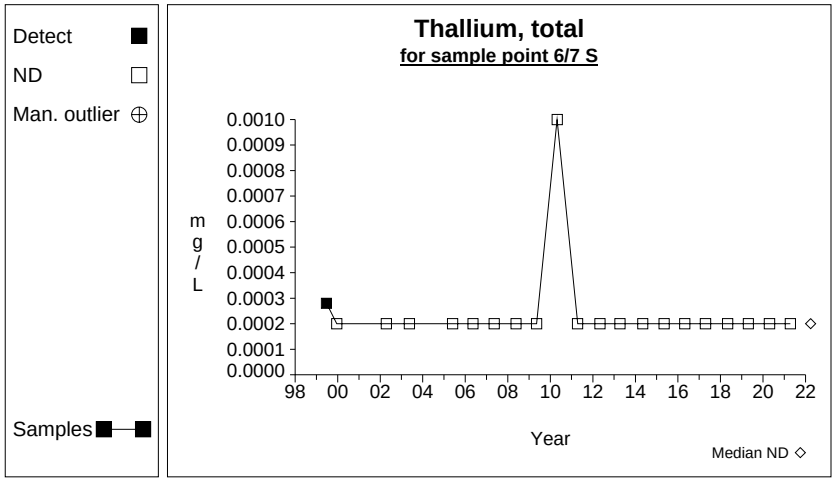
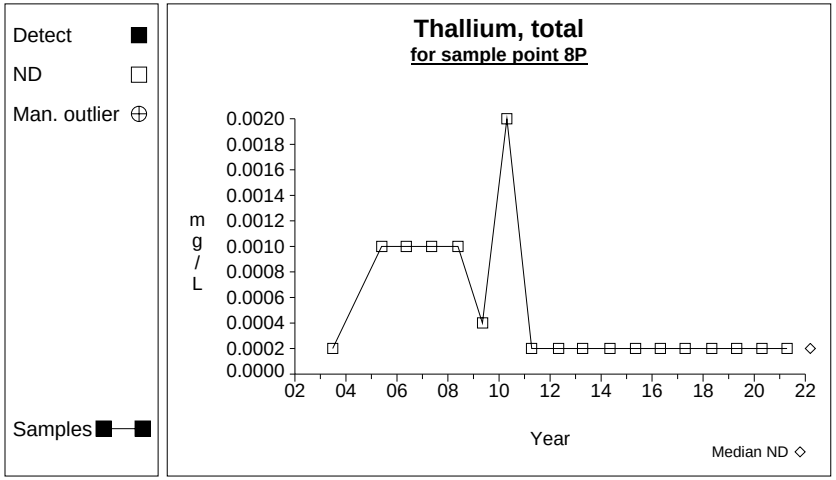


Graph 244

Time Series



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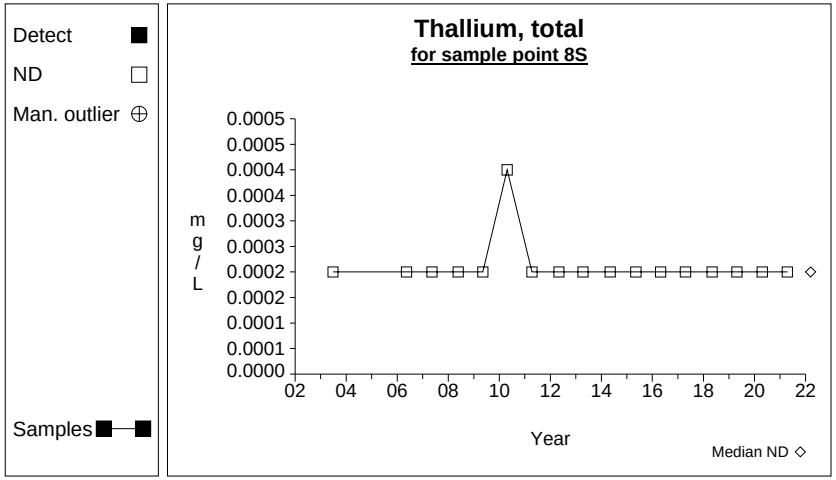

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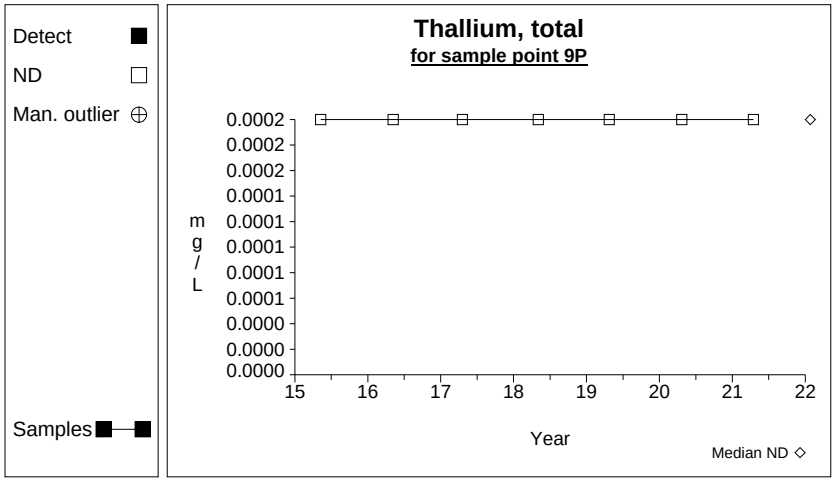

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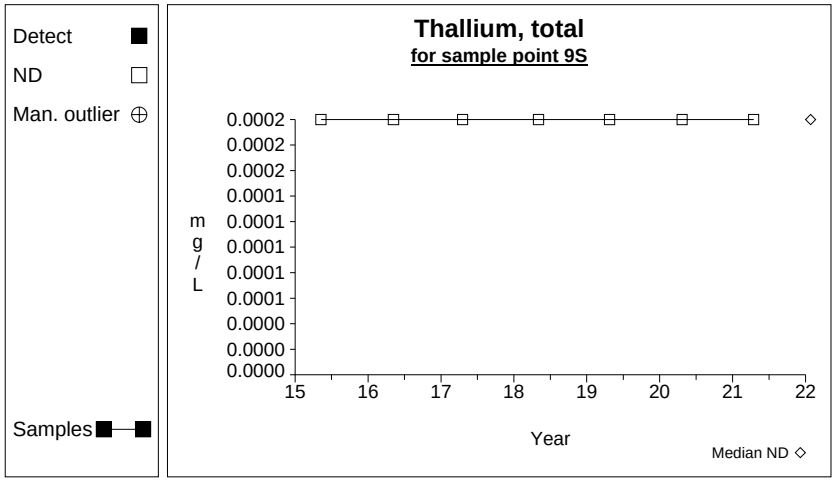
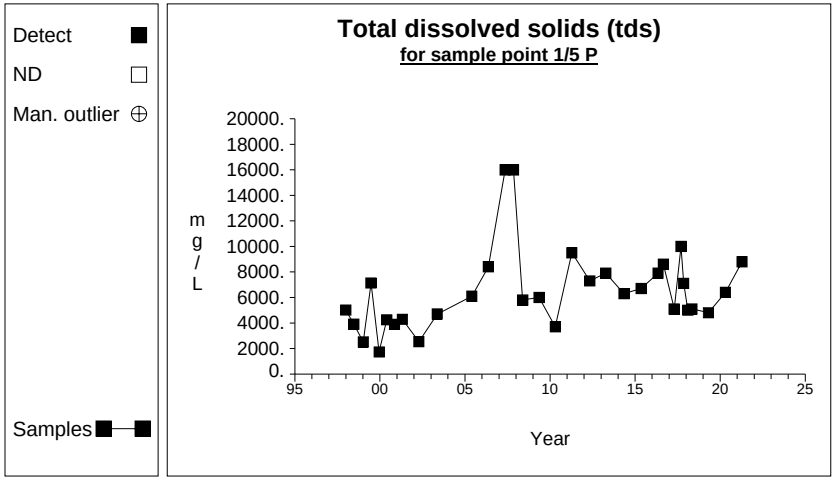


Graph 248

Time Series



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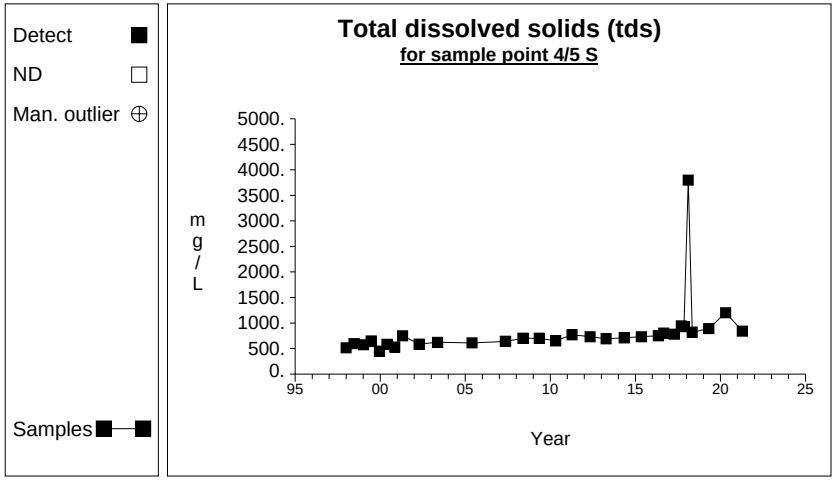

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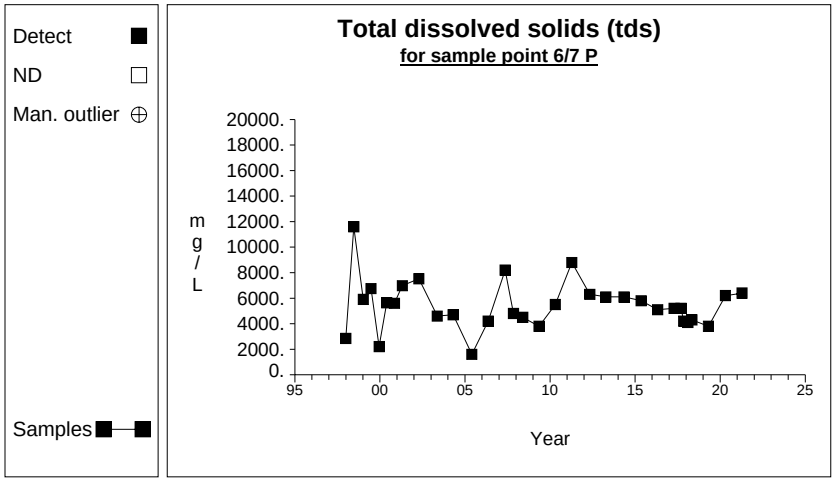

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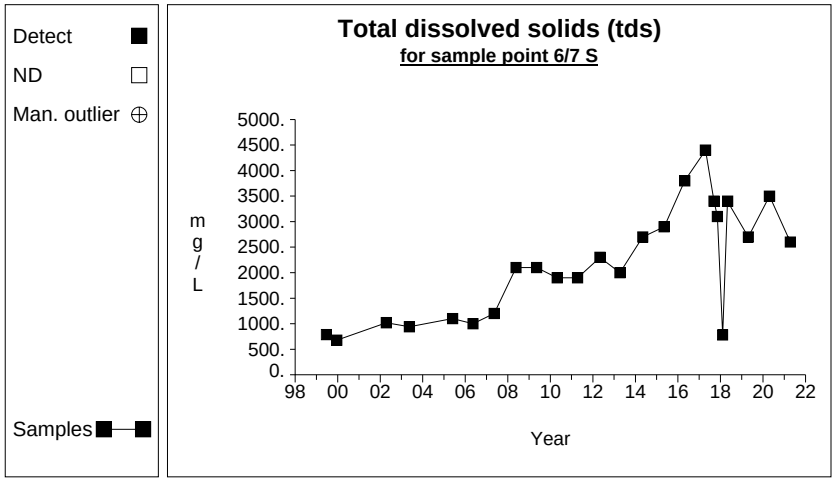
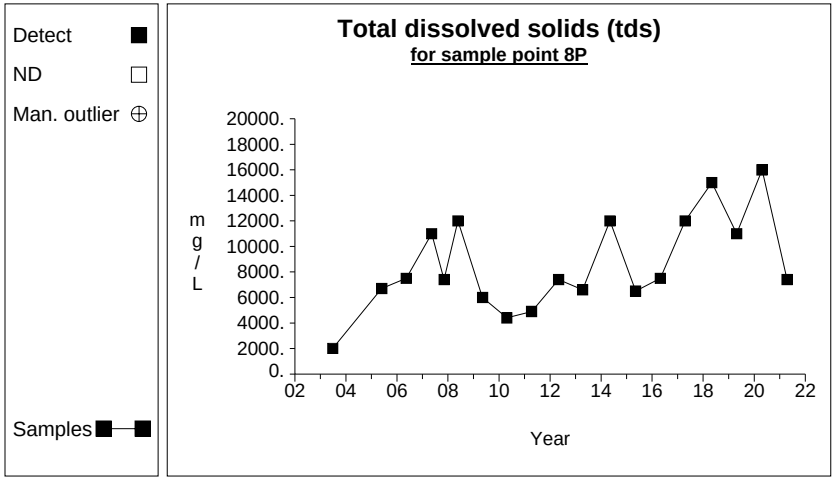


Graph 252

Time Series



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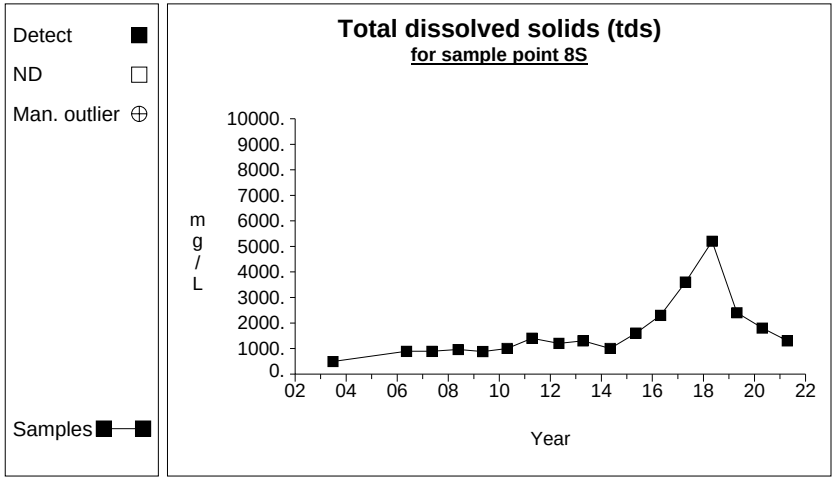

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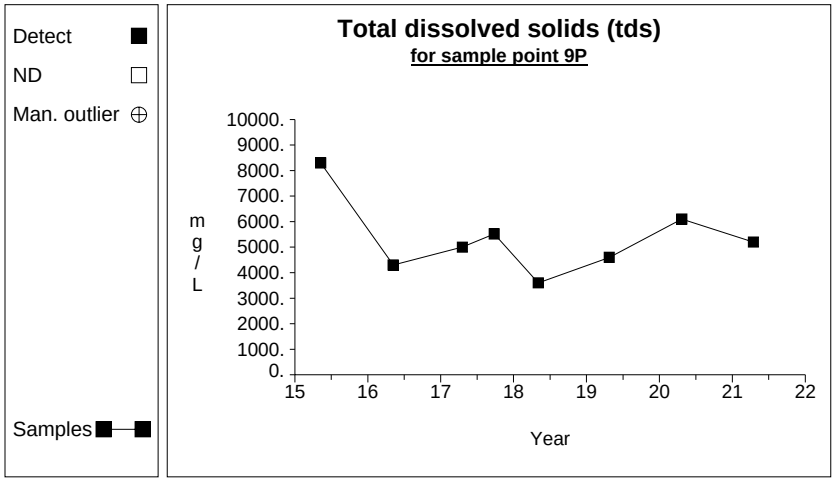

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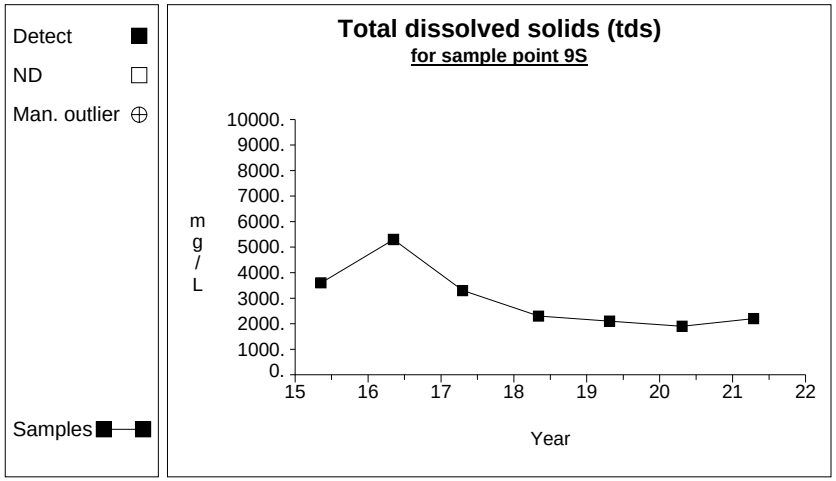
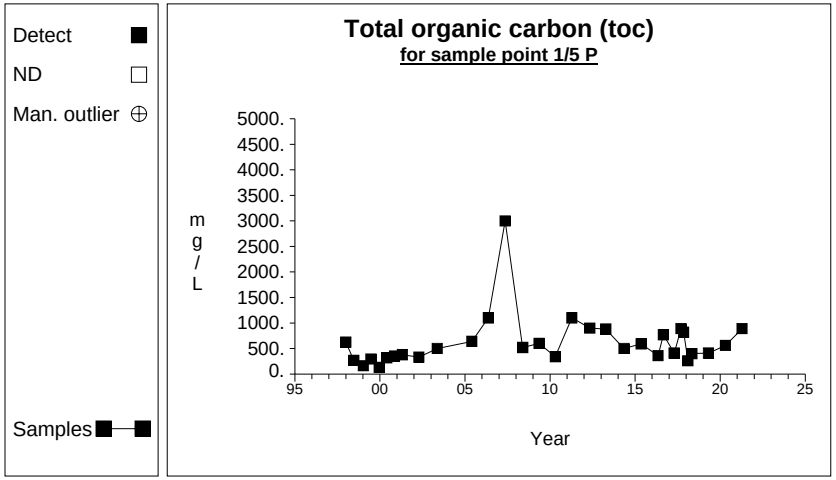


Graph 256

Time Series



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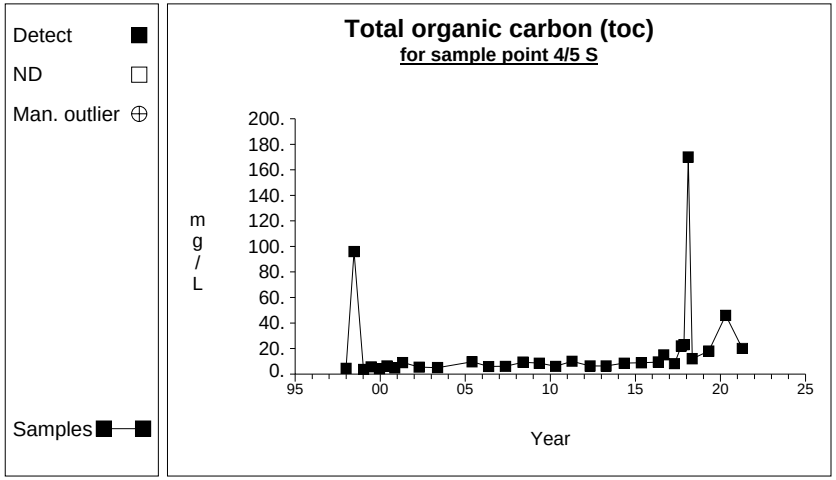

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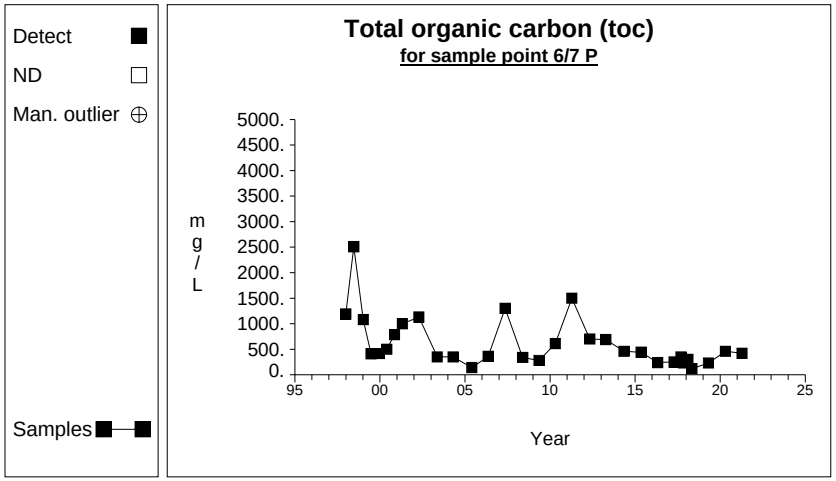

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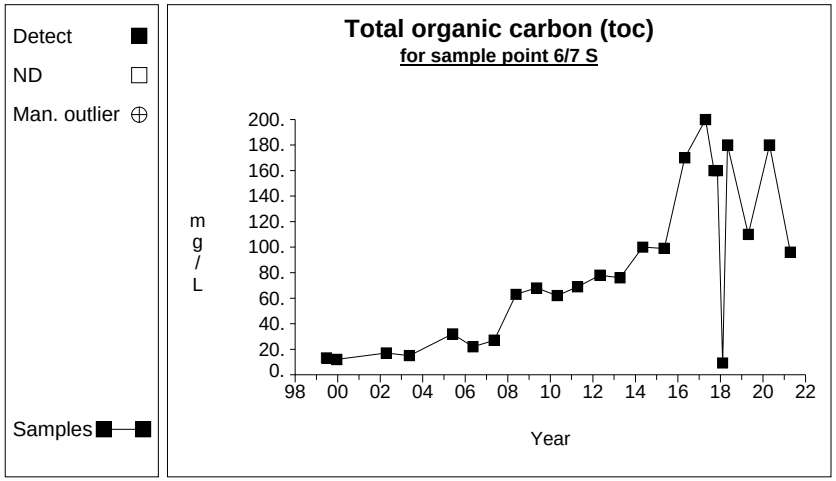
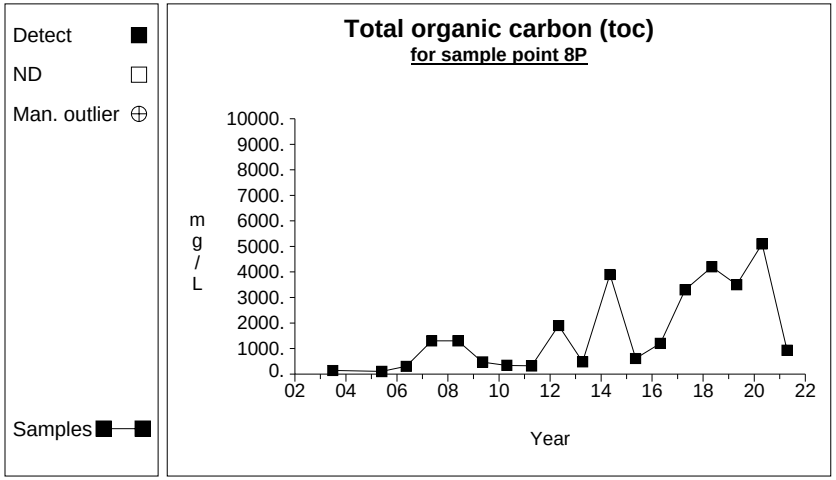


Graph 260

Time Series



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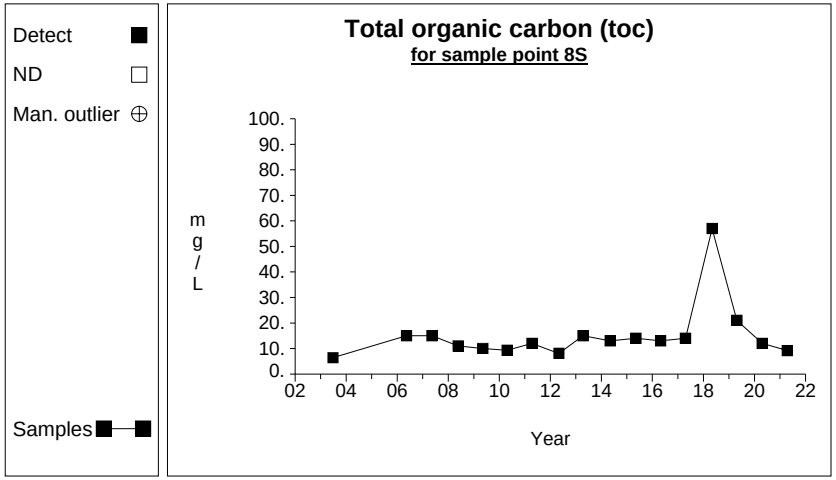

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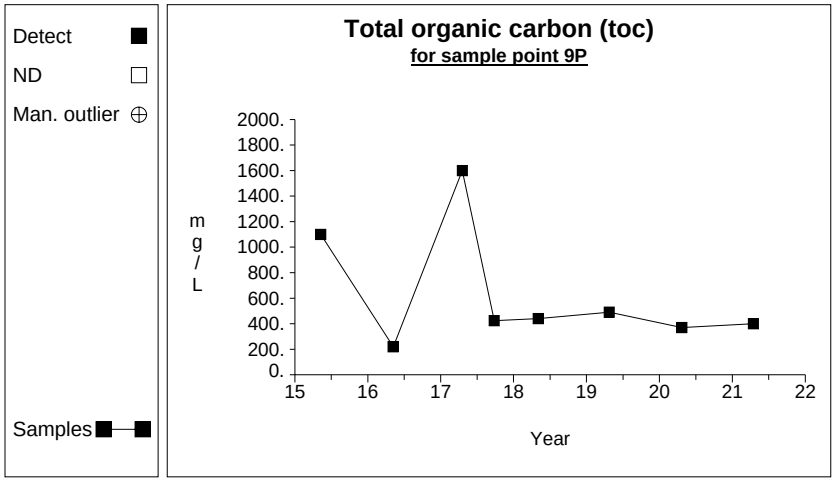

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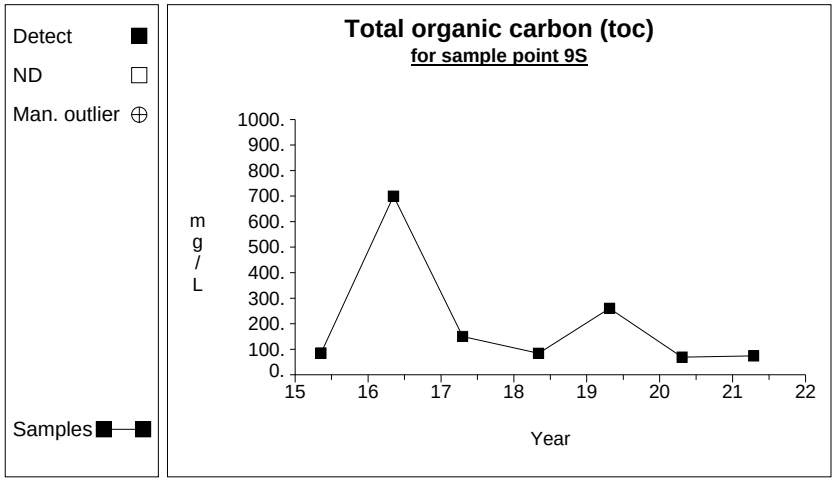
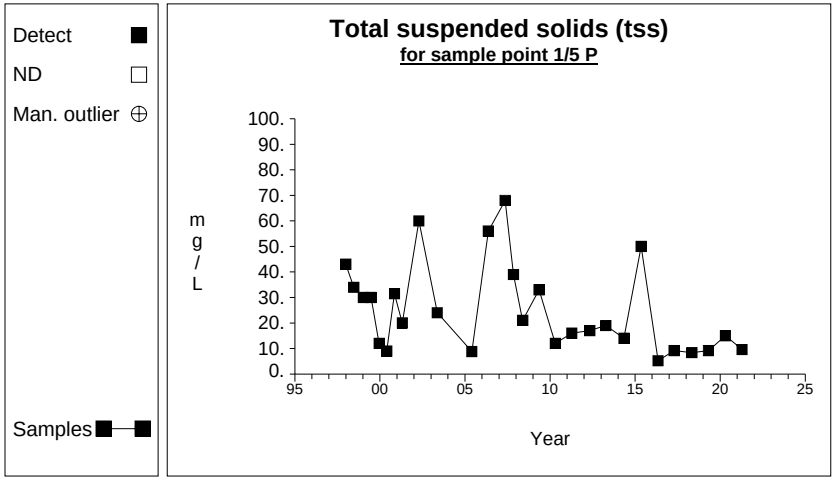
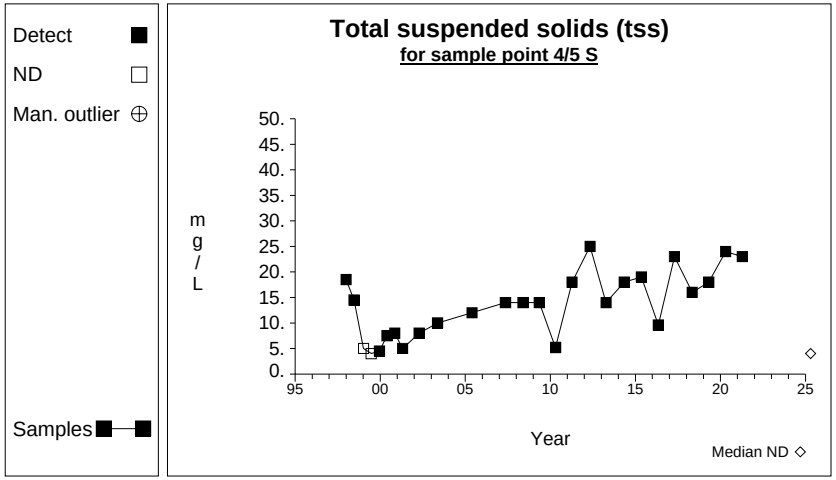


Graph 264

Time Series



Graph 265



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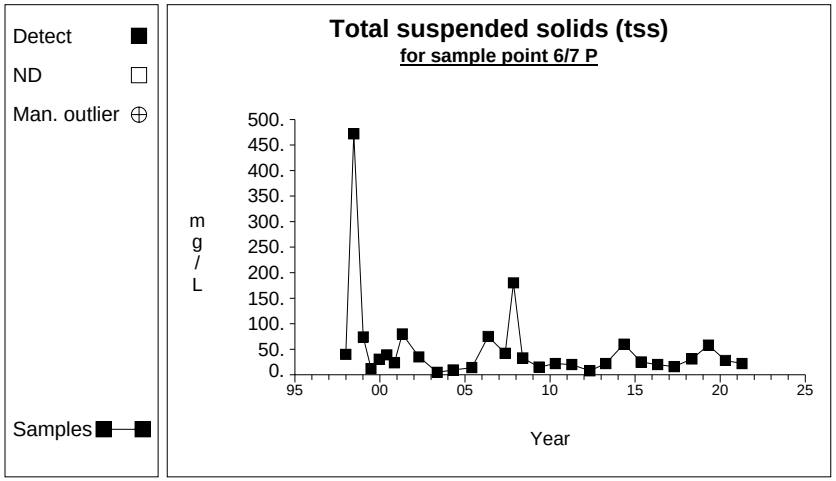

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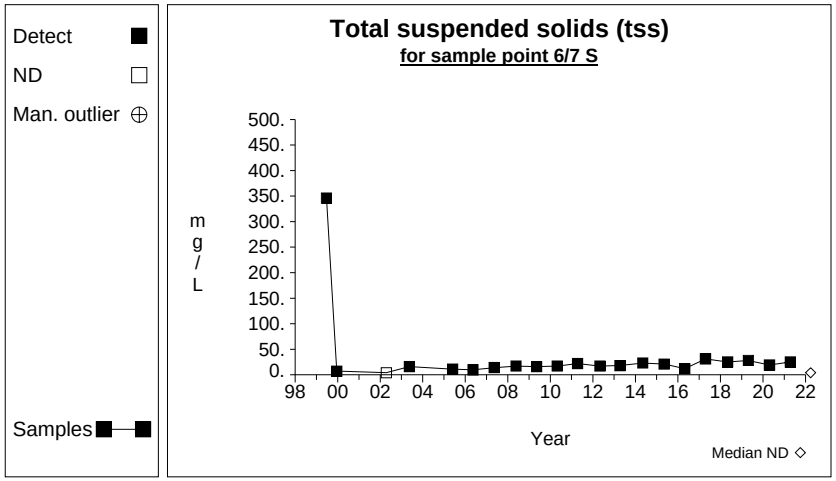
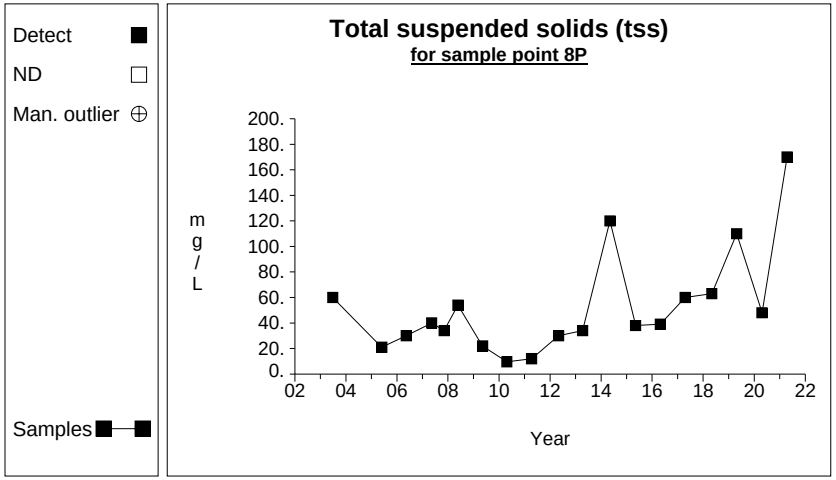
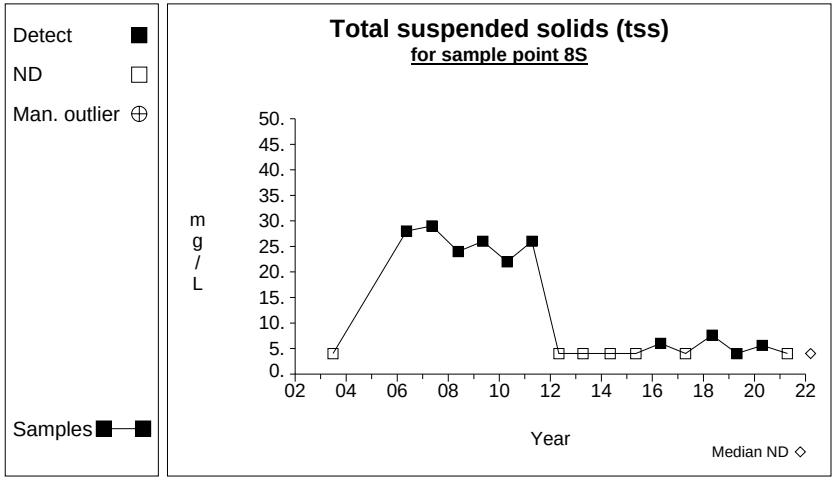


Graph 268

Time Series



Graph 269



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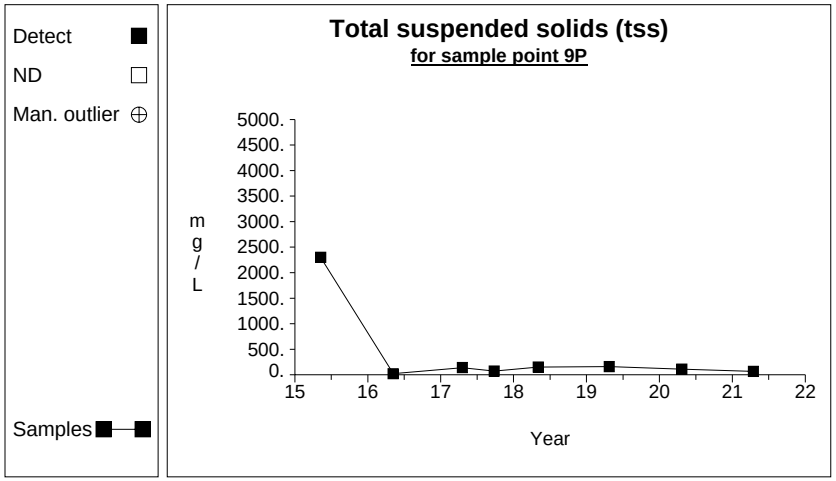
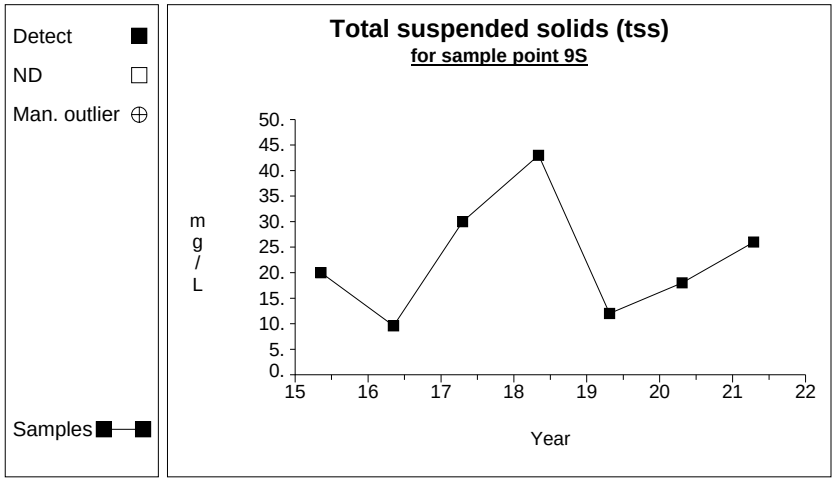
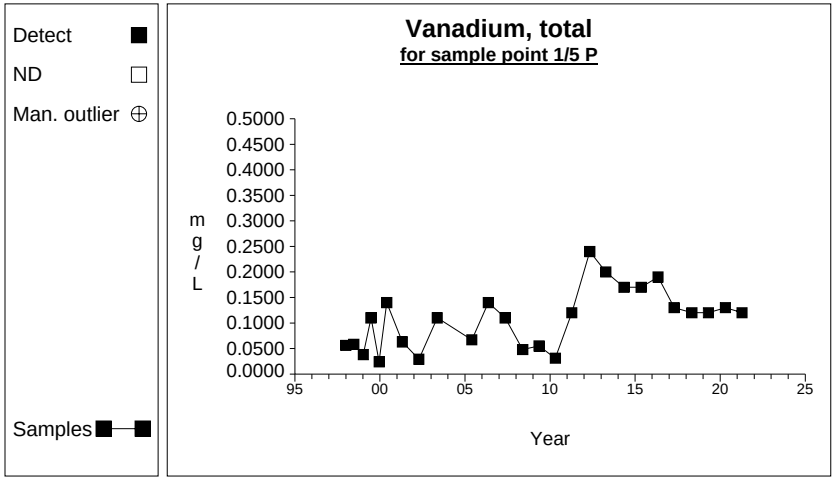


Graph 271

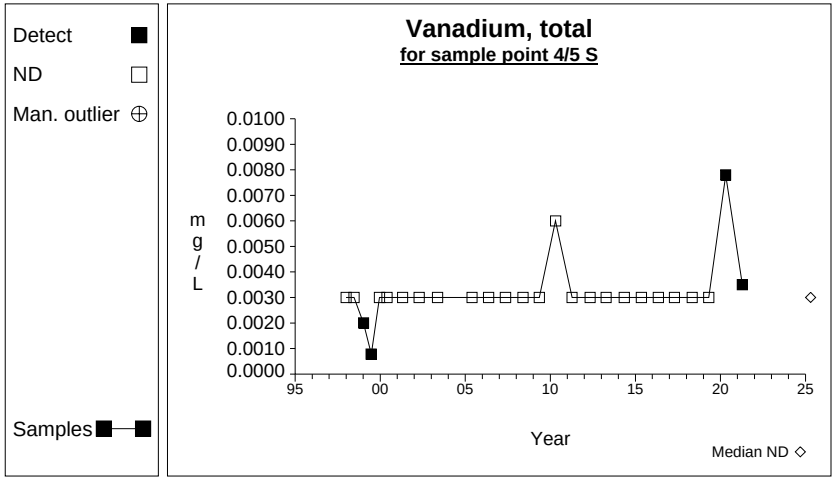


Graph 272

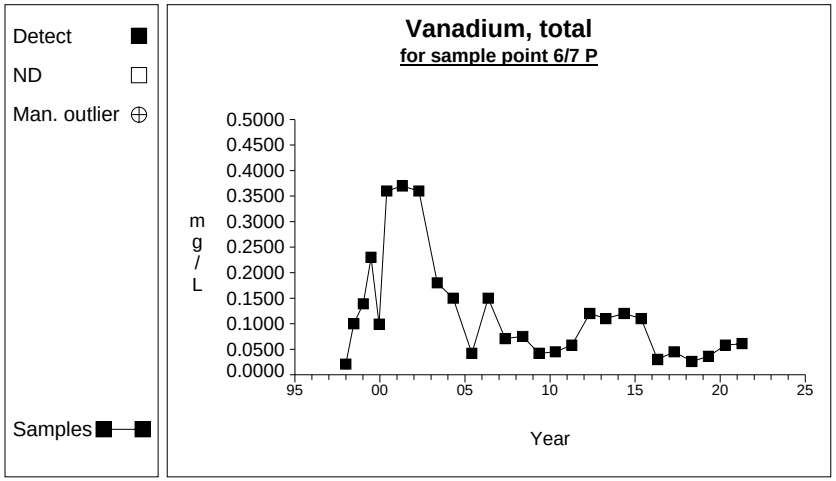
Time Series



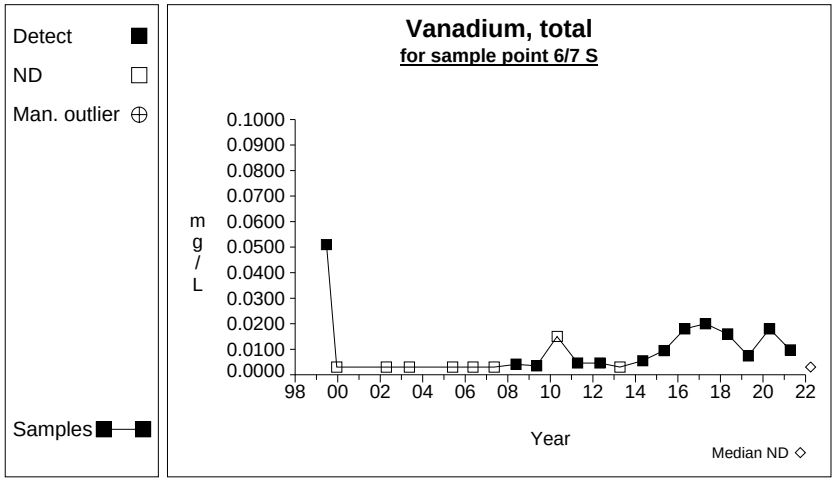
Graph 273



Graph 274

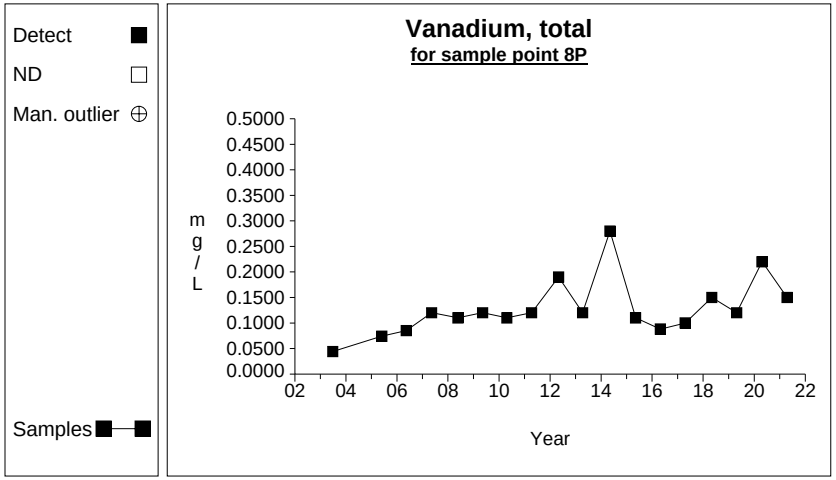


Graph 275

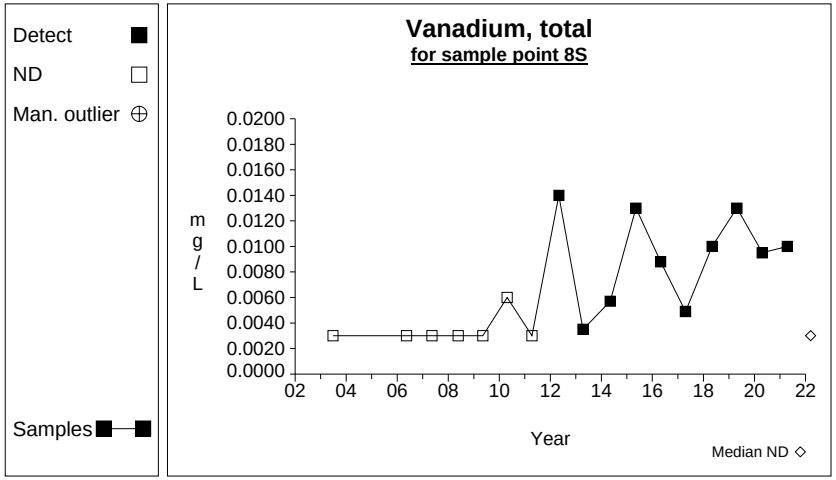


Graph 276

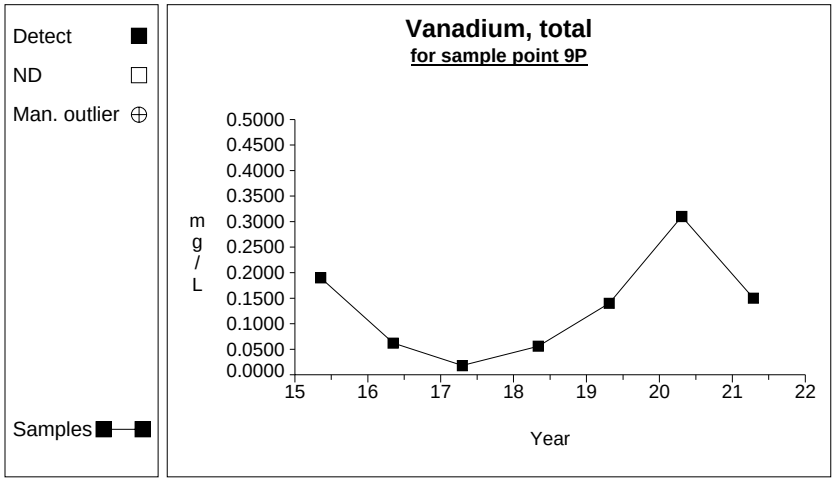
Time Series



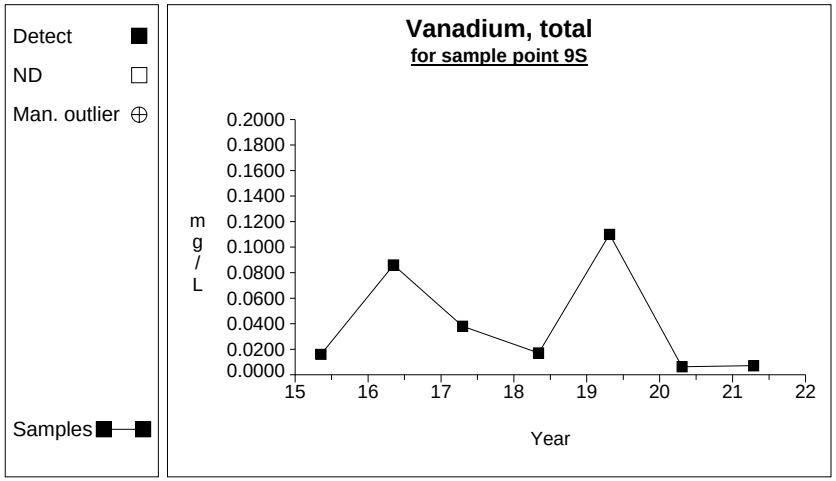
Graph 277



Graph 278

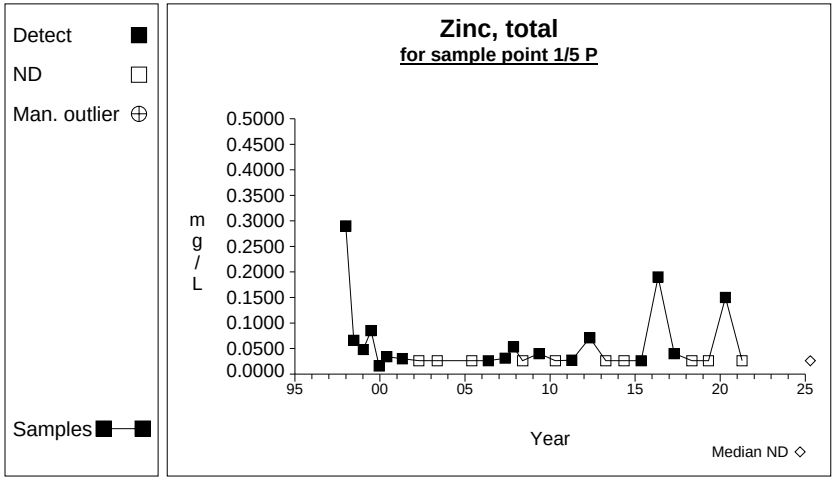


Graph 279

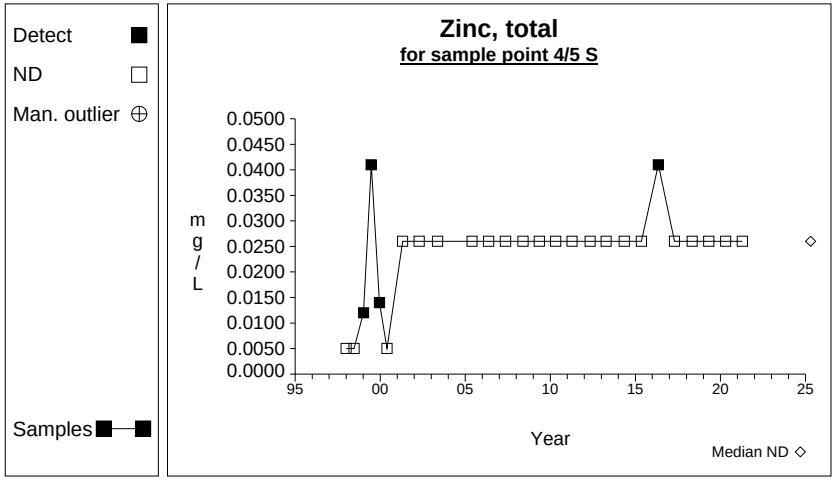


Graph 280

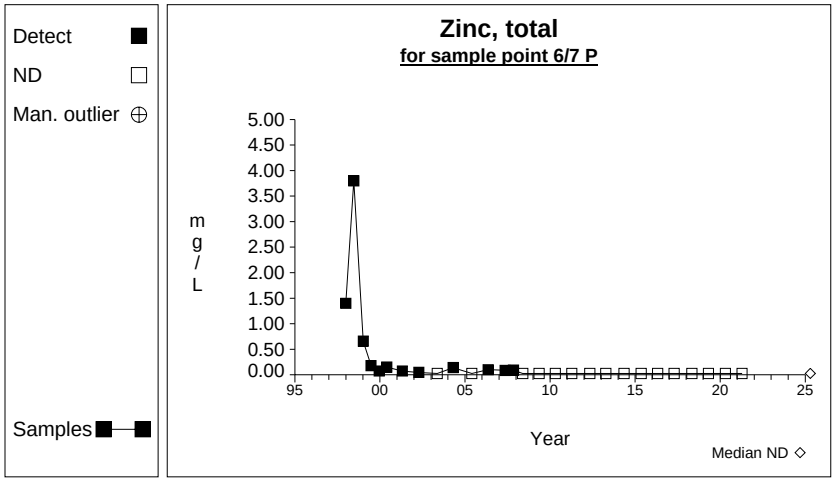
Time Series



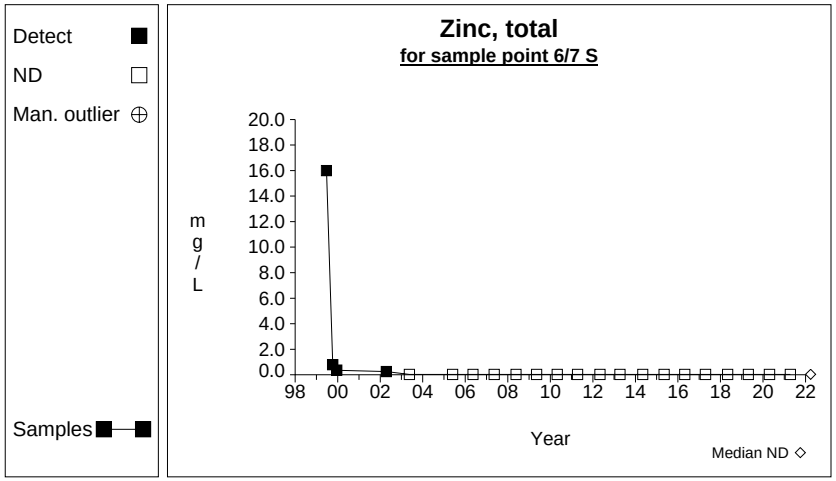
Graph 281



Graph 282

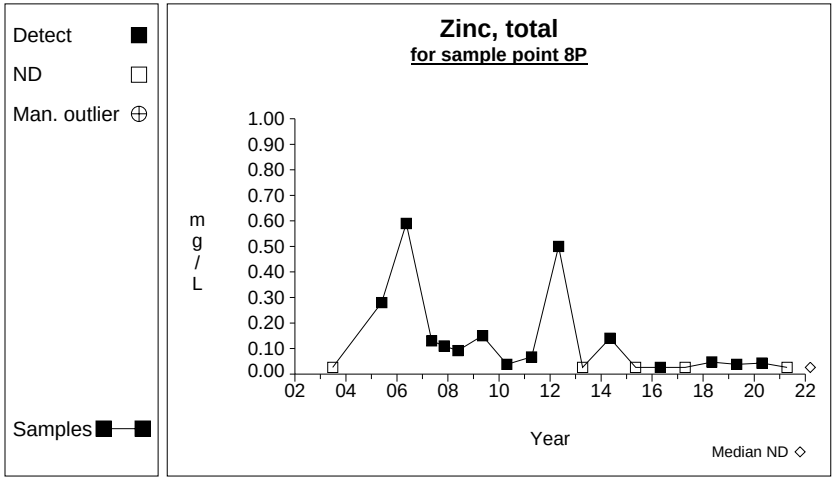


Graph 283

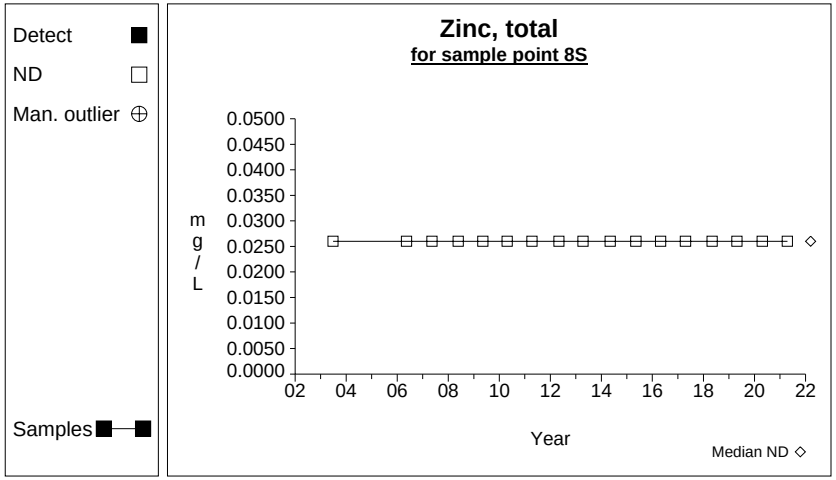


Graph 284

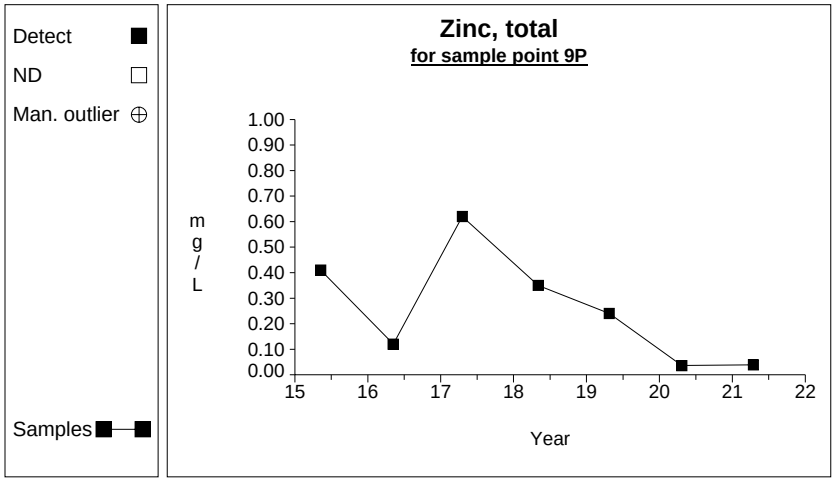
Time Series



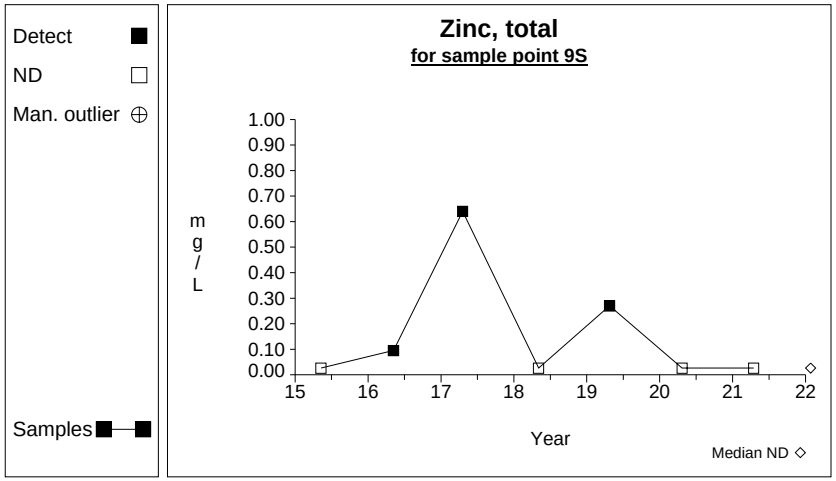
Graph 285



Graph 286



Graph 287

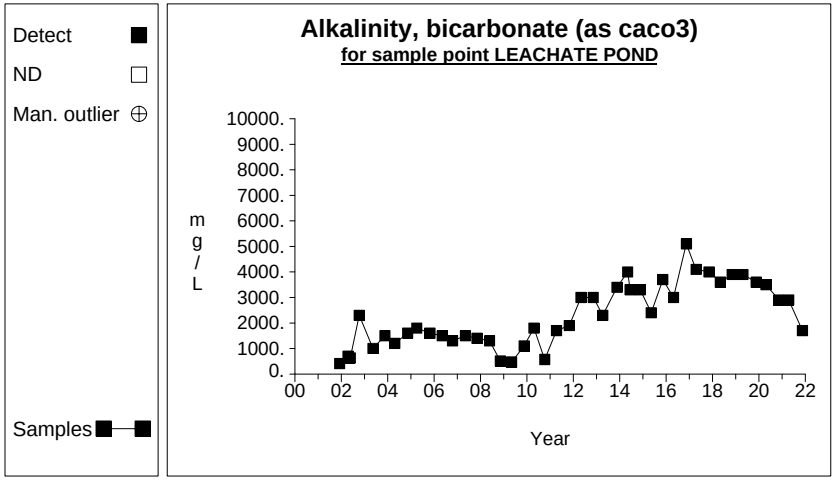


Graph 288

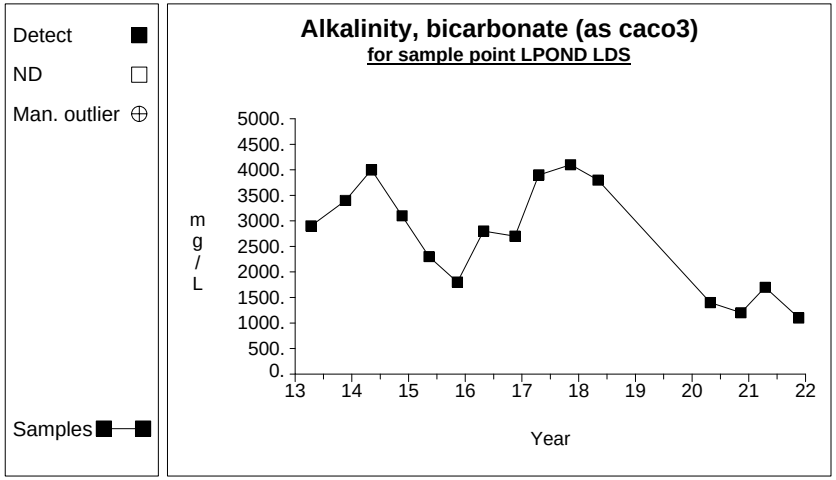
Leachate Pond and Leachate Pond LDS

Time-Concentration Graphs

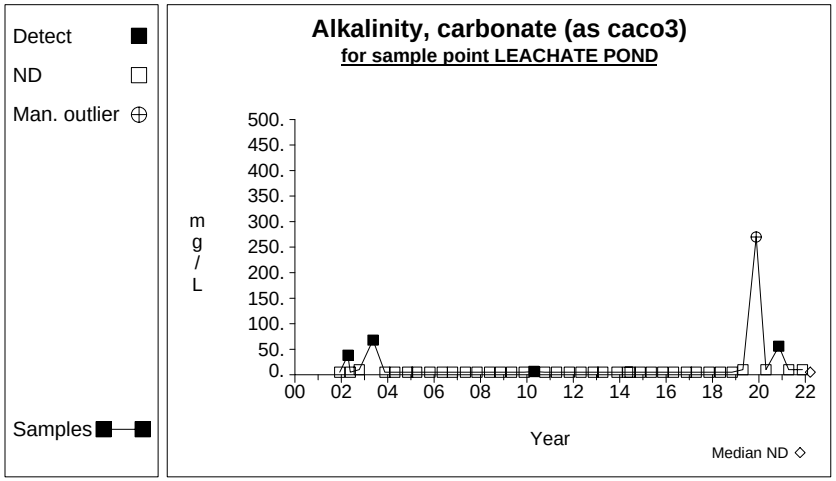
Time Series



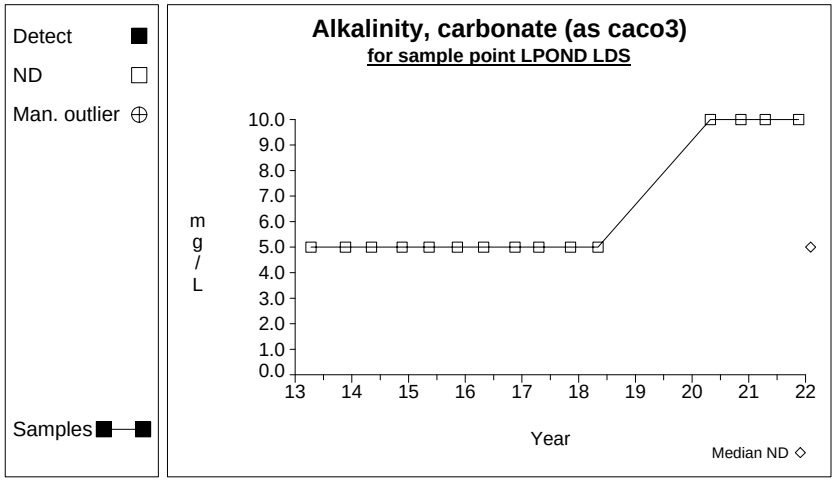
Graph 1



Graph 2

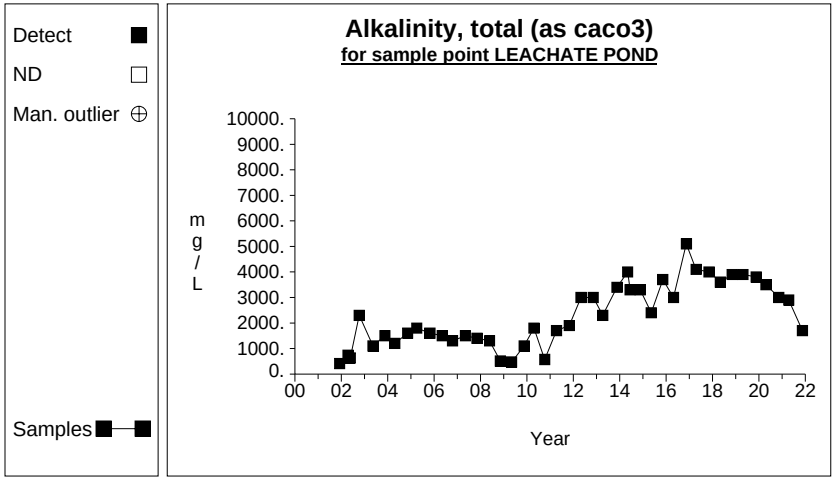


Graph 3

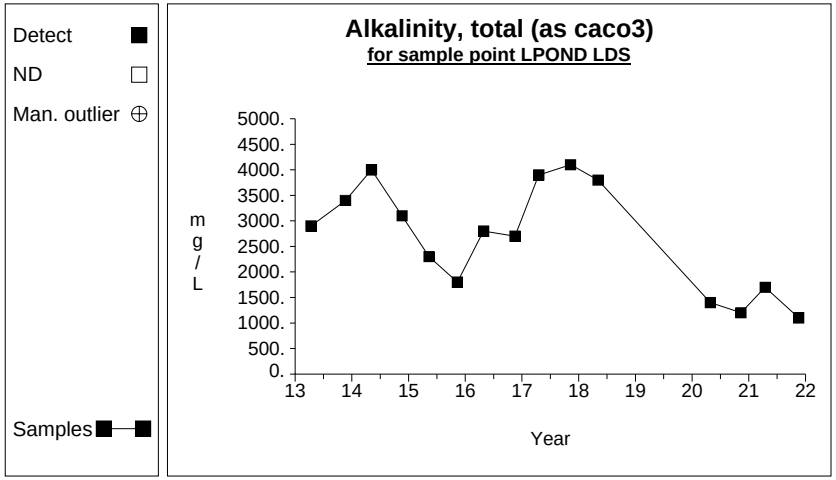


Graph 4

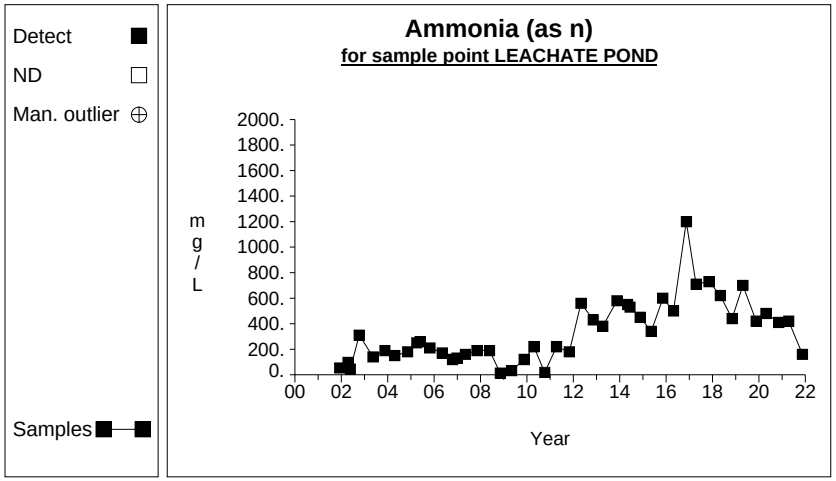
Time Series



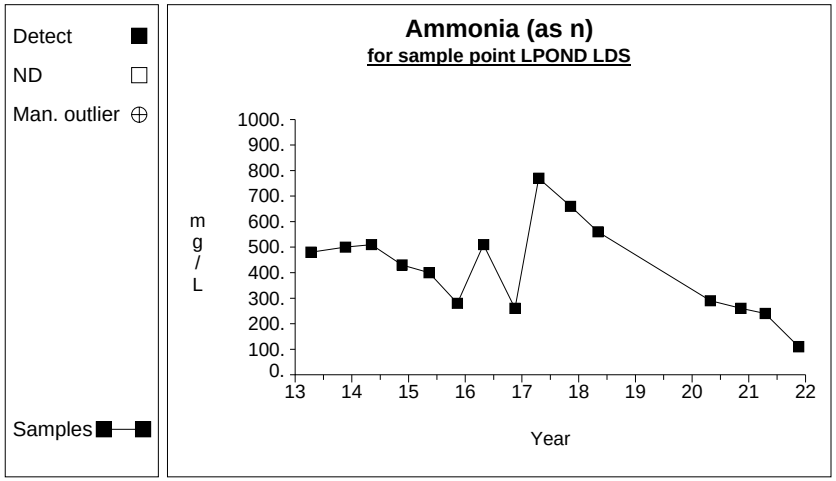
Graph 5



Graph 6

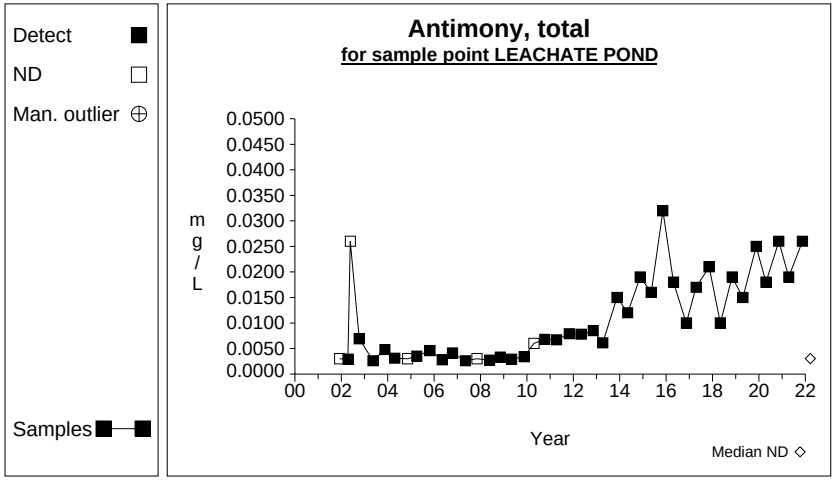


Graph 7

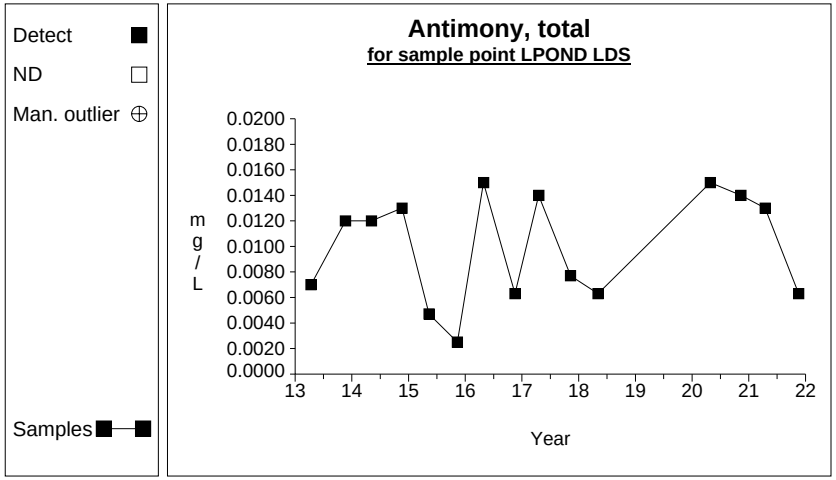


Graph 8

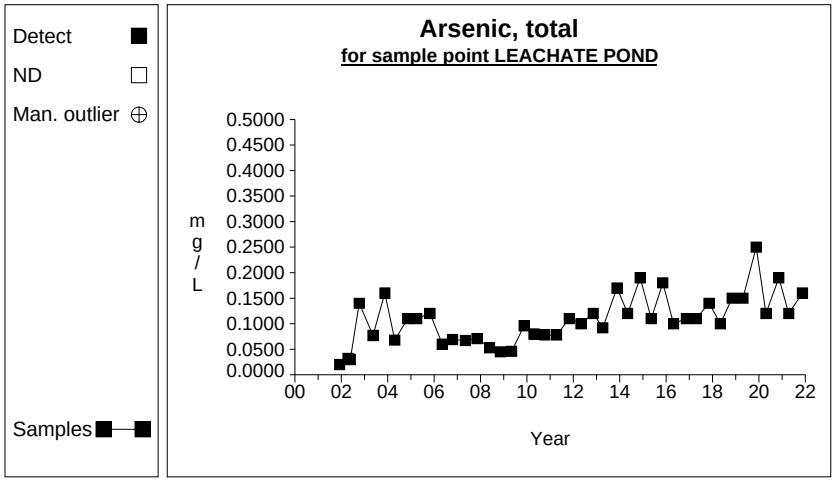
Time Series



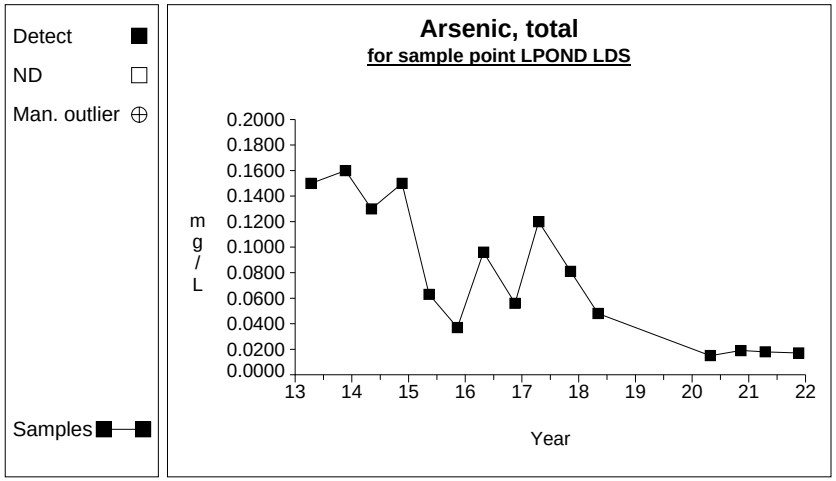
Graph 9



Graph 10

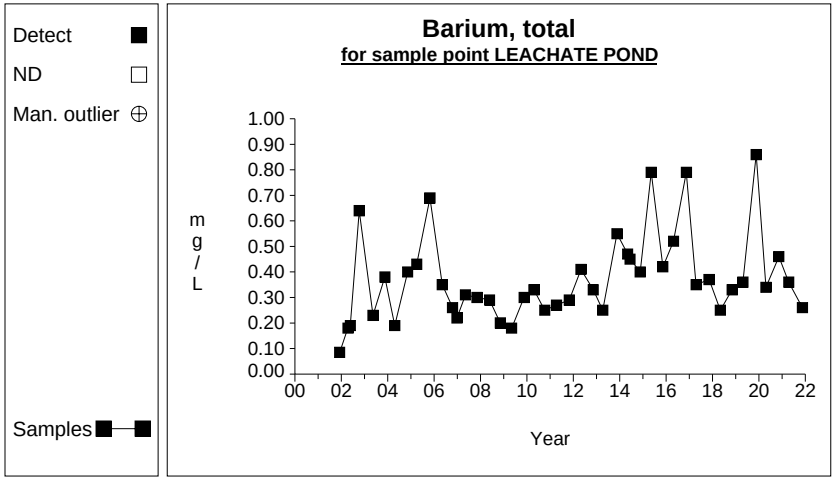


Graph 11

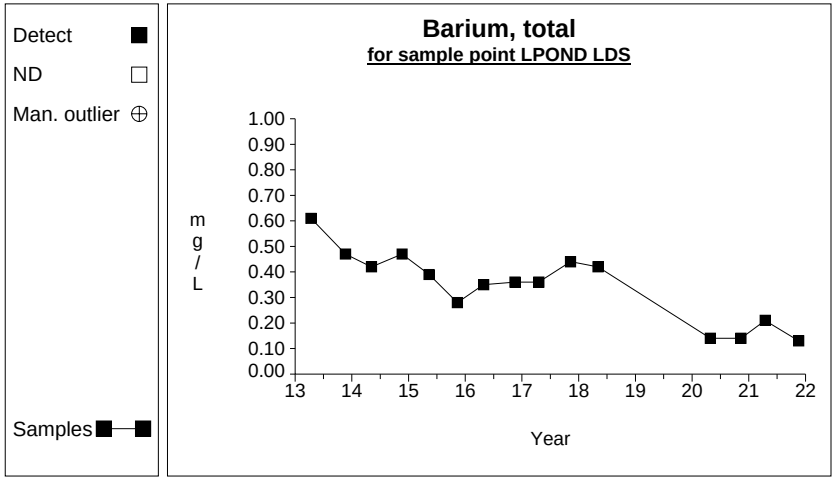


Graph 12

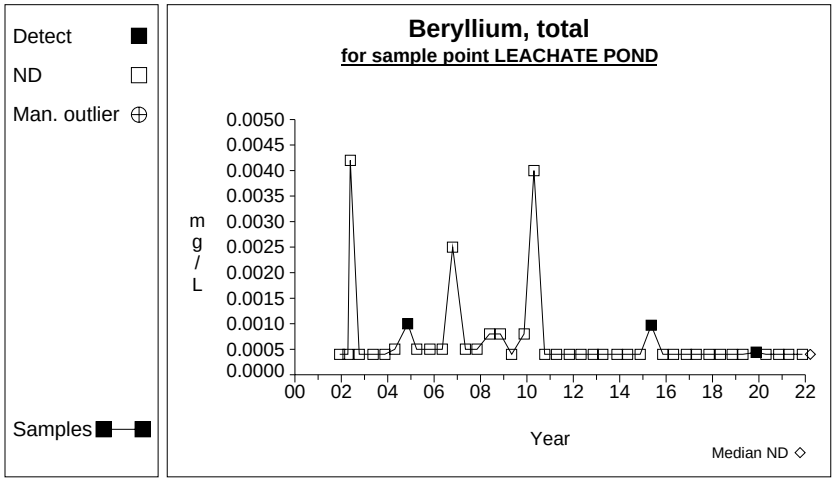
Time Series



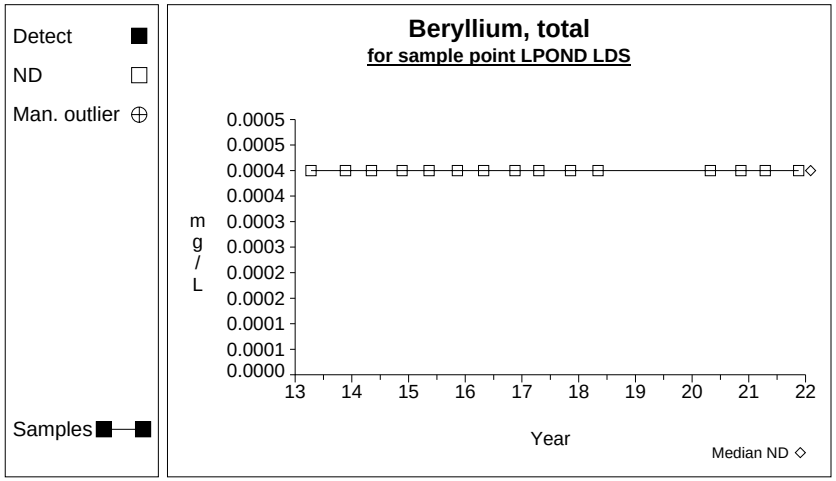
Graph 13



Graph 14

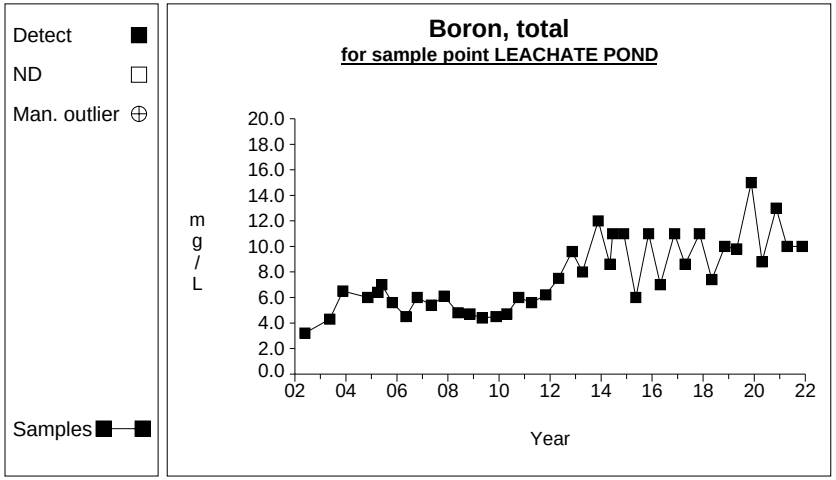


Graph 15

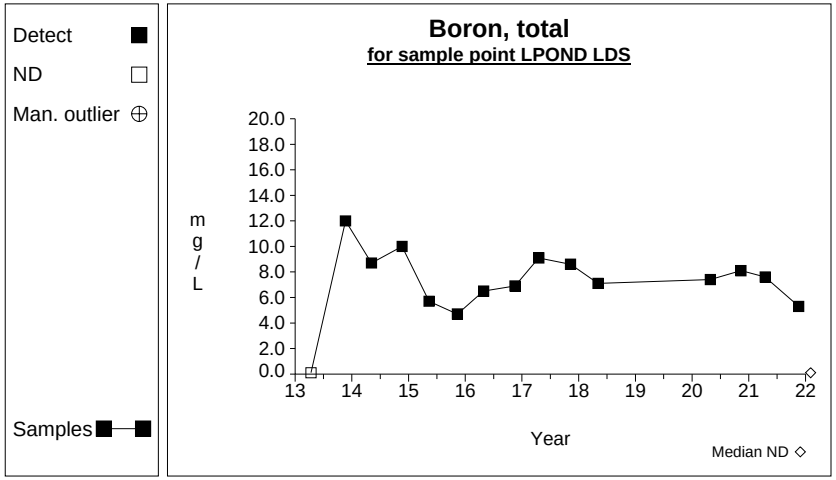


Graph 16

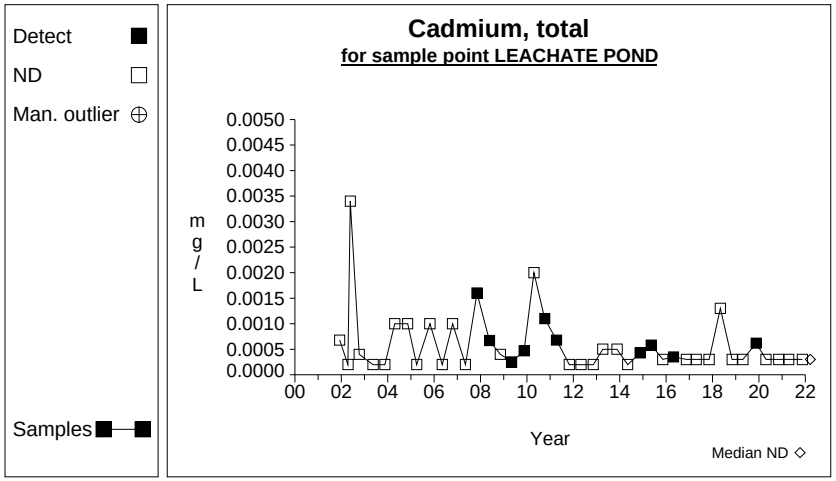
Time Series



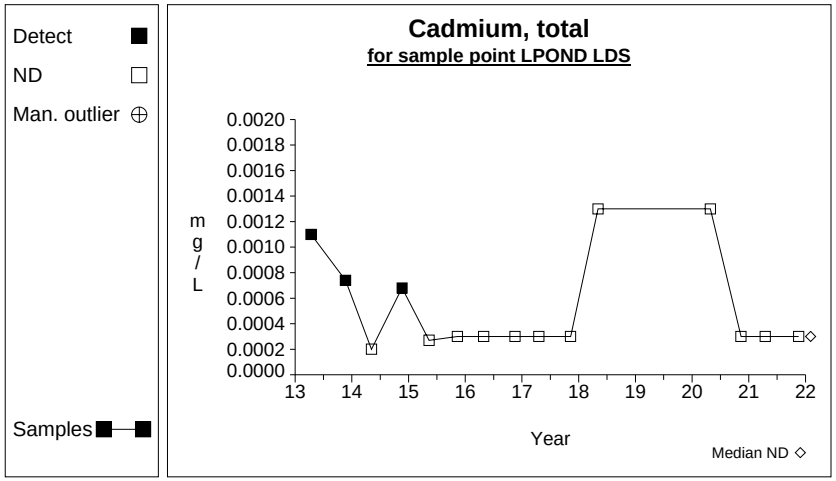
Graph 17



Graph 18

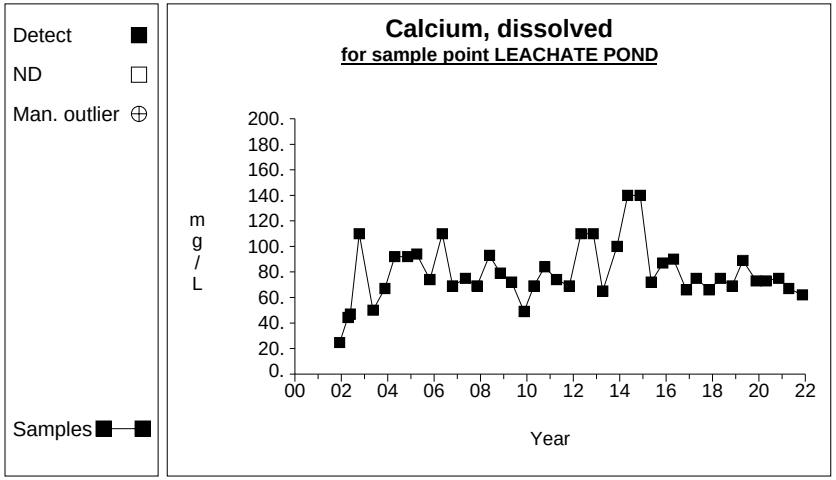


Graph 19

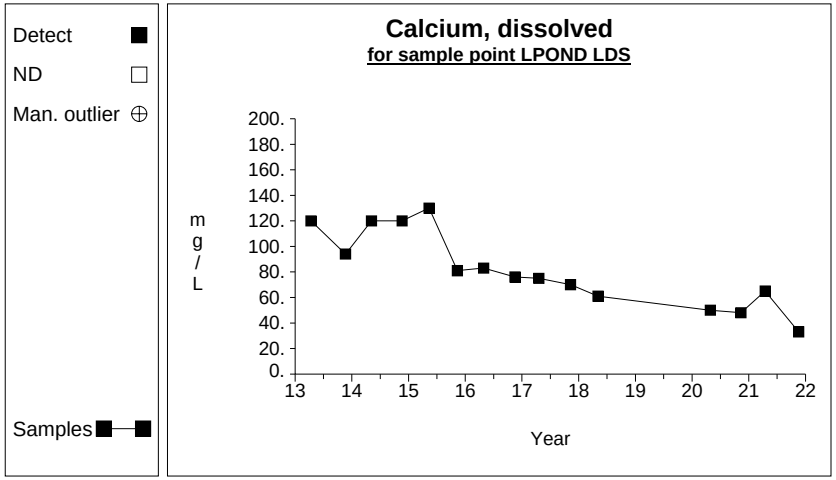


Graph 20

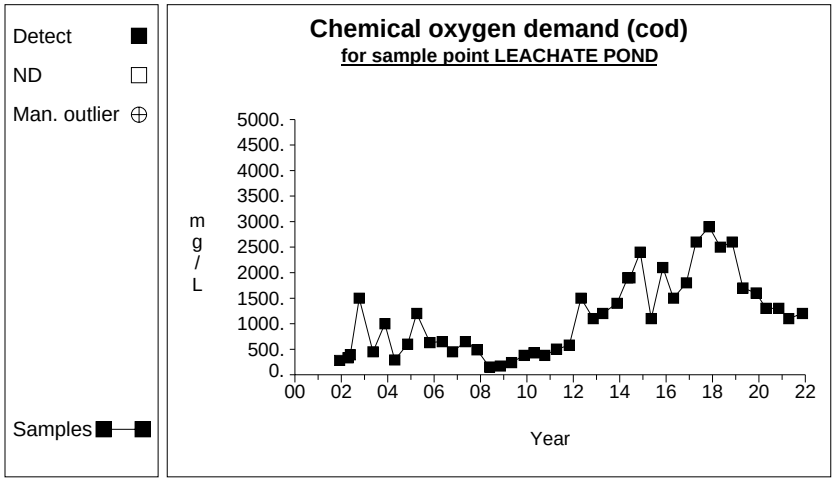
Time Series



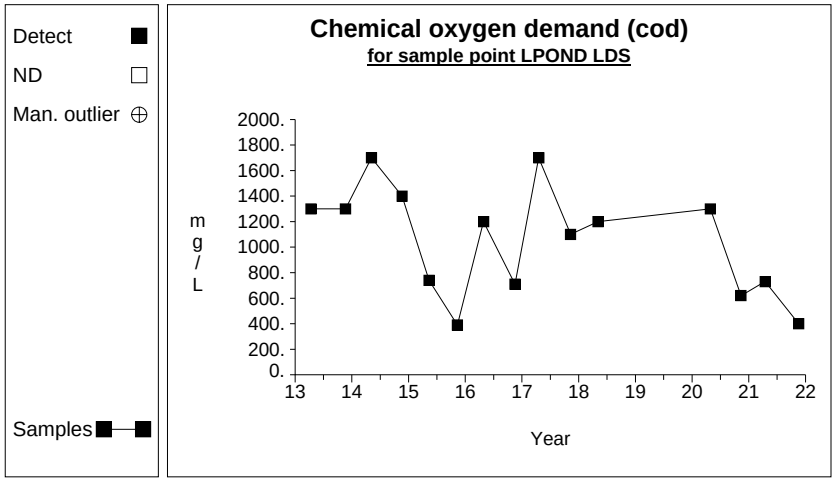
Graph 21



Graph 22

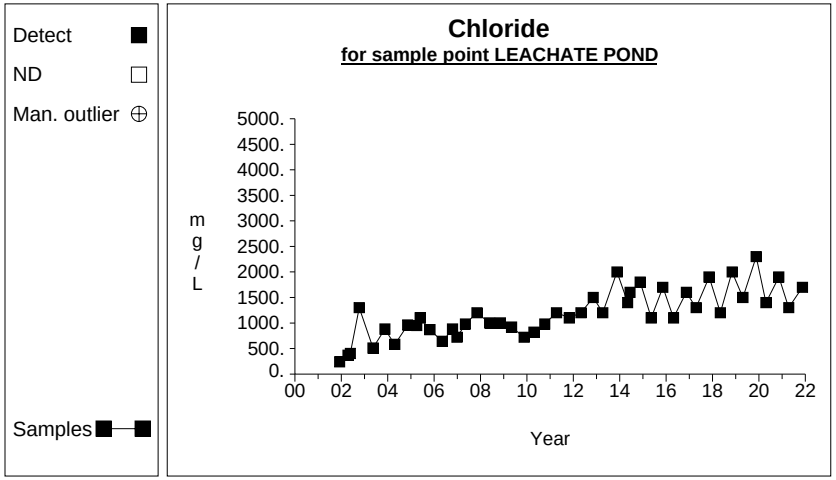


Graph 23

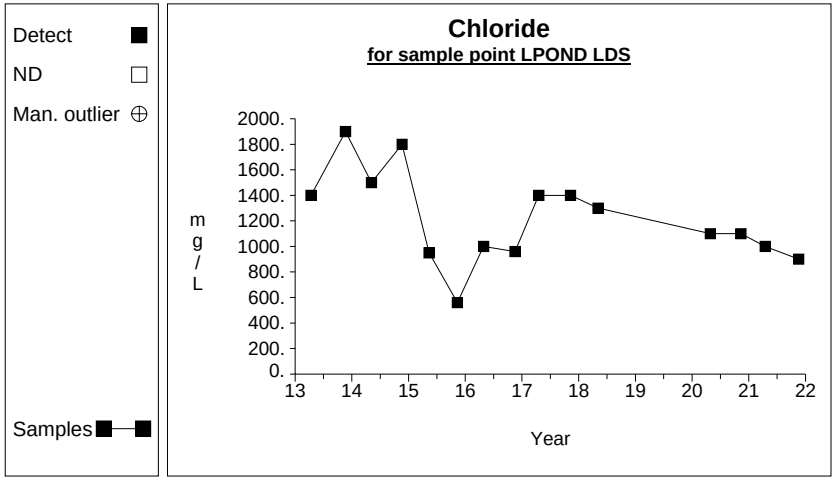


Graph 24

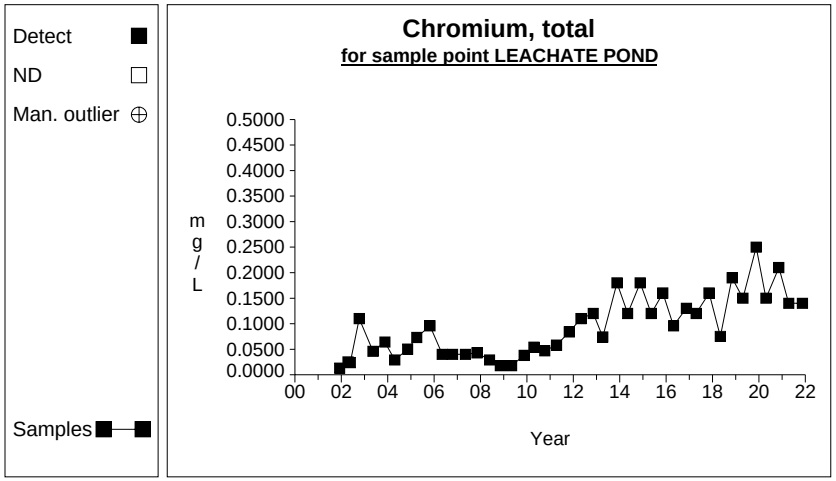
Time Series



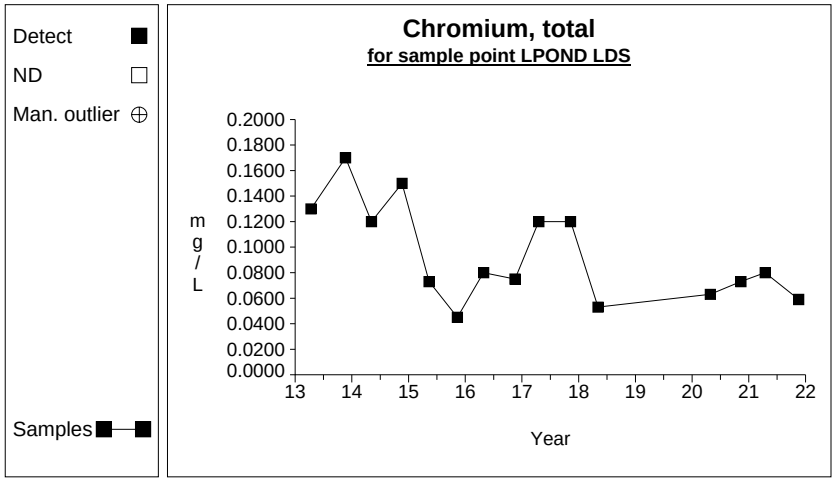
Graph 25



Graph 26

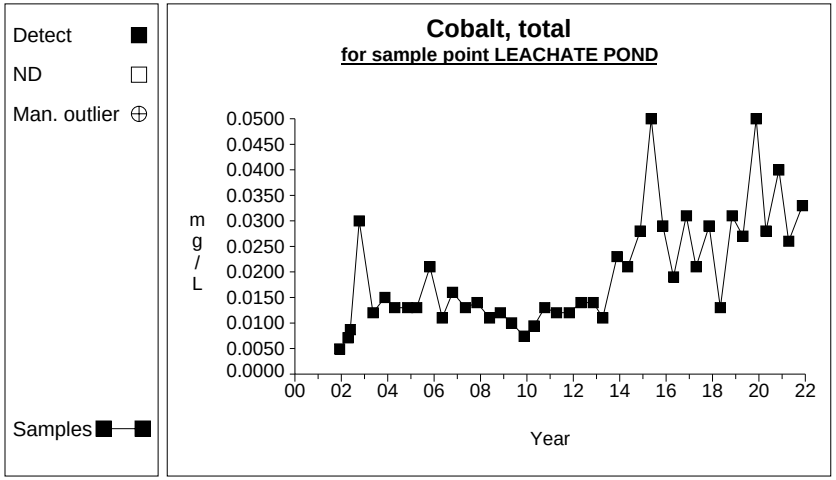


Graph 27

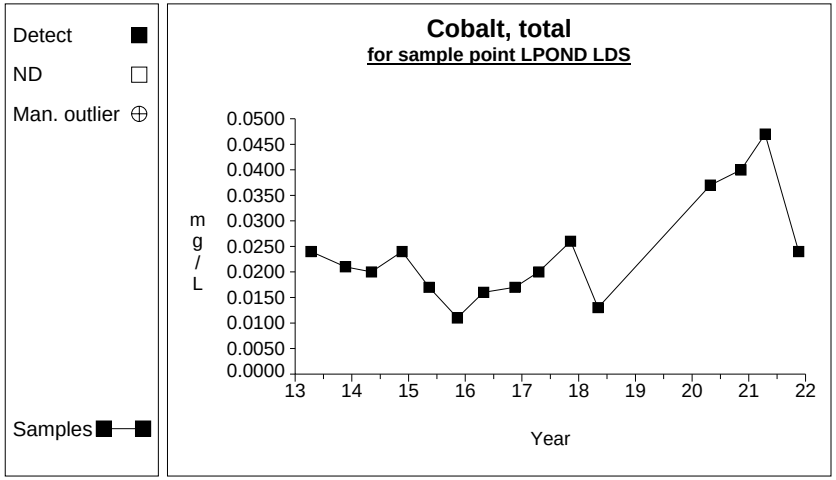


Graph 28

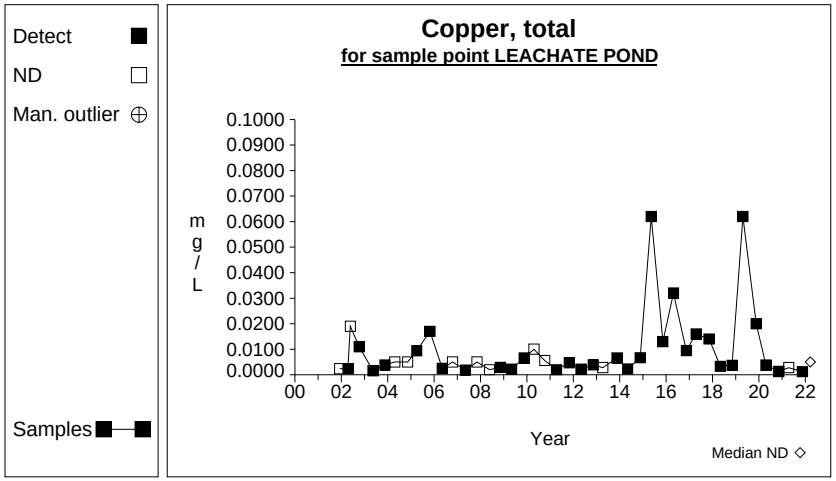
Time Series



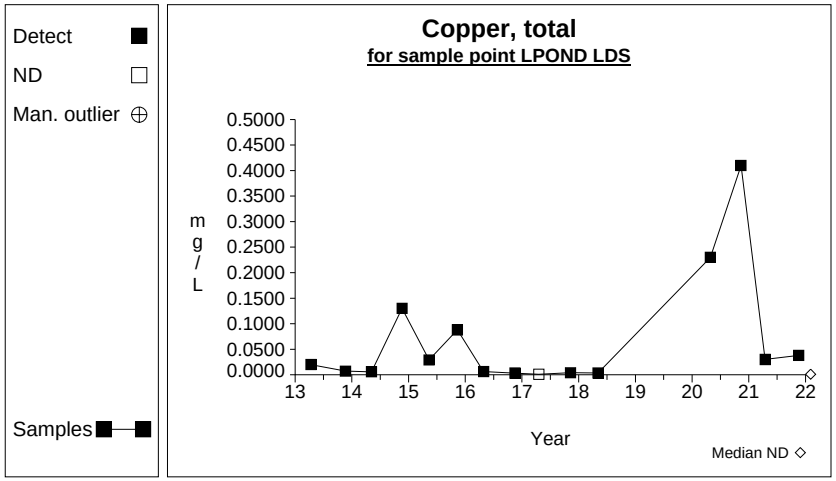
Graph 29



Graph 30

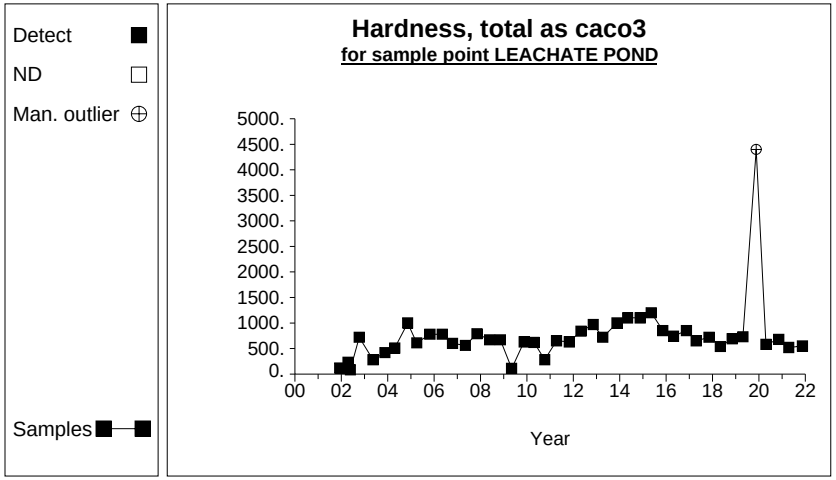


Graph 31

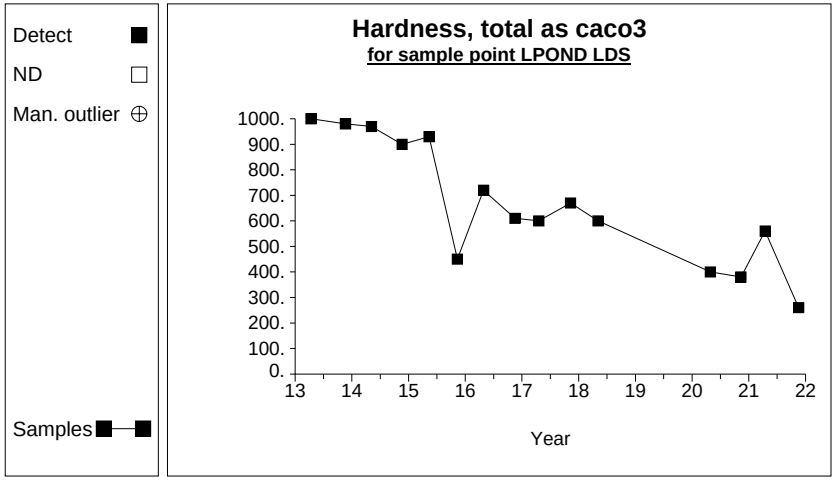


Graph 32

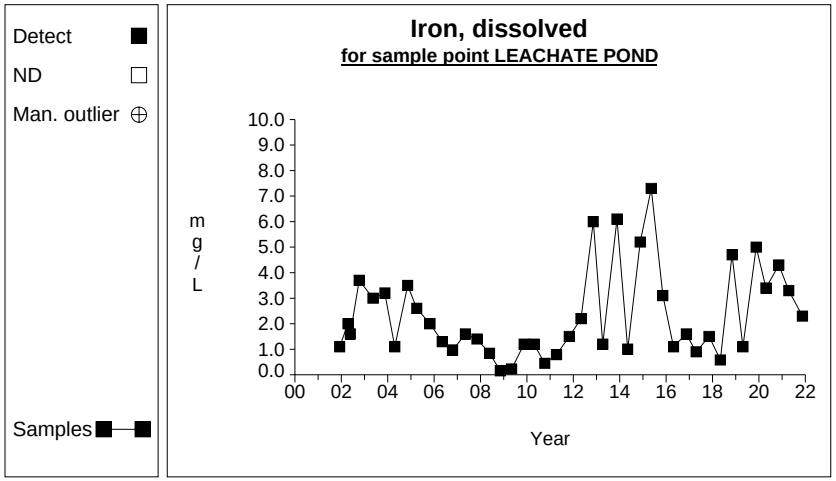
Time Series



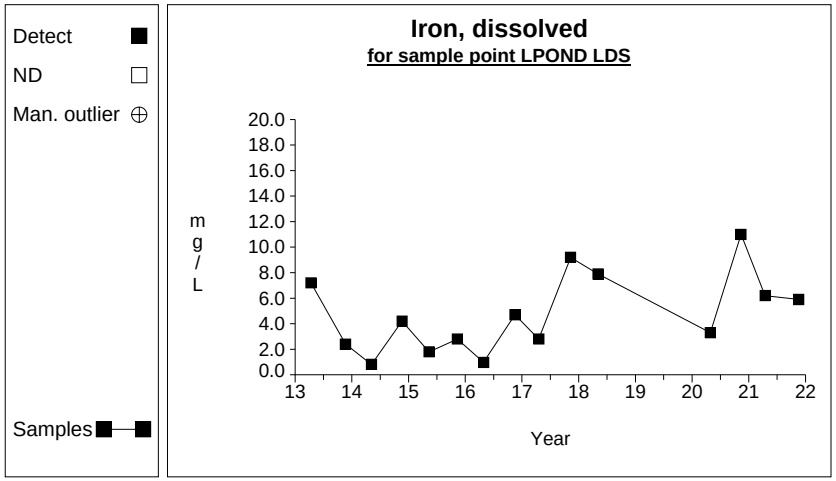
Graph 33



Graph 34

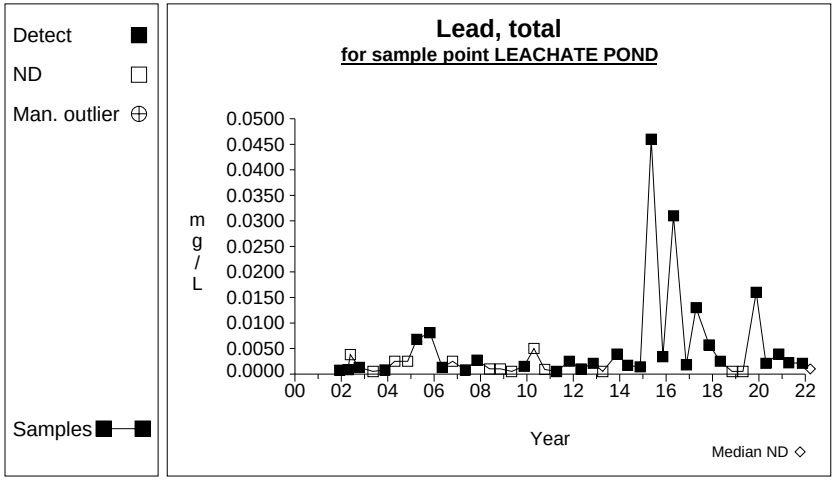


Graph 35

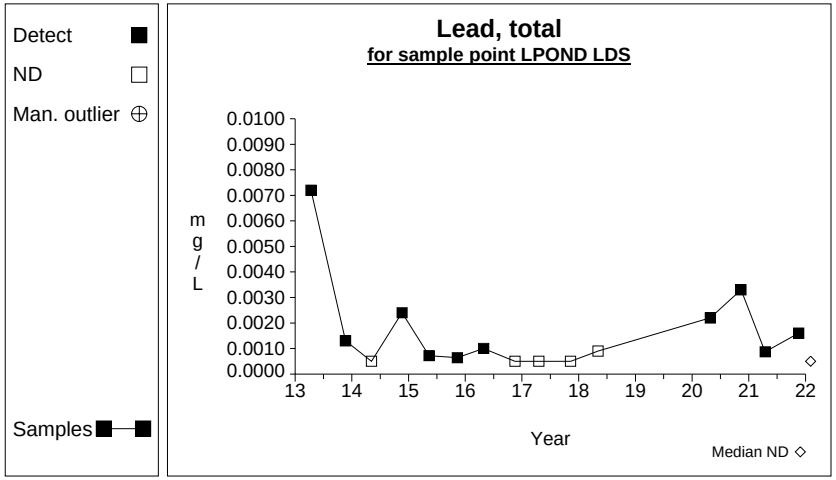


Graph 36

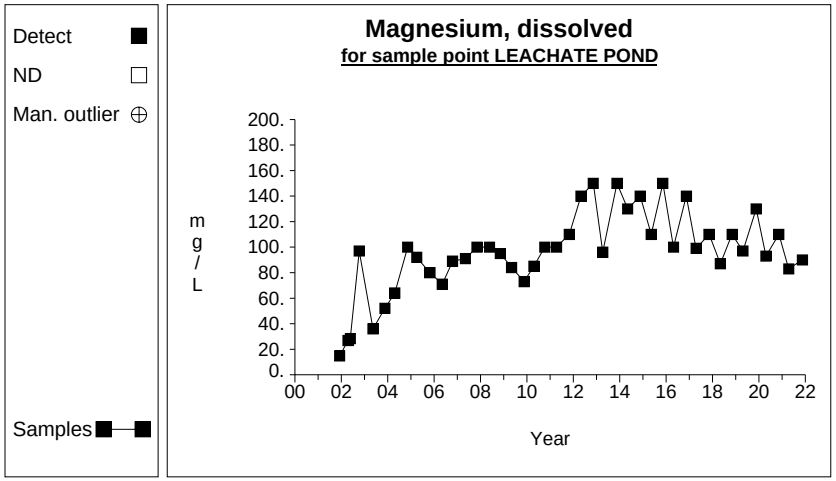
Time Series



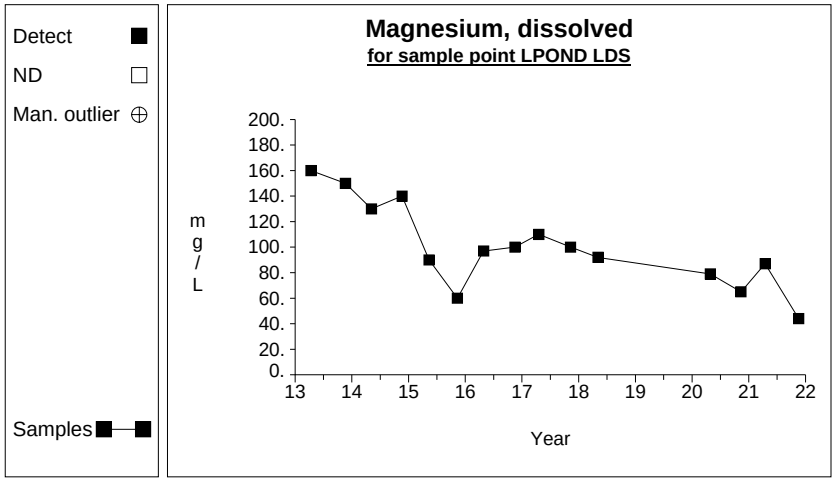
Graph 37



Graph 38

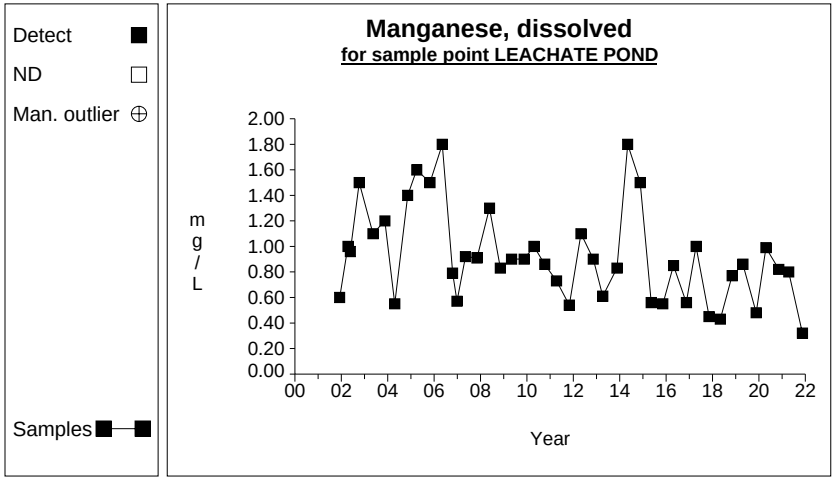


Graph 39

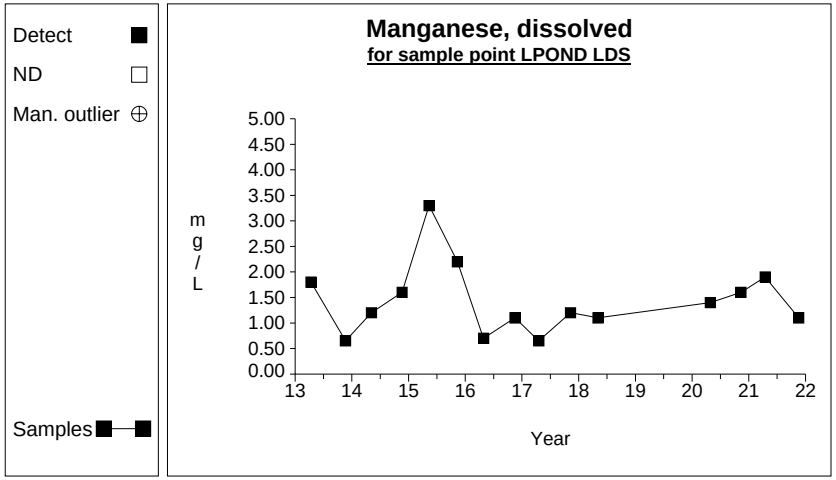


Graph 40

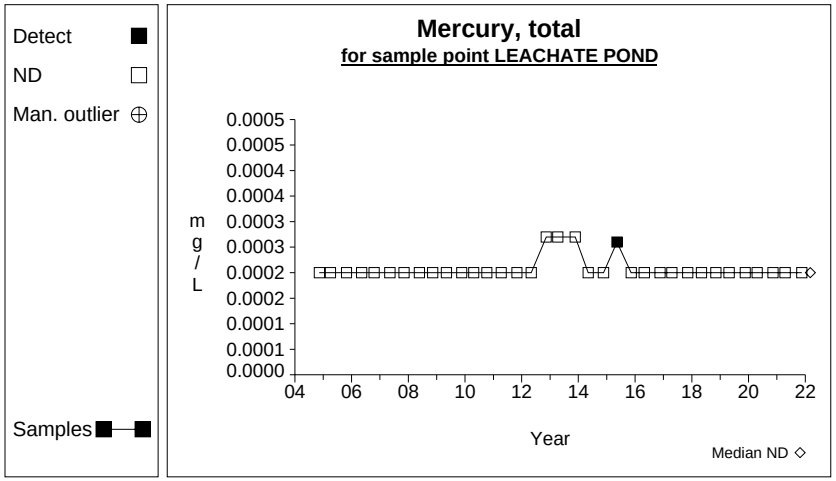
Time Series



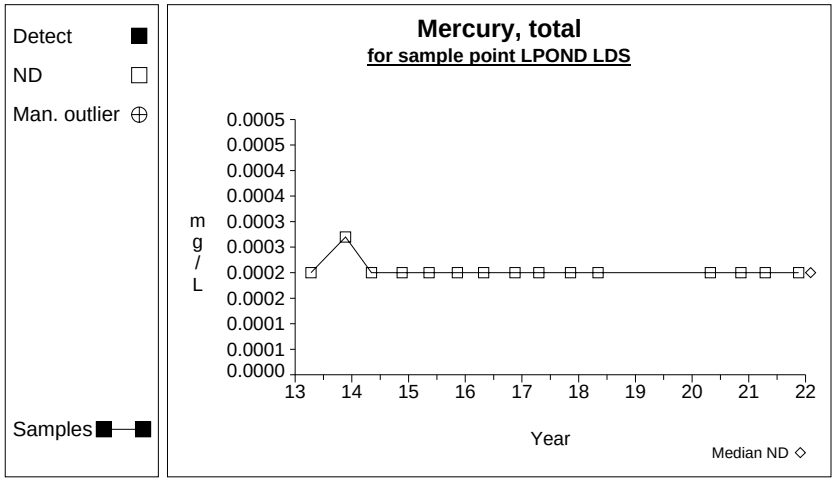
Graph 41



Graph 42

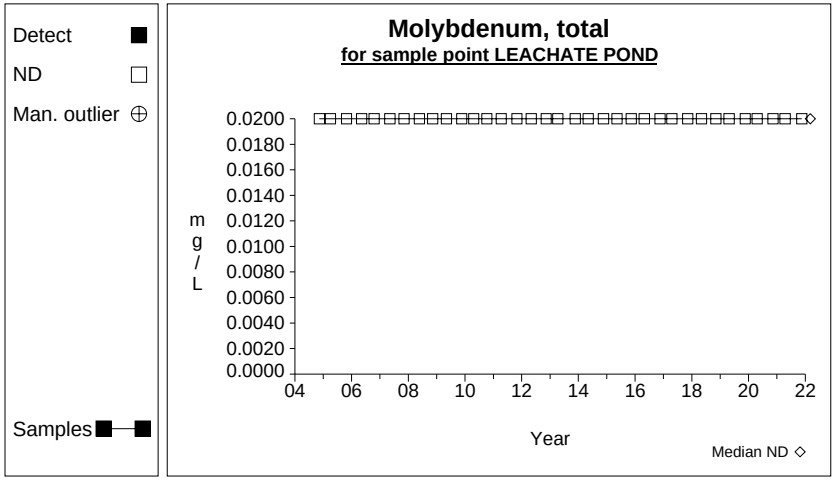


Graph 43

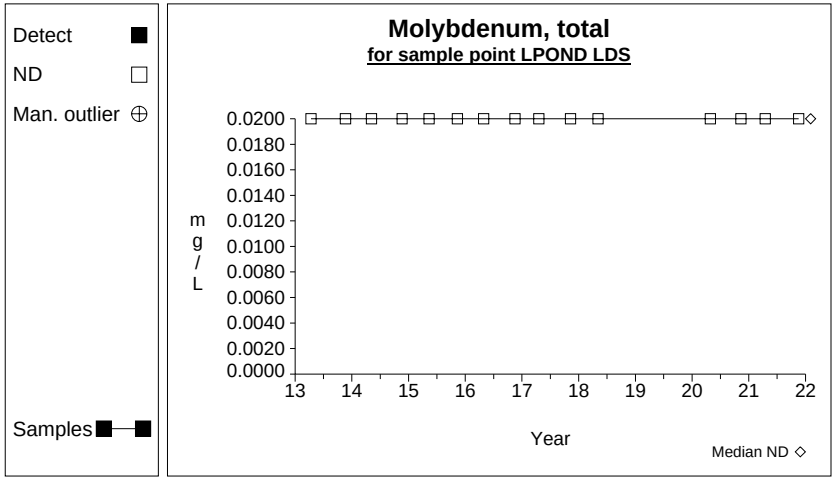


Graph 44

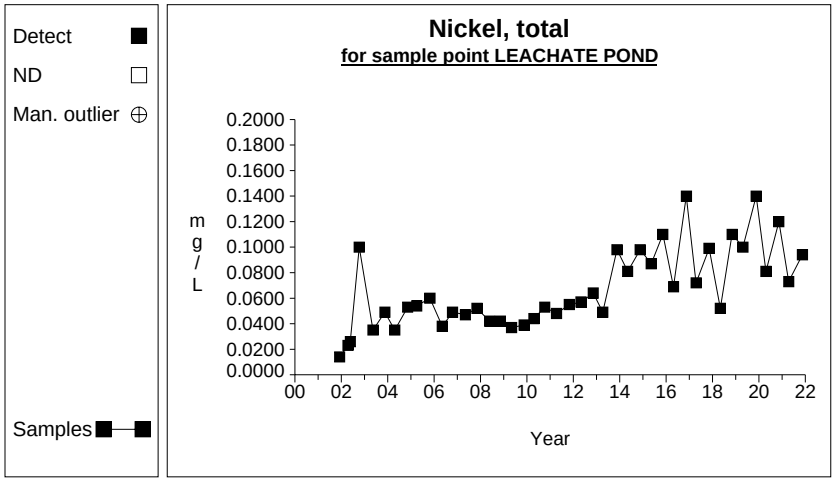
Time Series



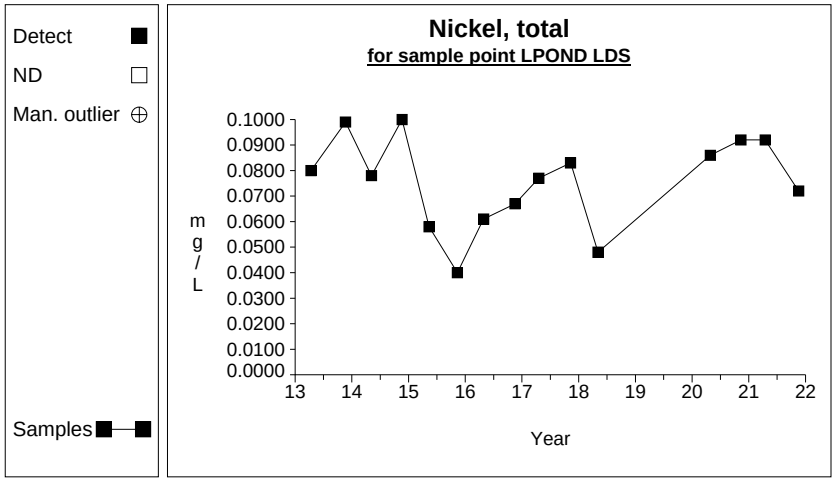
Graph 45



Graph 46

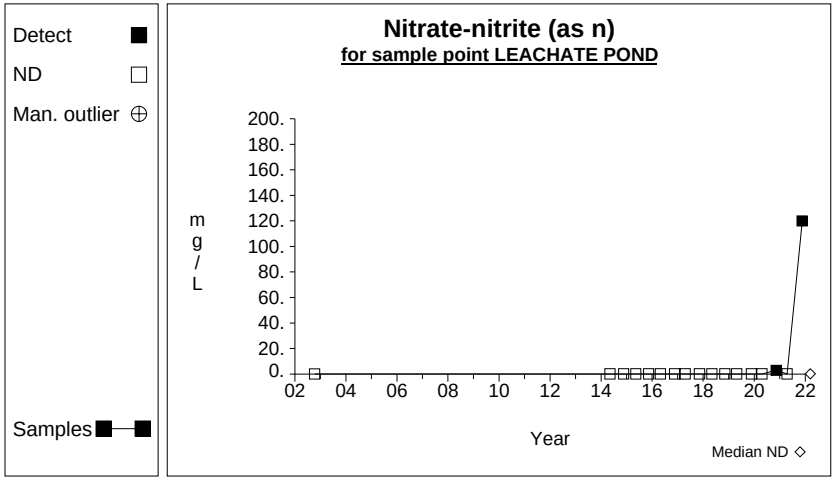


Graph 47

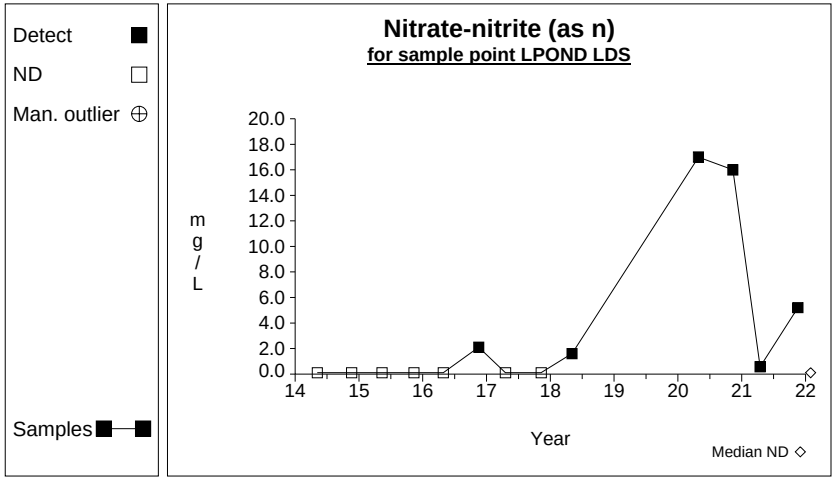


Graph 48

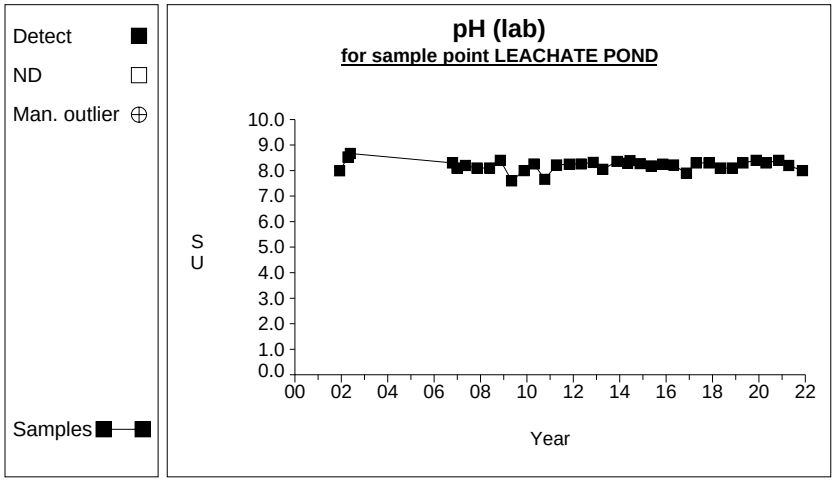
Time Series



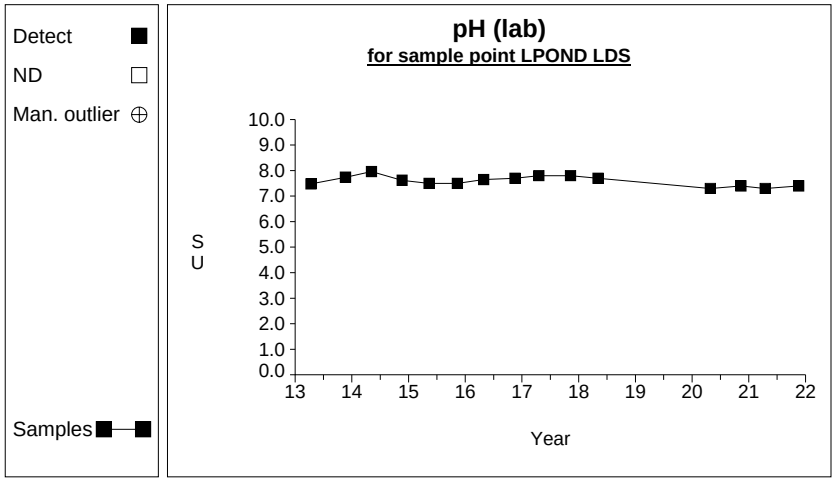
Graph 49



Graph 50

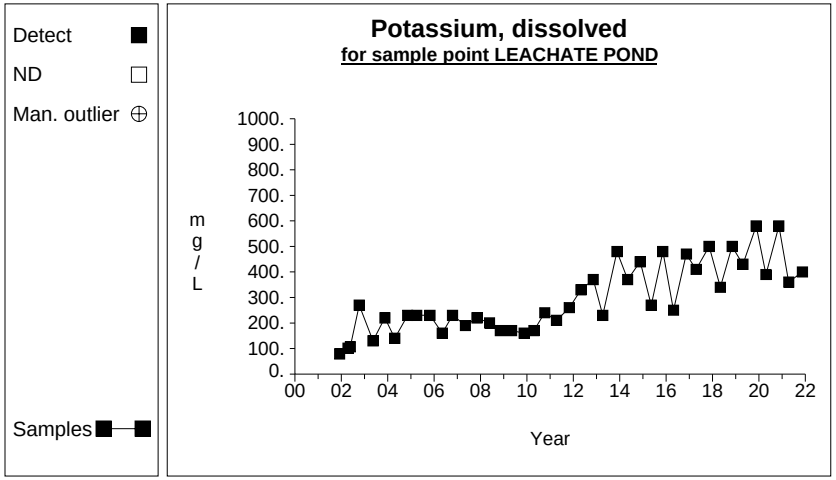


Graph 51

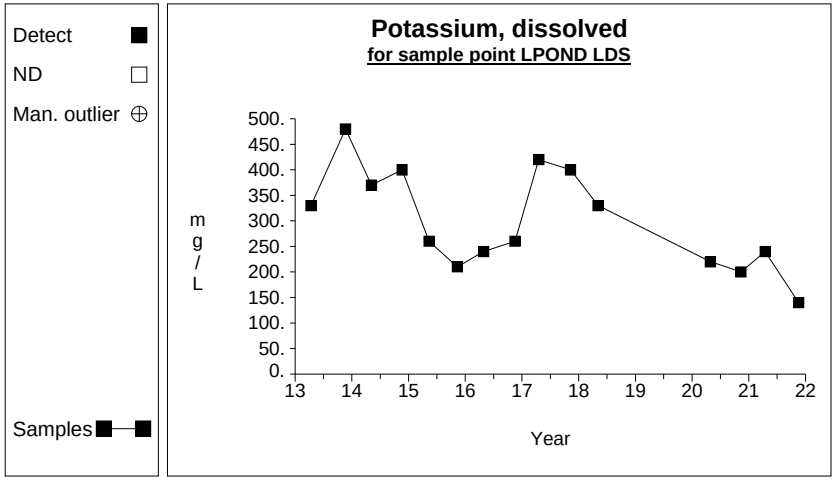


Graph 52

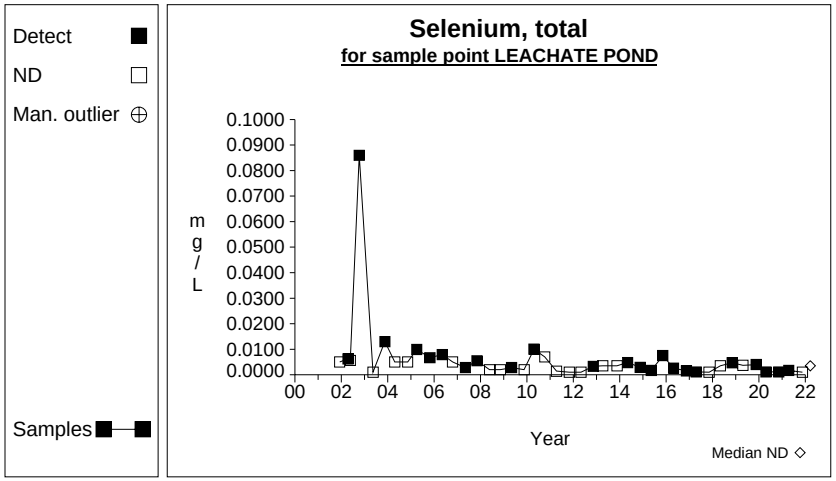
Time Series



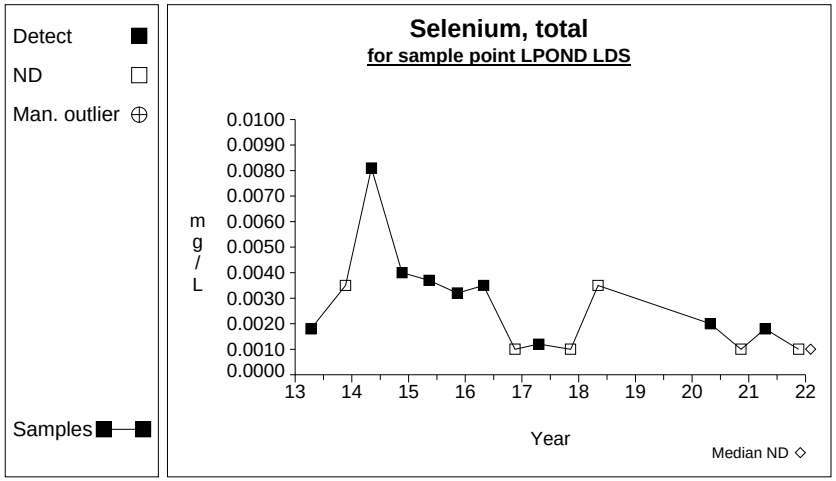
Graph 53



Graph 54

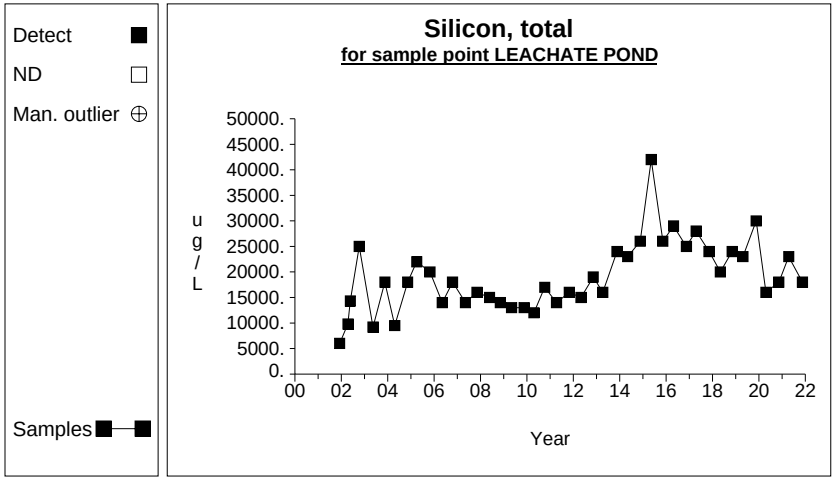


Graph 55

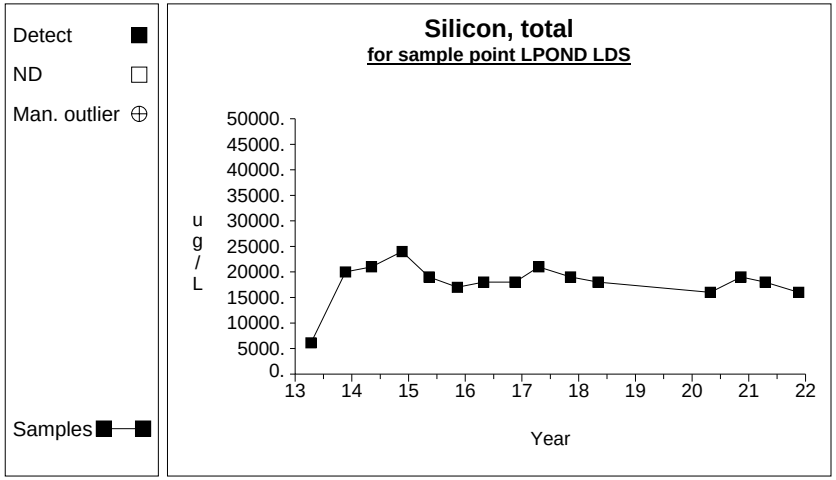


Graph 56

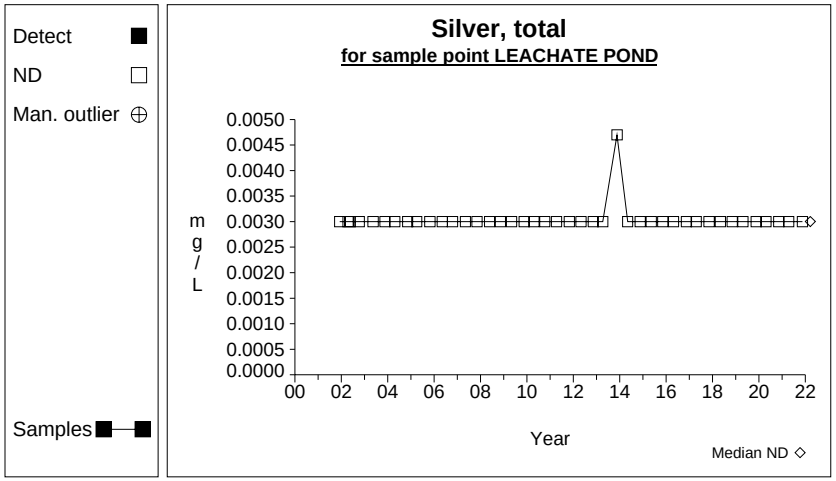
Time Series



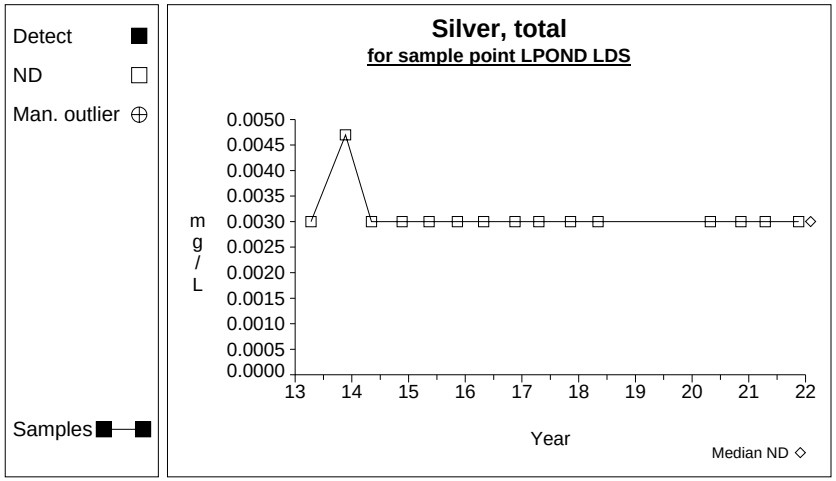
Graph 57



Graph 58

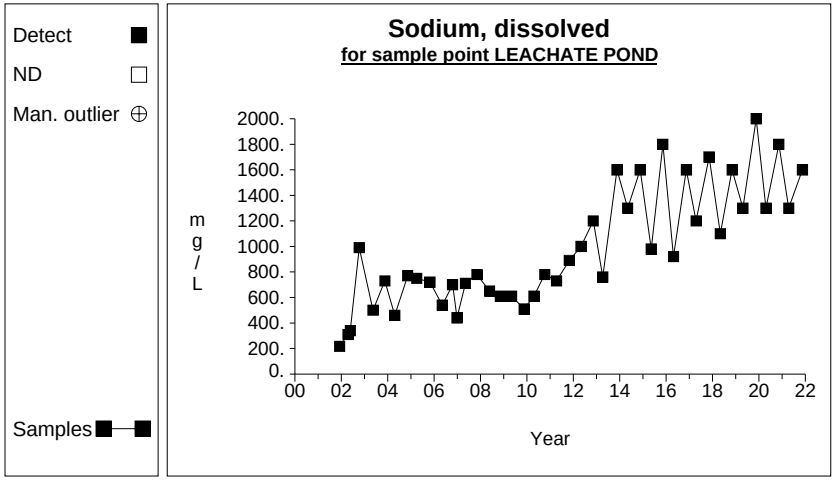


Graph 59

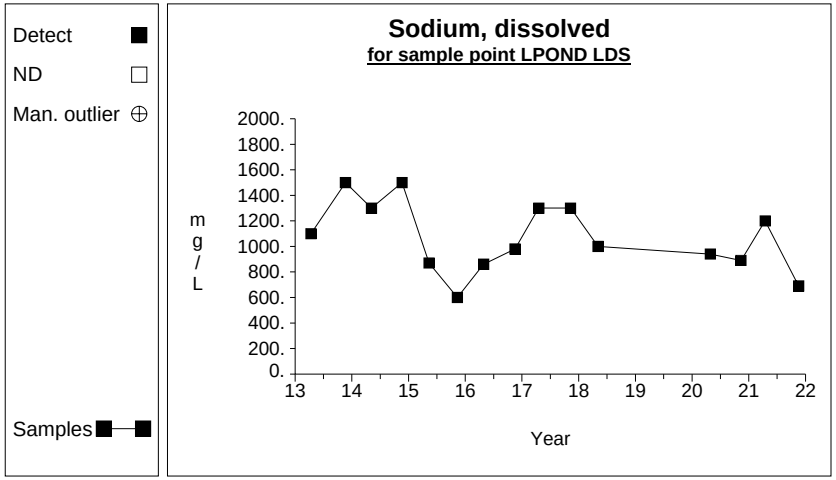


Graph 60

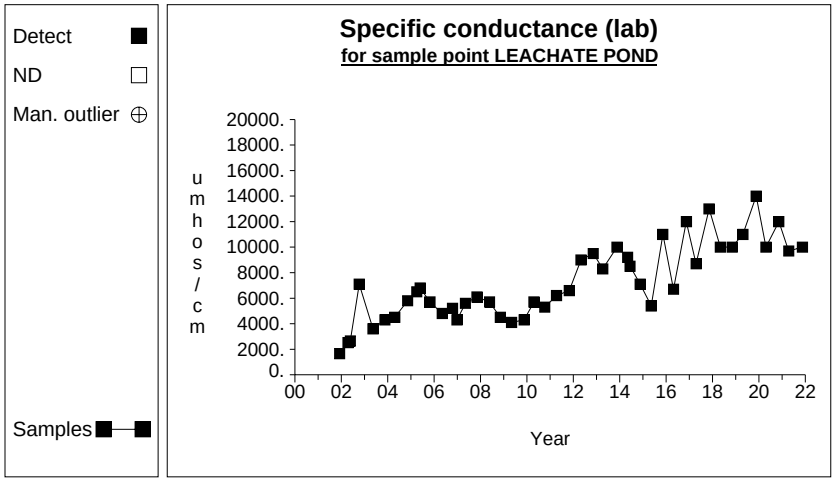
Time Series



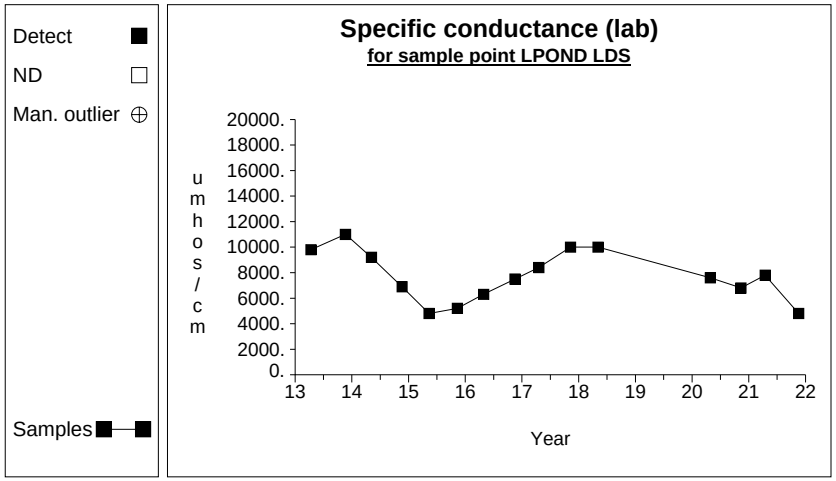
Graph 61



Graph 62

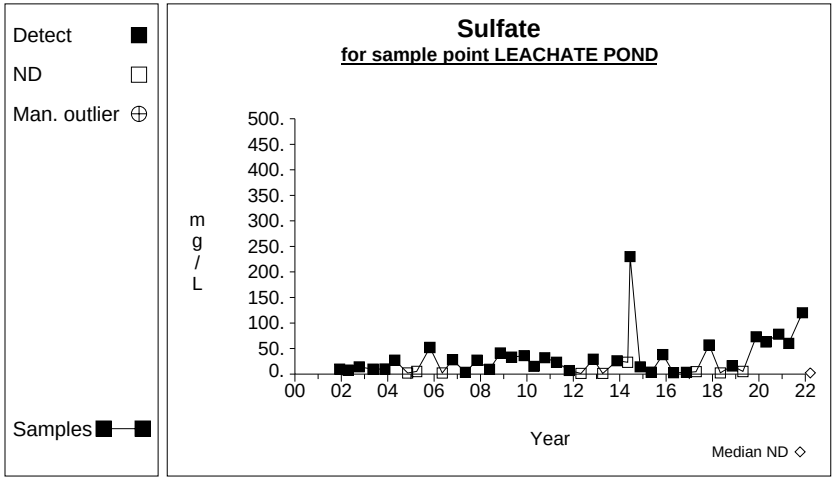


Graph 63

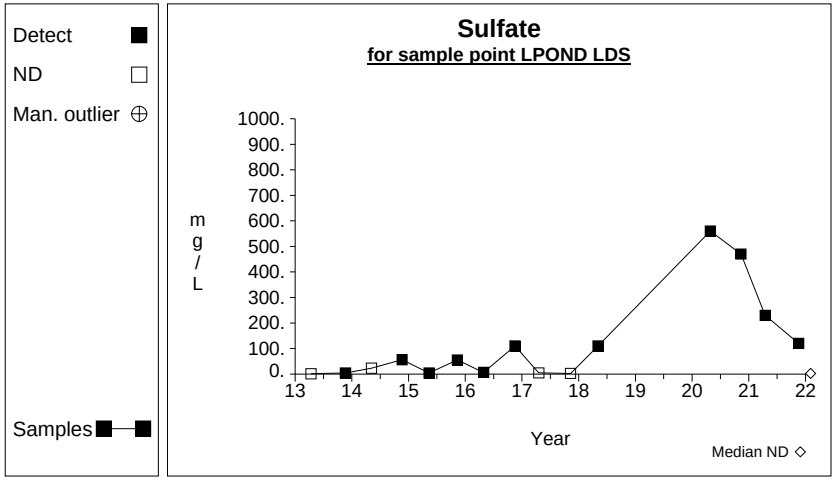


Graph 64

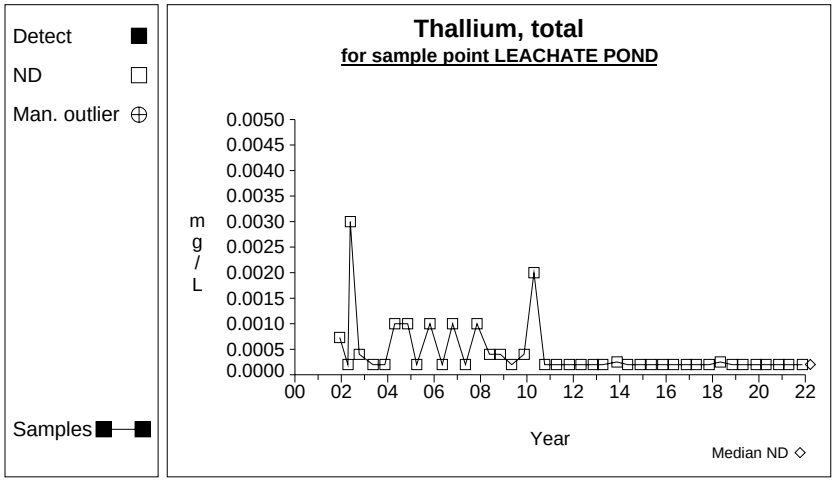
Time Series



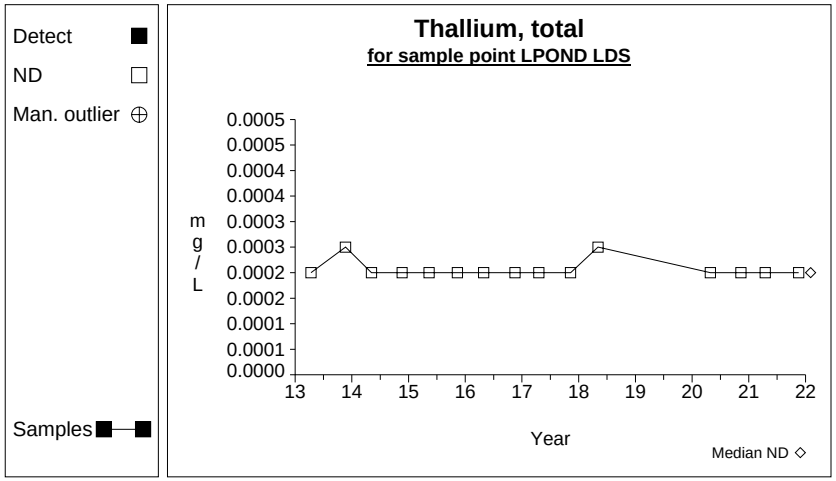
Graph 65



Graph 66

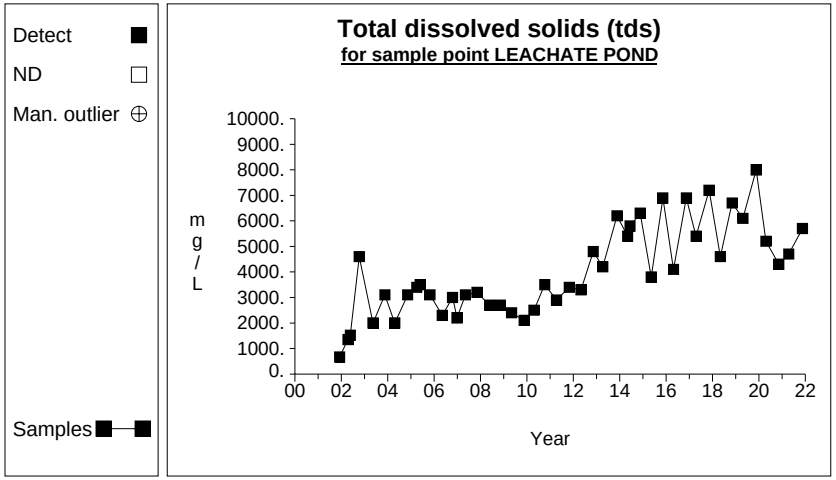


Graph 67

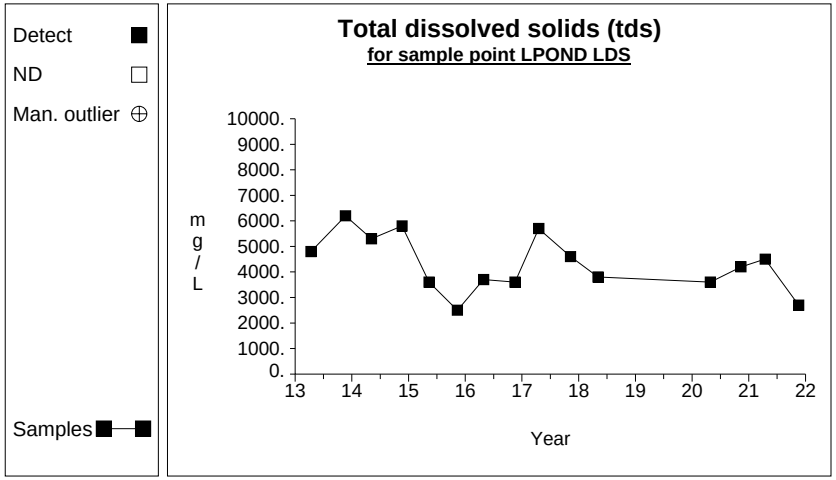


Graph 68

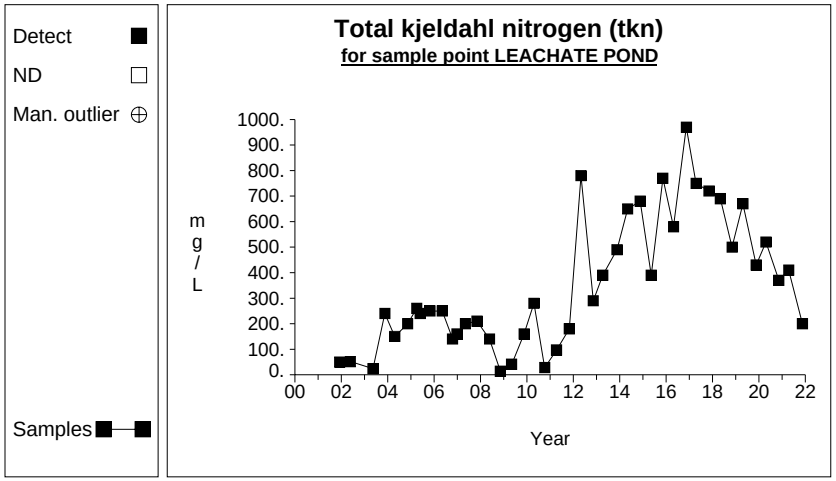
Time Series



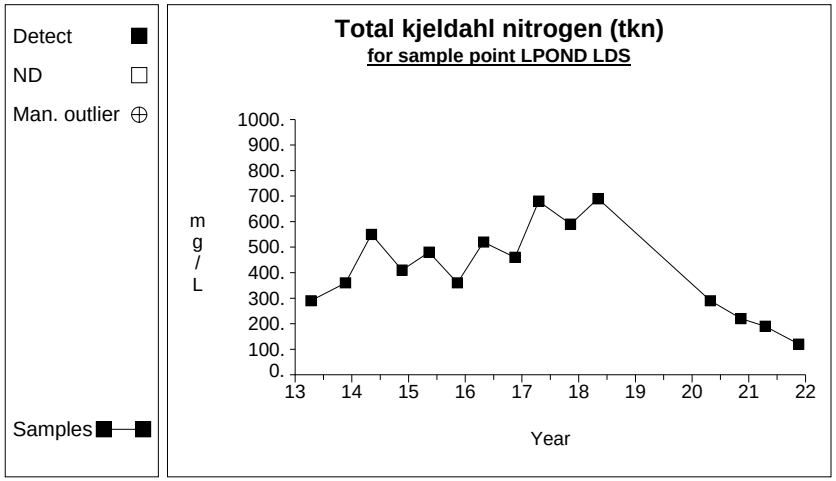
Graph 69



Graph 70

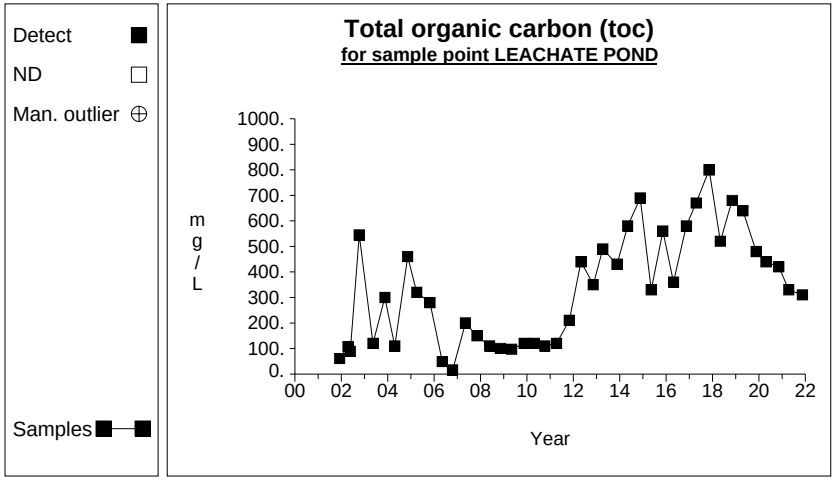


Graph 71

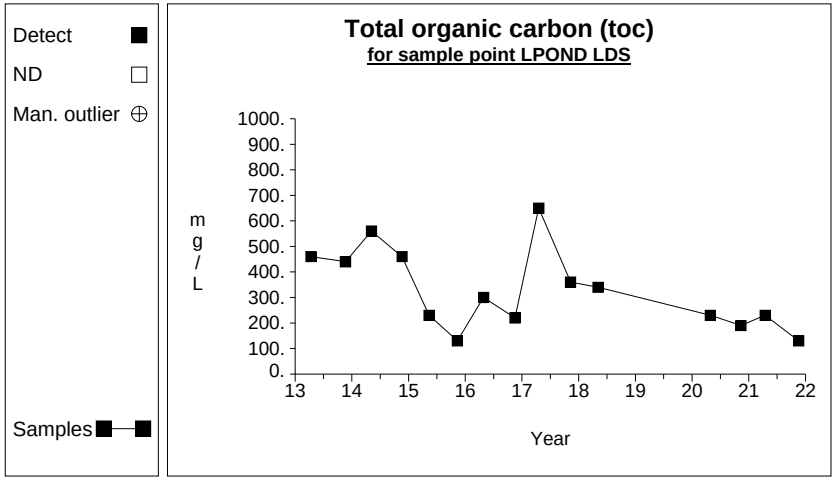


Graph 72

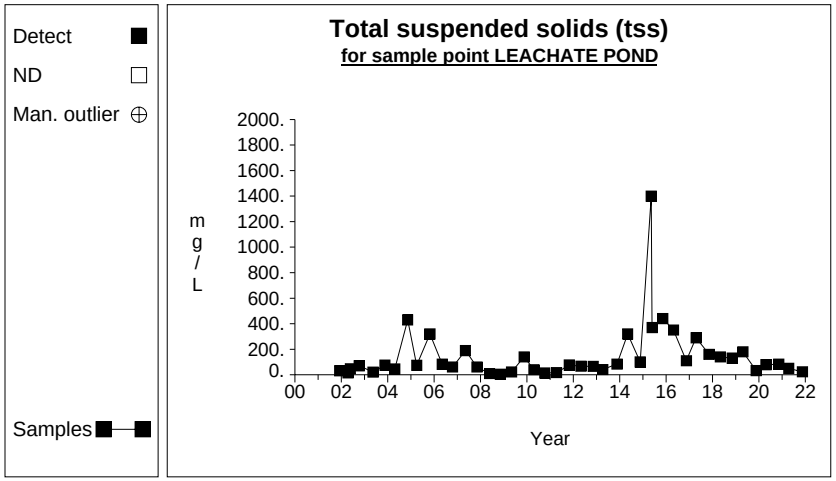
Time Series



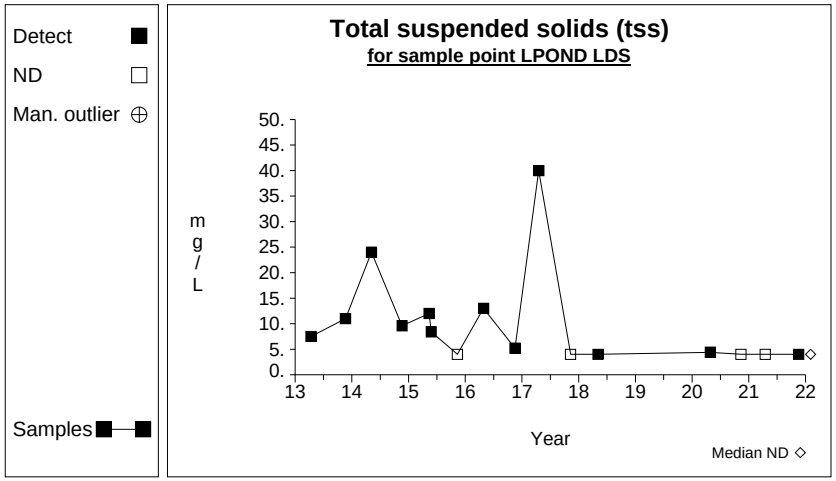
Graph 73



Graph 74

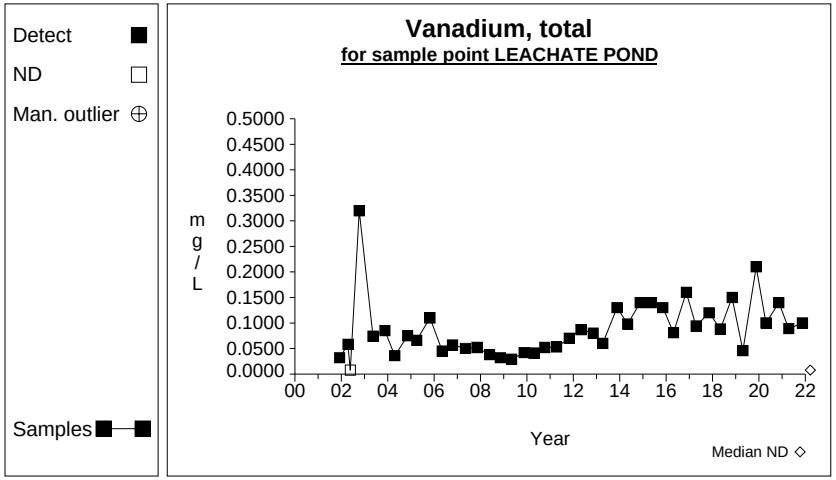


Graph 75

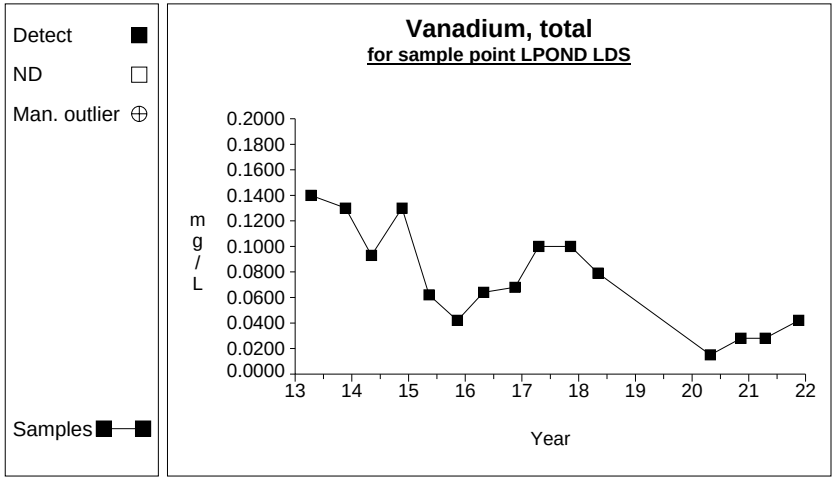


Graph 76

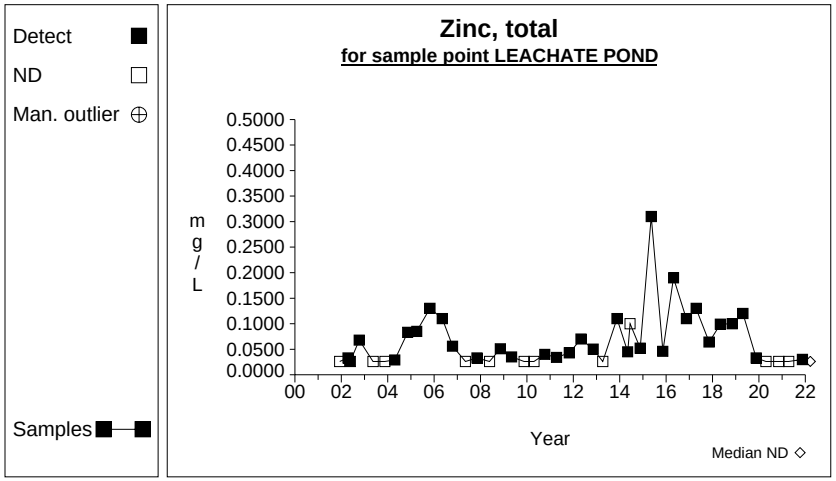
Time Series



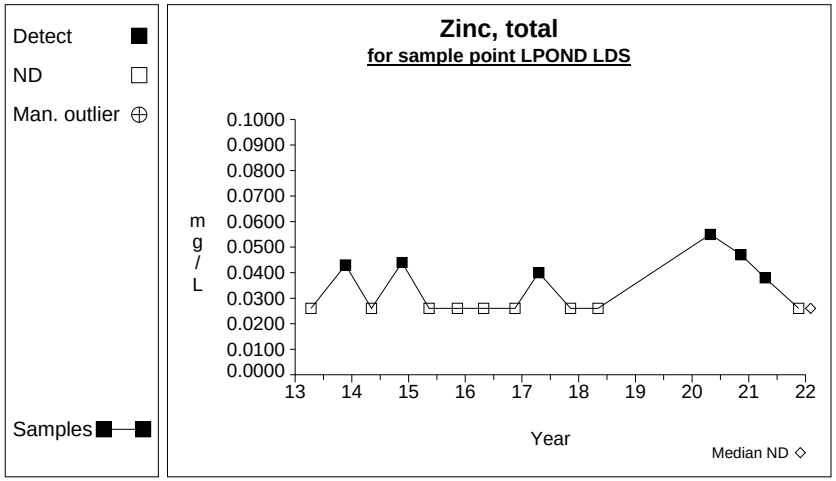
Graph 77



Graph 78



Graph 79



Graph 80

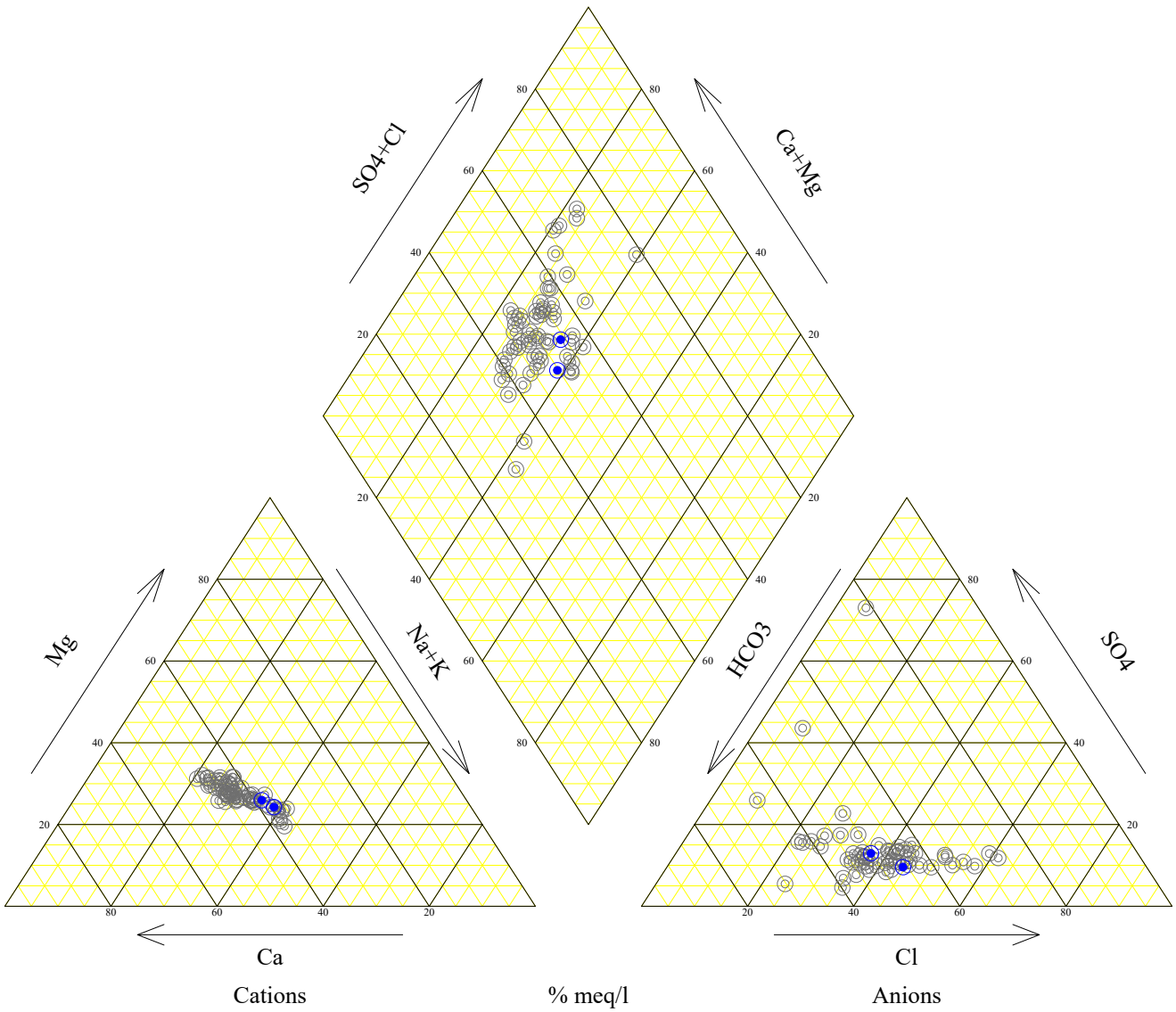
APPENDIX F

Geochemical Diagrams (Piper [Trilinear] Diagrams and Stiff Plots)

Trilinear Diagrams

Groundwater

Figure F-1 MW-12A Groundwater



MW-12A	12/28/1995	MW-12A	12/17/1998	MW-12A	5/20/2008	MW-12A	4/29/2014	MW-12A	2/07/2018
MW-12A	3/29/1996	MW-12A	9/16/1999	MW-12A	11/11/2008	MW-12A	11/18/2014	MW-12A	5/02/2018
MW-12A	5/24/1996	MW-12A	2/08/2000	MW-12A	5/05/2009	MW-12A	5/07/2015	MW-12A	11/06/2018
MW-12A	9/30/1996	MW-12A	5/30/2000	MW-12A	11/17/2009	MW-12A	11/11/2015	MW-12A	12/17/2018
MW-12A	1/14/1997	MW-12A	4/21/2004	MW-12A	4/20/2010	MW-12A	5/03/2016	MW-12A	2/28/2019
MW-12A	4/02/1997	MW-12A	11/09/2004	MW-12A	10/05/2010	MW-12A	8/31/2016	MW-12A	4/25/2019
MW-12A	5/20/1997	MW-12A	5/24/2005	MW-12A	4/14/2011	MW-12A	11/16/2016	MW-12A	11/19/2019
MW-12A	9/10/1997	MW-12A	10/26/2005	MW-12A	11/02/2011	MW-12A	12/22/2016	MW-12A	4/22/2020
MW-12A	12/22/1997	MW-12A	5/09/2006	MW-12A	5/02/2012	MW-12A	4/19/2017	MW-12A	11/11/2020
MW-12A	3/18/1998	MW-12A	10/17/2006	MW-12A	11/13/2012	MW-12A	7/14/2017	MW-12A	4/16/2021
MW-12A	4/30/1998	MW-12A	5/08/2007	MW-12A	4/15/2013	MW-12A	9/12/2017	MW-12A	11/19/2021
MW-12A	8/21/1998	MW-12A	11/07/2007	MW-12A	11/19/2013	MW-12A	11/09/2017		

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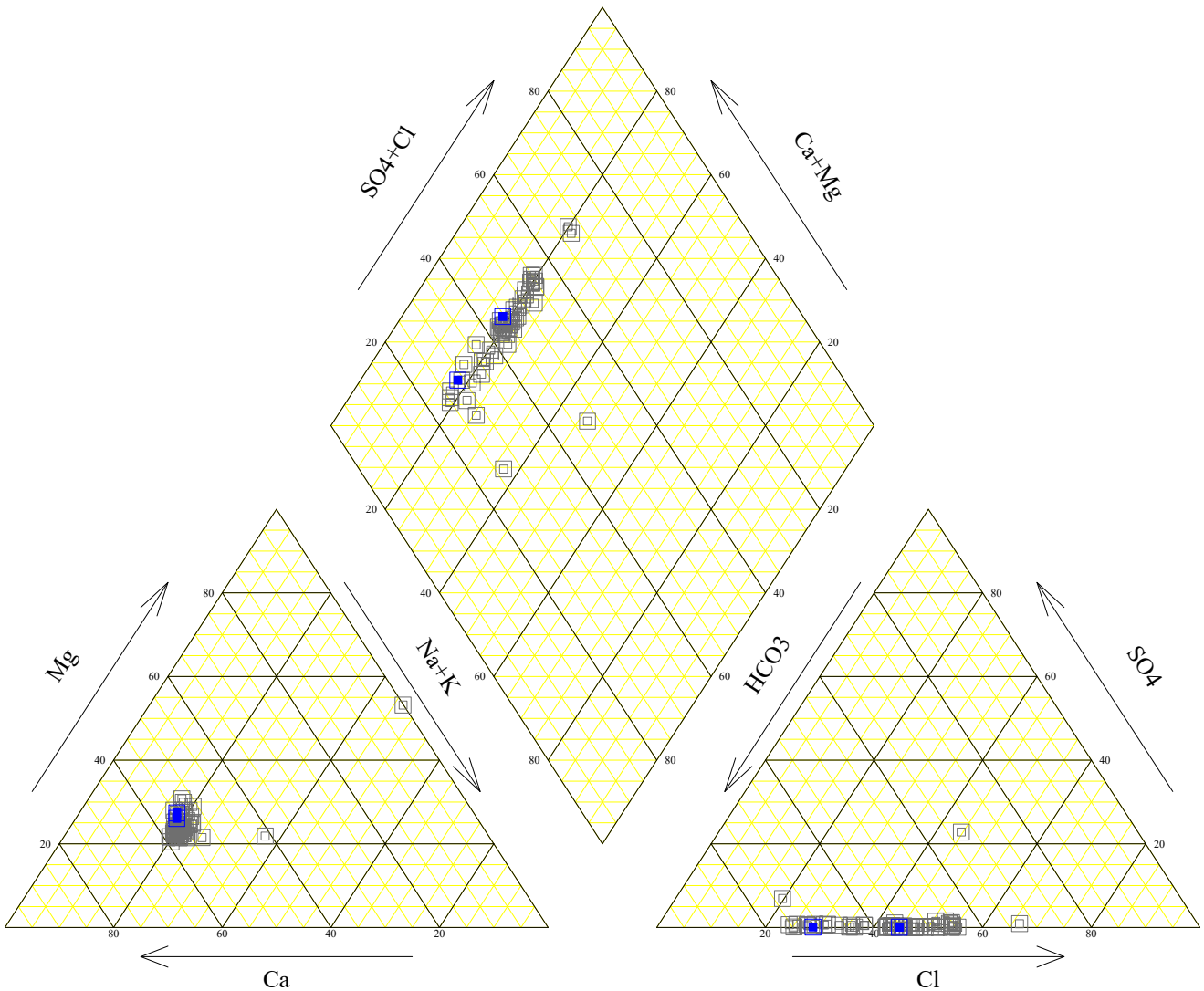
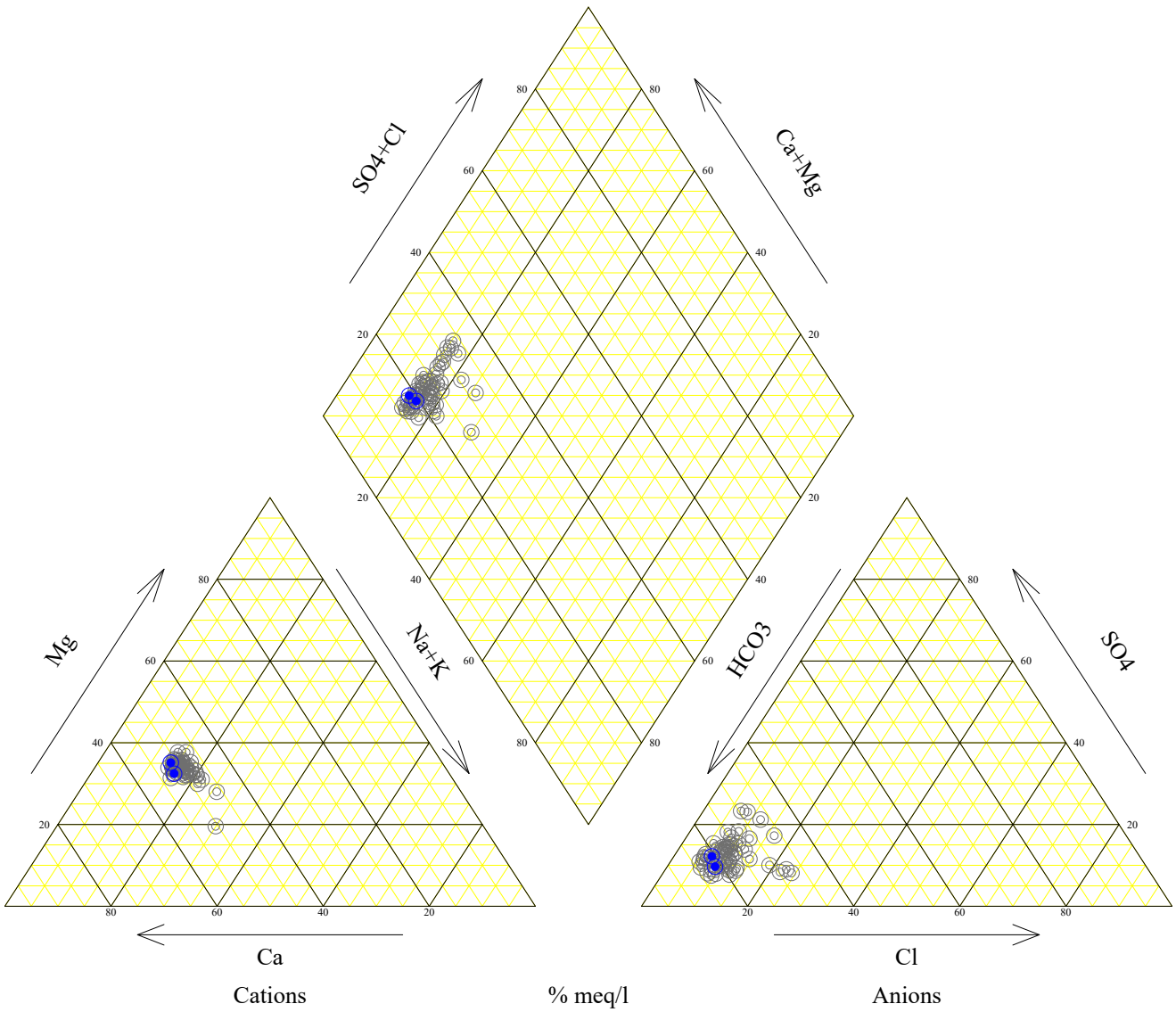
Figure F-2 MW-12B Groundwater



MW-12B	12/28/1995	MW-12B	8/21/1998	MW-12B	5/08/2007	MW-12B	11/13/2012	MW-12B	11/09/2017
MW-12B	3/29/1996	MW-12B	12/17/1998	MW-12B	11/08/2007	MW-12B	4/15/2013	MW-12B	4/30/2018
MW-12B	5/24/1996	MW-12B	9/16/1999	MW-12B	5/20/2008	MW-12B	11/20/2013	MW-12B	11/06/2018
MW-12B	9/30/1996	MW-12B	2/08/2000	MW-12B	11/11/2008	MW-12B	4/29/2014	MW-12B	4/25/2019
MW-12B	1/14/1997	MW-12B	5/30/2000	MW-12B	5/05/2009	MW-12B	11/18/2014	MW-12B	11/19/2019
MW-12B	4/02/1997	MW-12B	4/21/2004	MW-12B	11/17/2009	MW-12B	5/07/2015	MW-12B	4/22/2020
MW-12B	5/20/1997	MW-12B	11/09/2004	MW-12B	4/20/2010	MW-12B	11/11/2015	MW-12B	11/11/2020
MW-12B	9/10/1997	MW-12B	5/25/2005	MW-12B	10/05/2010	MW-12B	5/03/2016	MW-12B	4/16/2021
MW-12B	12/22/1997	MW-12B	10/25/2005	MW-12B	4/14/2011	MW-12B	8/31/2016	MW-12B	11/19/2021
MW-12B	3/18/1998	MW-12B	5/09/2006	MW-12B	11/02/2011	MW-12B	11/16/2016		
MW-12B	4/30/1998	MW-12B	10/17/2006	MW-12B	5/02/2012	MW-12B	4/19/2017		

Prepared by: SCS Engineers

Figure F-3 MW-14A Groundwater



◎	MW-14A	4/03/1997	◎ MW-14A	2/09/2000	◎ MW-14A	5/10/2006	◎ MW-14A	1/12/2012	◎ MW-14A	4/19/2017
◎	MW-14A	5/20/1997	◎ MW-14A	5/24/2000	◎ MW-14A	11/22/2006	◎ MW-14A	5/03/2012	◎ MW-14A	11/08/2017
◎	MW-14A	9/11/1997	◎ MW-14A	1/30/2001	◎ MW-14A	5/09/2007	◎ MW-14A	11/13/2012	◎ MW-14A	2/07/2018
◎	MW-14A	12/30/1997	◎ MW-14A	4/25/2001	◎ MW-14A	12/27/2007	◎ MW-14A	4/09/2013	◎ MW-14A	5/01/2018
◎	MW-14A	3/19/1998	◎ MW-14A	8/29/2001	◎ MW-14A	5/21/2008	◎ MW-14A	11/20/2013	◎ MW-14A	12/26/2019
◎	MW-14A	6/11/1998	◎ MW-14A	1/30/2002	◎ MW-14A	11/13/2008	◎ MW-14A	4/30/2014	◎ MW-14A	1/22/2019
◎	MW-14A	8/20/1998	◎ MW-14A	4/09/2002	◎ MW-14A	5/06/2009	◎ MW-14A	11/20/2014	◎ MW-14A	4/25/2019
◎	MW-14A	12/16/1998	◎ MW-14A	2/25/2003	◎ MW-14A	11/18/2009	◎ MW-14A	5/12/2015	◎ MW-14A	4/21/2020
◎	MW-14A	3/25/1999	◎ MW-14A	5/13/2003	◎ MW-14A	4/22/2010	◎ MW-14A	12/28/2015	◎ MW-14A	1/28/2021
◎	MW-14A	6/16/1999	◎ MW-14A	4/20/2004	◎ MW-14A	11/24/2010	◎ MW-14A	5/04/2016	◉ MW-14A	4/13/2021
◎	MW-14A	12/10/1999	◎ MW-14A	5/25/2005	◎ MW-14A	4/13/2011	◎ MW-14A	11/17/2016	◉ MW-14A	11/17/2021

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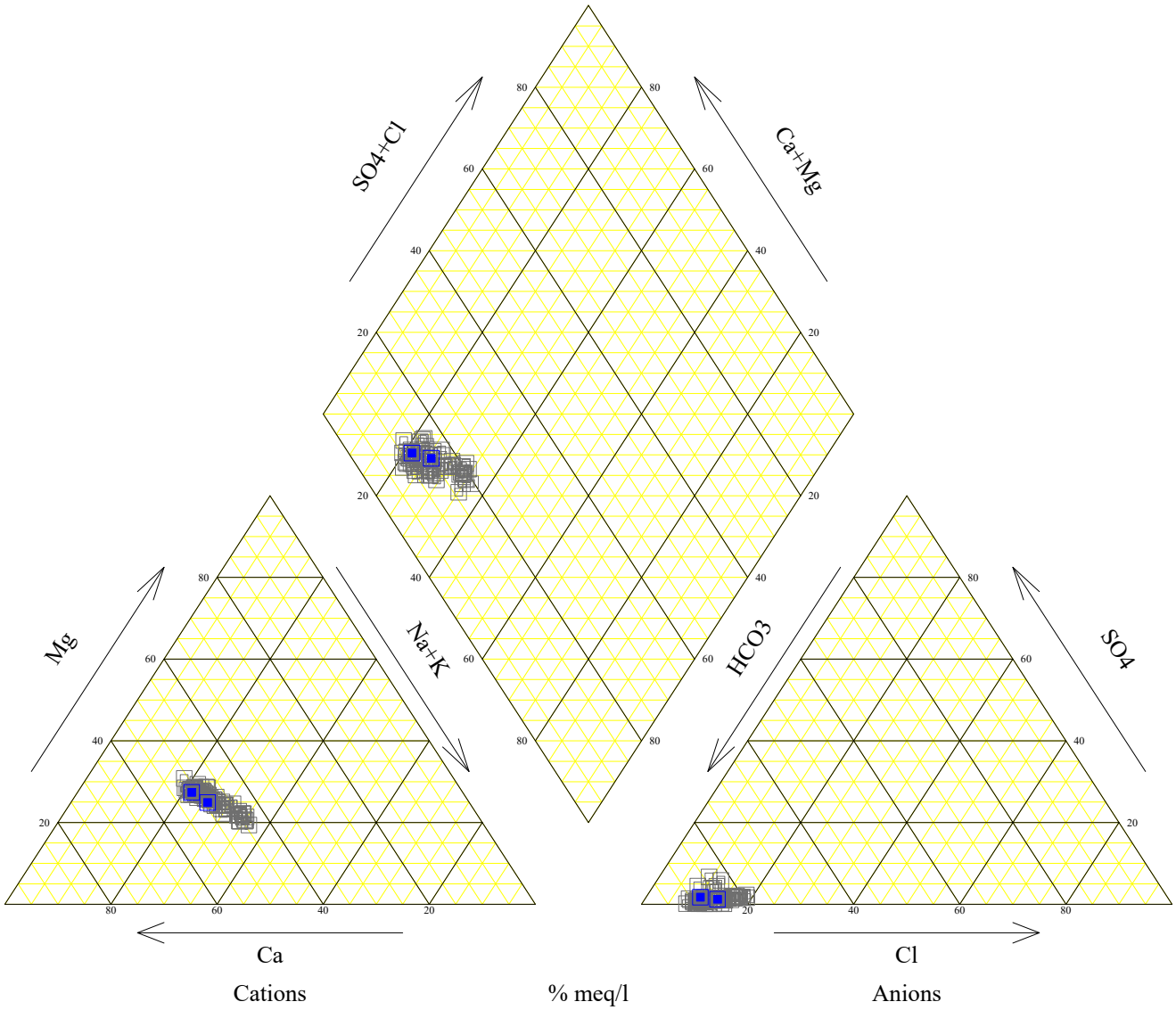
Figure F-4 MW-14B Groundwater



MW-14B 4/03/1997	MW-14B 5/24/2000	MW-14B 8/20/2003	MW-14B 11/17/2009	MW-14B 5/04/2016
MW-14B 5/20/1997	MW-14B 8/22/2000	MW-14B 11/18/2003	MW-14B 4/22/2010	MW-14B 11/17/2016
MW-14B 9/11/1997	MW-14B 11/07/2000	MW-14B 4/21/2004	MW-14B 10/06/2010	MW-14B 4/19/2017
MW-14B 12/30/1997	MW-14B 1/30/2001	MW-14B 11/10/2004	MW-14B 4/13/2011	MW-14B 11/08/2017
MW-14B 3/19/1998	MW-14B 4/25/2001	MW-14B 5/25/2005	MW-14B 11/01/2011	MW-14B 5/02/2018
MW-14B 6/11/1998	MW-14B 8/29/2001	MW-14B 10/25/2005	MW-14B 5/03/2012	MW-14B 11/07/2018
MW-14B 8/20/1998	MW-14B 11/06/2001	MW-14B 5/10/2006	MW-14B 11/13/2012	MW-14B 4/25/2019
MW-14B 12/16/1998	MW-14B 1/30/2002	MW-14B 10/18/2006	MW-14B 4/09/2013	MW-14B 11/19/2019
MW-14B 3/25/1999	MW-14B 4/09/2002	MW-14B 5/09/2007	MW-14B 11/20/2013	MW-14B 4/21/2020
MW-14B 6/16/1999	MW-14B 7/23/2002	MW-14B 11/08/2007	MW-14B 4/30/2014	MW-14B 11/10/2020
MW-14B 9/16/1999	MW-14B 10/10/2002	MW-14B 5/21/2008	MW-14B 11/19/2014	MW-14B 4/13/2021
MW-14B 12/10/1999	MW-14B 2/25/2003	MW-14B 11/12/2008	MW-14B 5/12/2015	MW-14B 11/18/2021
MW-14B 2/09/2000	MW-14B 5/13/2003	MW-14B 5/06/2009	MW-14B 11/11/2015	

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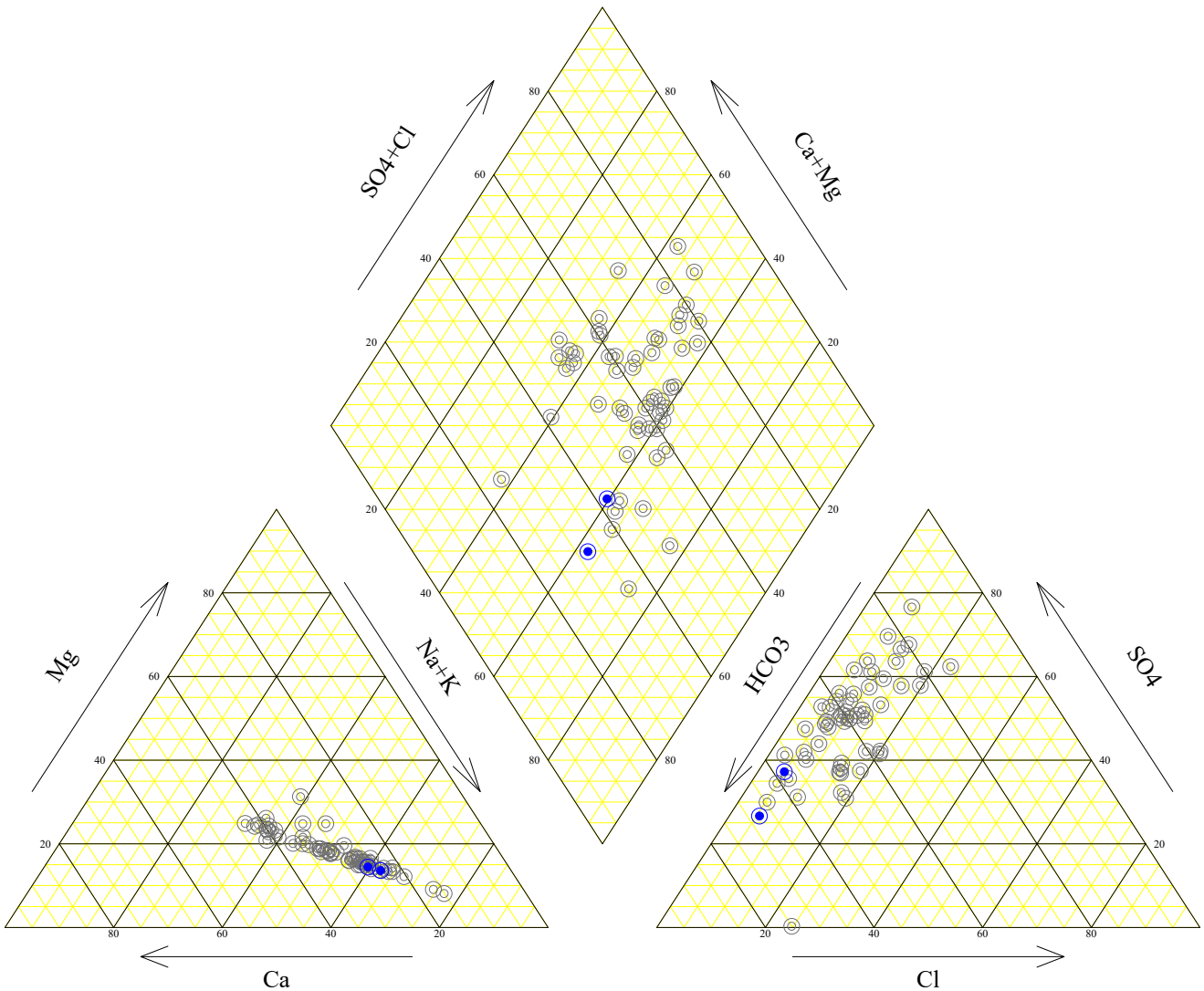
Figure F-5 MW-15A Groundwater



MW-15A	4/01/1997	MW-15A	1/30/2001	MW-15A	5/09/2006	MW-15A	5/02/2012	MW-15A	5/02/2018
MW-15A	5/19/1997	MW-15A	4/24/2001	MW-15A	11/22/2006	MW-15A	11/13/2012	MW-15A	12/17/2018
MW-15A	12/19/1997	MW-15A	8/29/2001	MW-15A	5/08/2007	MW-15A	4/11/2013	MW-15A	4/24/2019
MW-15A	3/18/1998	MW-15A	1/31/2002	MW-15A	11/08/2007	MW-15A	11/19/2013	MW-15A	12/26/2019
MW-15A	6/11/1998	MW-15A	4/09/2002	MW-15A	5/20/2008	MW-15A	4/29/2014	MW-15A	4/22/2020
MW-15A	8/20/1998	MW-15A	7/23/2002	MW-15A	11/12/2008	MW-15A	11/18/2014	MW-15A	1/28/2021
MW-15A	12/17/1998	MW-15A	2/25/2003	MW-15A	5/05/2009	MW-15A	5/07/2015	MW-15A	4/15/2021
MW-15A	3/26/1999	MW-15A	5/13/2003	MW-15A	11/17/2009	MW-15A	12/28/2015	MW-15A	11/17/2021
MW-15A	6/18/1999	MW-15A	8/20/2003	MW-15A	4/20/2010	MW-15A	5/03/2016		
MW-15A	12/13/1999	MW-15A	4/20/2004	MW-15A	10/06/2010	MW-15A	11/16/2016		
MW-15A	2/08/2000	MW-15A	5/24/2005	MW-15A	4/14/2011	MW-15A	4/19/2017		
MW-15A	5/24/2000	MW-15A	10/26/2005	MW-15A	11/03/2011	MW-15A	11/08/2017		

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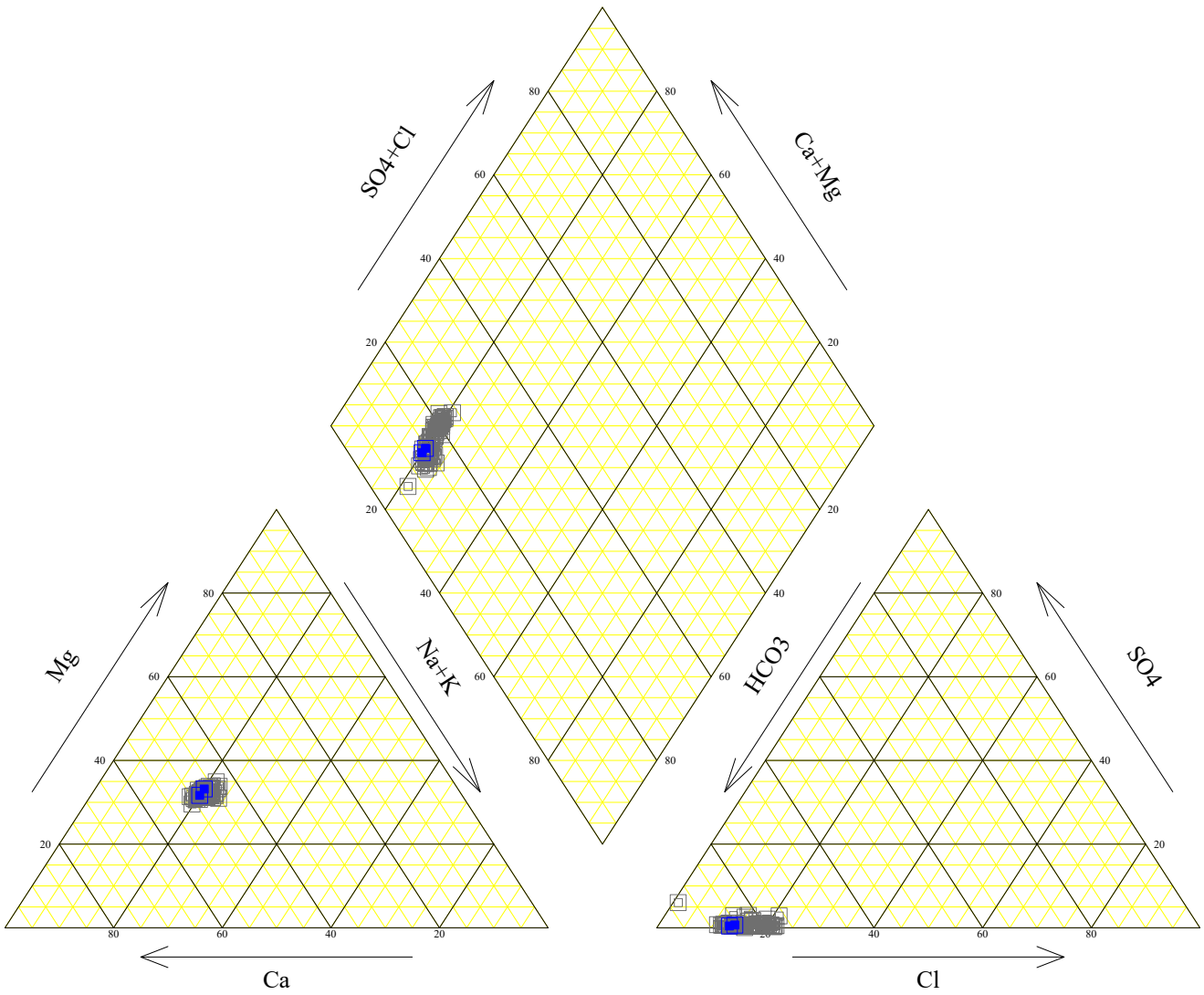
Figure F-6 MW-15B Groundwater



MW-15B 4/04/1997	MW-15B 8/22/2000	MW-15B 11/18/2003	MW-15B 10/05/2010	MW-15B 4/19/2017
MW-15B 5/19/1997	MW-15B 11/08/2000	MW-15B 4/20/2004	MW-15B 4/14/2011	MW-15B 11/08/2017
MW-15B 9/11/1997	MW-15B 1/30/2001	MW-15B 11/09/2004	MW-15B 11/02/2011	MW-15B 4/27/2018
MW-15B 12/19/1997	MW-15B 4/24/2001	MW-15B 10/25/2005	MW-15B 5/02/2012	MW-15B 11/06/2018
MW-15B 3/18/1998	MW-15B 8/28/2001	MW-15B 5/09/2006	MW-15B 11/13/2012	MW-15B 4/24/2019
MW-15B 6/11/1998	MW-15B 11/06/2001	MW-15B 10/17/2006	MW-15B 4/15/2013	MW-15B 11/20/2019
MW-15B 8/20/1998	MW-15B 1/31/2002	MW-15B 5/08/2007	MW-15B 11/19/2013	MW-15B 4/22/2020
MW-15B 12/17/1998	MW-15B 4/09/2002	MW-15B 11/07/2007	MW-15B 4/29/2014	MW-15B 11/11/2020
MW-15B 3/26/1999	MW-15B 7/23/2002	MW-15B 5/20/2008	MW-15B 11/18/2014	MW-15B 4/15/2021
MW-15B 6/18/1999	MW-15B 10/10/2002	MW-15B 11/11/2008	MW-15B 5/07/2015	MW-15B 11/17/2021
MW-15B 12/13/1999	MW-15B 2/25/2003	MW-15B 5/05/2009	MW-15B 11/11/2015	
MW-15B 2/08/2000	MW-15B 5/13/2003	MW-15B 11/17/2009	MW-15B 5/03/2016	
MW-15B 5/24/2000	MW-15B 8/20/2003	MW-15B 4/20/2010	MW-15B 11/16/2016	

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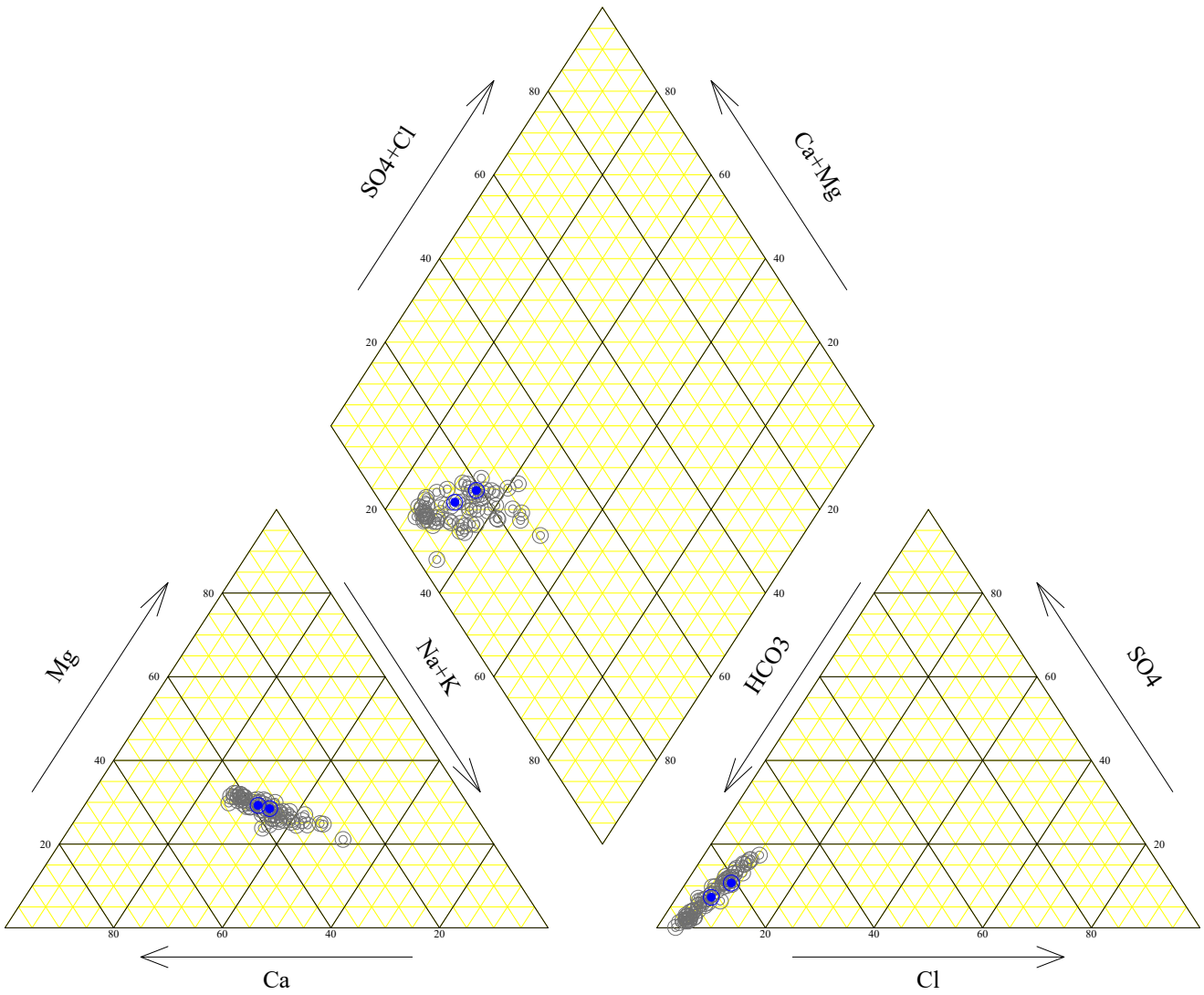
Figure F-7 MW-16A Groundwater



MW-16A 4/01/1997	MW-16A 4/24/2001	MW-16A 10/18/2006	MW-16A 11/18/2014
MW-16A 5/19/1997	MW-16A 8/28/2001	MW-16A 5/08/2007	MW-16A 5/07/2015
MW-16A 9/12/1997	MW-16A 11/06/2001	MW-16A 11/07/2007	MW-16A 12/28/2015
MW-16A 12/22/1997	MW-16A 1/31/2002	MW-16A 5/20/2008	MW-16A 5/03/2016
MW-16A 3/18/1998	MW-16A 4/09/2002	MW-16A 11/11/2008	MW-16A 11/16/2016
MW-16A 6/11/1998	MW-16A 7/23/2002	MW-16A 5/05/2009	MW-16A 4/19/2017
MW-16A 8/21/1998	MW-16A 10/09/2002	MW-16A 11/18/2009	MW-16A 11/07/2017 - 11/21/2017
MW-16A 12/17/1998	MW-16A 2/25/2003	MW-16A 4/20/2010	MW-16A 4/27/2018
MW-16A 3/26/1999	MW-16A 5/13/2003	MW-16A 10/06/2010	MW-16A 12/17/2018
MW-16A 6/17/1999	MW-16A 8/19/2003	MW-16A 4/14/2011	MW-16A 4/24/2019
MW-16A 12/13/1999	MW-16A 11/19/2003	MW-16A 11/03/2011	MW-16A 12/26/2019
MW-16A 2/09/2000	MW-16A 4/20/2004	MW-16A 5/02/2012	MW-16A 4/21/2020
MW-16A 5/25/2000	MW-16A 11/09/2004	MW-16A 11/13/2012	MW-16A 1/28/2021
MW-16A 8/22/2000	MW-16A 5/24/2005	MW-16A 4/11/2013	MW-16A 4/14/2021
MW-16A 11/08/2000	MW-16A 10/26/2005	MW-16A 11/19/2013	MW-16A 11/17/2021
MW-16A 1/30/2001	MW-16A 5/09/2006	MW-16A 4/29/2014	

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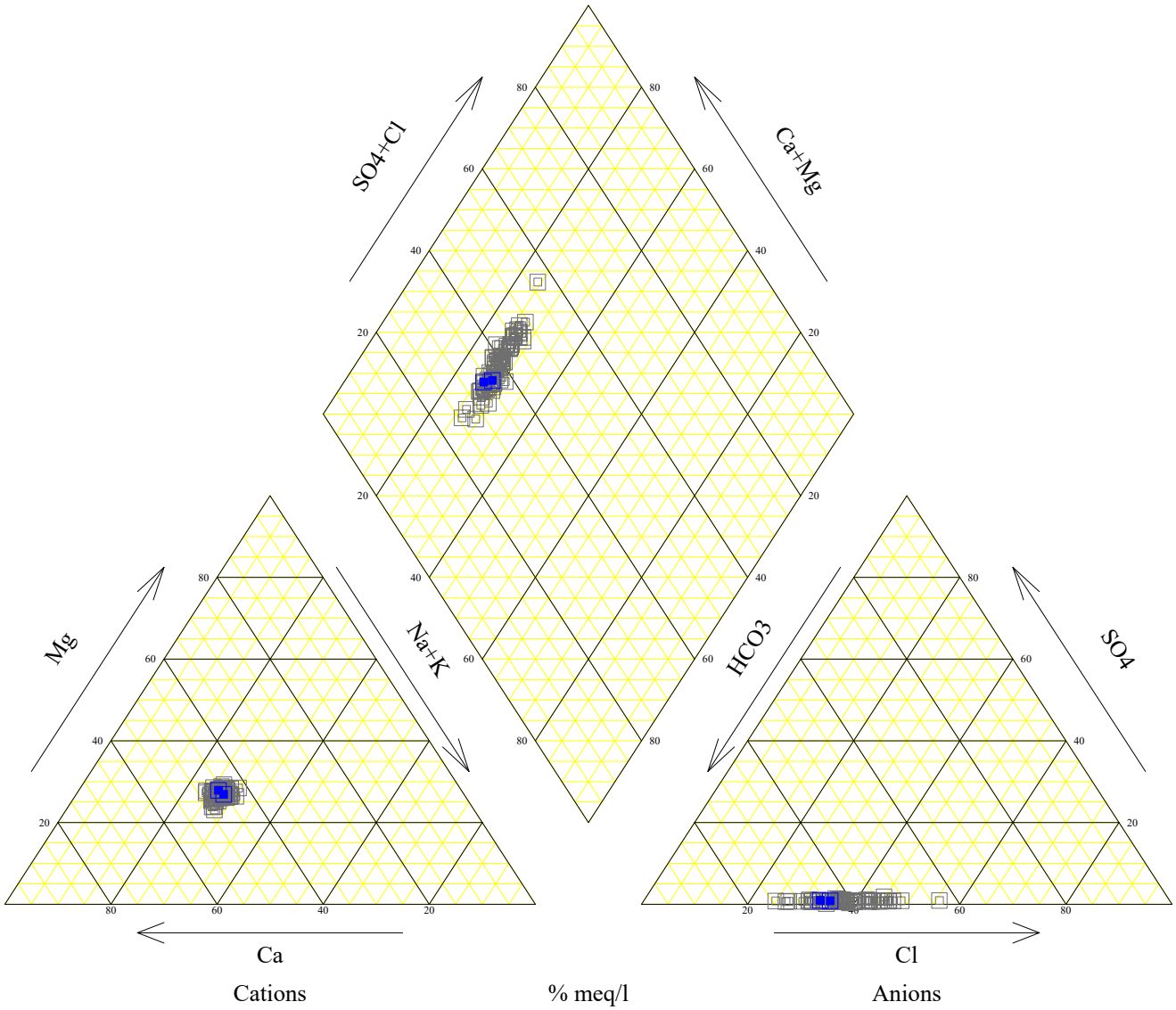
Figure F-8 MW-16B Groundwater



MW-16B 4/01/1997	MW-16B 8/22/2000	MW-16B 11/18/2003	MW-16B 4/20/2010	MW-16B 11/16/2016
MW-16B 5/19/1997	MW-16B 11/08/2000	MW-16B 4/20/2004	MW-16B 10/05/2010	MW-16B 4/19/2017
MW-16B 9/12/1997	MW-16B 1/30/2001	MW-16B 11/09/2004	MW-16B 4/14/2011	MW-16B 11/08/2017
MW-16B 12/22/1997	MW-16B 4/24/2001	MW-16B 5/24/2005	MW-16B 11/02/2011	MW-16B 4/27/2018
MW-16B 3/18/1998	MW-16B 8/28/2001	MW-16B 10/25/2005	MW-16B 5/02/2012	MW-16B 11/06/2018
MW-16B 6/11/1998	MW-16B 11/06/2001	MW-16B 5/09/2006	MW-16B 11/13/2012	MW-16B 4/24/2019
MW-16B 8/21/1998	MW-16B 1/31/2002	MW-16B 10/17/2006	MW-16B 4/11/2013	MW-16B 11/20/2019
MW-16B 12/17/1998	MW-16B 4/09/2002	MW-16B 5/08/2007	MW-16B 11/19/2013	MW-16B 4/21/2020
MW-16B 3/26/1999	MW-16B 7/23/2002	MW-16B 11/07/2007	MW-16B 4/29/2014	MW-16B 11/11/2020
MW-16B 6/17/1999	MW-16B 10/09/2002	MW-16B 5/20/2008	MW-16B 11/18/2014	MW-16B 4/14/2021
MW-16B 12/13/1999	MW-16B 2/25/2003	MW-16B 11/11/2008	MW-16B 5/07/2015	MW-16B 11/17/2021
MW-16B 2/09/2000	MW-16B 5/13/2003	MW-16B 5/05/2009	MW-16B 11/11/2015	
MW-16B 5/25/2000	MW-16B 8/19/2003	MW-16B 11/17/2009	MW-16B 5/03/2016	

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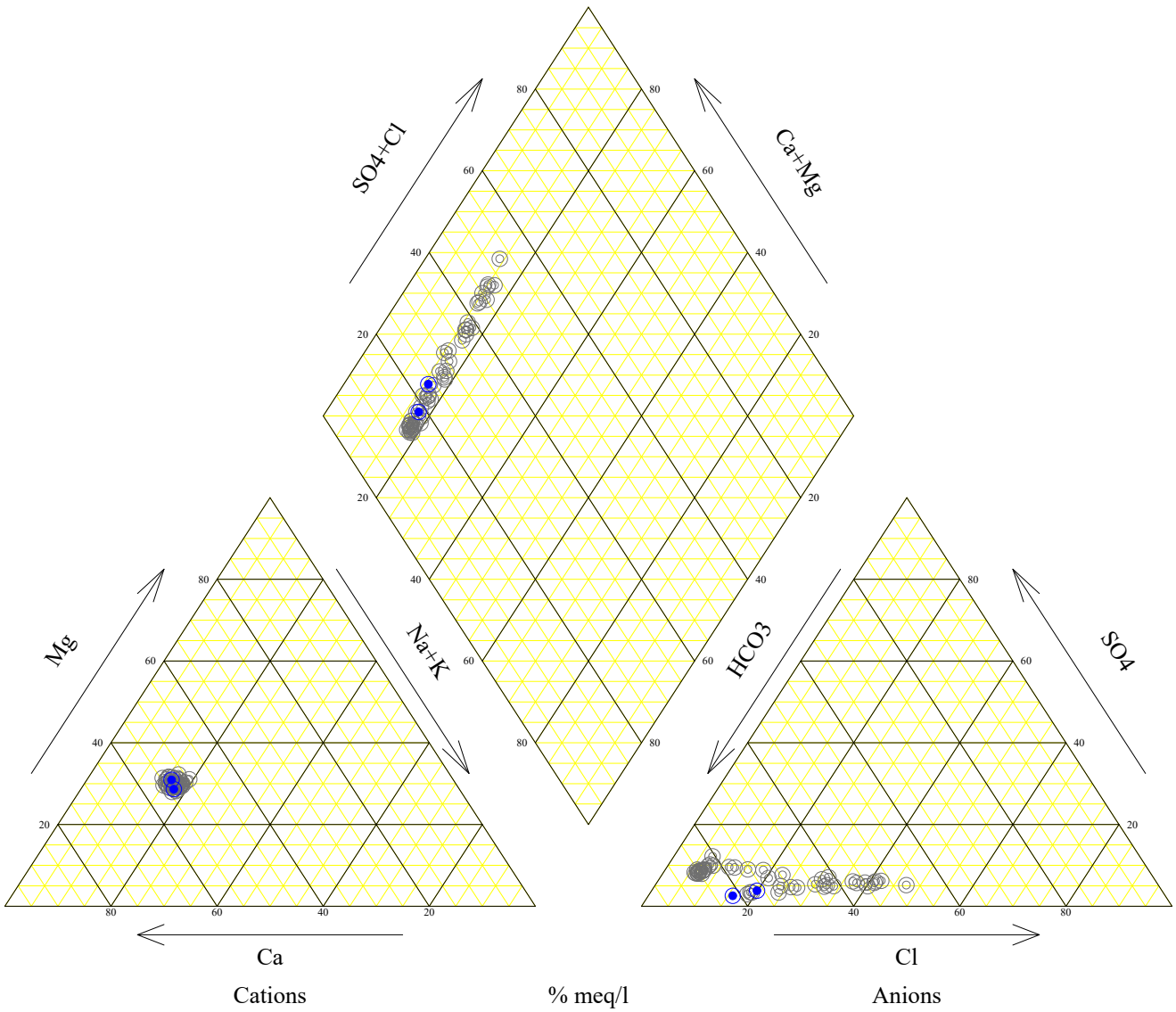
Figure F-9 MW-19A Groundwater



◎ MW-19A	3/26/2001	◎ MW-19A	11/20/2003	◎ MW-19A	5/07/2009	◎ MW-19A	5/02/2014	◎ MW-19A	11/20/2019
◎ MW-19A	5/09/2001	◎ MW-19A	4/22/2004	◎ MW-19A	11/19/2009	◎ MW-19A	11/20/2014	◎ MW-19A	4/23/2020
◎ MW-19A	8/30/2001	◎ MW-19A	11/10/2004	◎ MW-19A	4/20/2010	◎ MW-19A	5/14/2015	◎ MW-19A	11/10/2020
◎ MW-19A	11/08/2001	◎ MW-19A	5/27/2005	◎ MW-19A	10/06/2010	◎ MW-19A	11/12/2015	◉ MW-19A	4/16/2021
◎ MW-19A	1/28/2002	◎ MW-19A	10/27/2005	◎ MW-19A	4/12/2011	◎ MW-19A	5/05/2016	◉ MW-19A	11/19/2021
◎ MW-19A	4/11/2002	◎ MW-19A	5/11/2006	◎ MW-19A	11/01/2011	◎ MW-19A	11/17/2016		
◎ MW-19A	7/25/2002	◎ MW-19A	10/19/2006	◎ MW-19A	2/07/2012	◎ MW-19A	4/20/2017		
◎ MW-19A	10/09/2002	◎ MW-19A	5/10/2007	◎ MW-19A	5/01/2012	◎ MW-19A	11/07/2017		
◎ MW-19A	2/27/2003	◎ MW-19A	11/08/2007	◎ MW-19A	11/14/2012	◎ MW-19A	4/26/2018		
◎ MW-19A	5/16/2003	◎ MW-19A	5/21/2008	◎ MW-19A	4/10/2013	◎ MW-19A	11/06/2018		
◎ MW-19A	8/20/2003	◎ MW-19A	11/13/2008	◎ MW-19A	11/21/2013	◎ MW-19A	4/29/2019		

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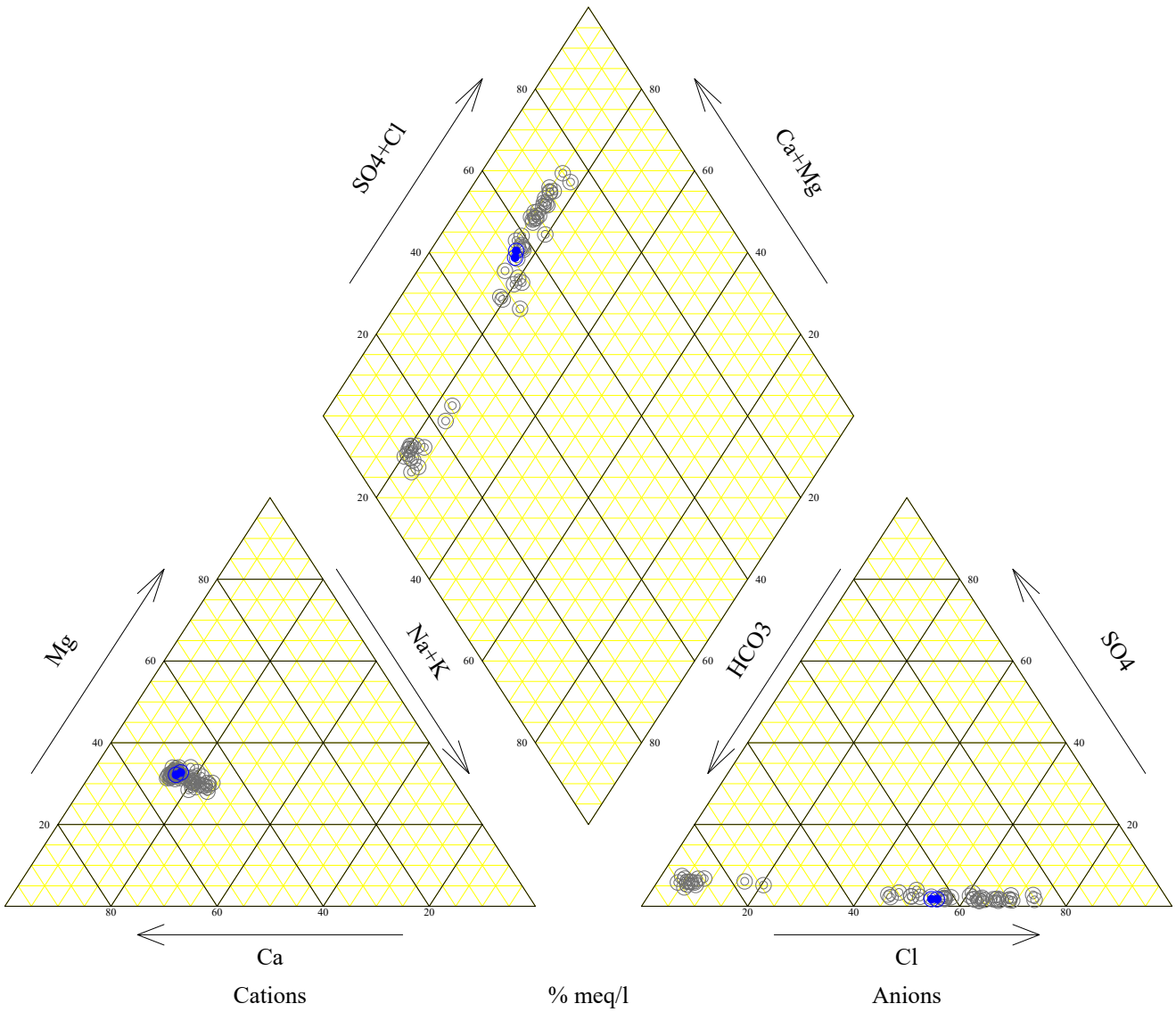
Figure F-10 MW-20A Groundwater



◎ MW-20A	3/26/2001	◎ MW-20A	11/20/2003	◎ MW-20A	11/13/2008	◎ MW-20A	10/25/2013	◎ MW-20A	4/23/2019
◎ MW-20A	5/09/2001	◎ MW-20A	4/22/2004	◎ MW-20A	5/07/2009	◎ MW-20A	5/02/2014	◎ MW-20A	11/19/2019
◎ MW-20A	8/29/2001	◎ MW-20A	11/10/2004	◎ MW-20A	11/19/2009	◎ MW-20A	11/19/2014	◎ MW-20A	4/20/2020
◎ MW-20A	11/08/2001	◎ MW-20A	5/27/2005	◎ MW-20A	4/21/2010	◎ MW-20A	5/14/2015	◎ MW-20A	11/10/2020
◎ MW-20A	1/29/2002	◎ MW-20A	10/27/2005	◎ MW-20A	10/06/2010	◎ MW-20A	11/12/2015	◉ MW-20A	4/13/2021
◎ MW-20A	4/12/2002	◎ MW-20A	5/11/2006	◎ MW-20A	4/12/2011	◎ MW-20A	5/05/2016	◉ MW-20A	11/16/2021
◎ MW-20A	7/24/2002	◎ MW-20A	10/19/2006	◎ MW-20A	11/01/2011	◎ MW-20A	11/17/2016		
◎ MW-20A	10/08/2002	◎ MW-20A	5/10/2007	◎ MW-20A	2/09/2012	◎ MW-20A	4/18/2017		
◎ MW-20A	2/26/2003	◎ MW-20A	7/24/2007	◎ MW-20A	5/01/2012	◎ MW-20A	11/07/2017		
◎ MW-20A	5/15/2003	◎ MW-20A	11/08/2007	◎ MW-20A	11/14/2012	◎ MW-20A	5/01/2018		
◎ MW-20A	8/21/2003	◎ MW-20A	5/21/2008	◎ MW-20A	4/12/2013	◎ MW-20A	11/07/2018		

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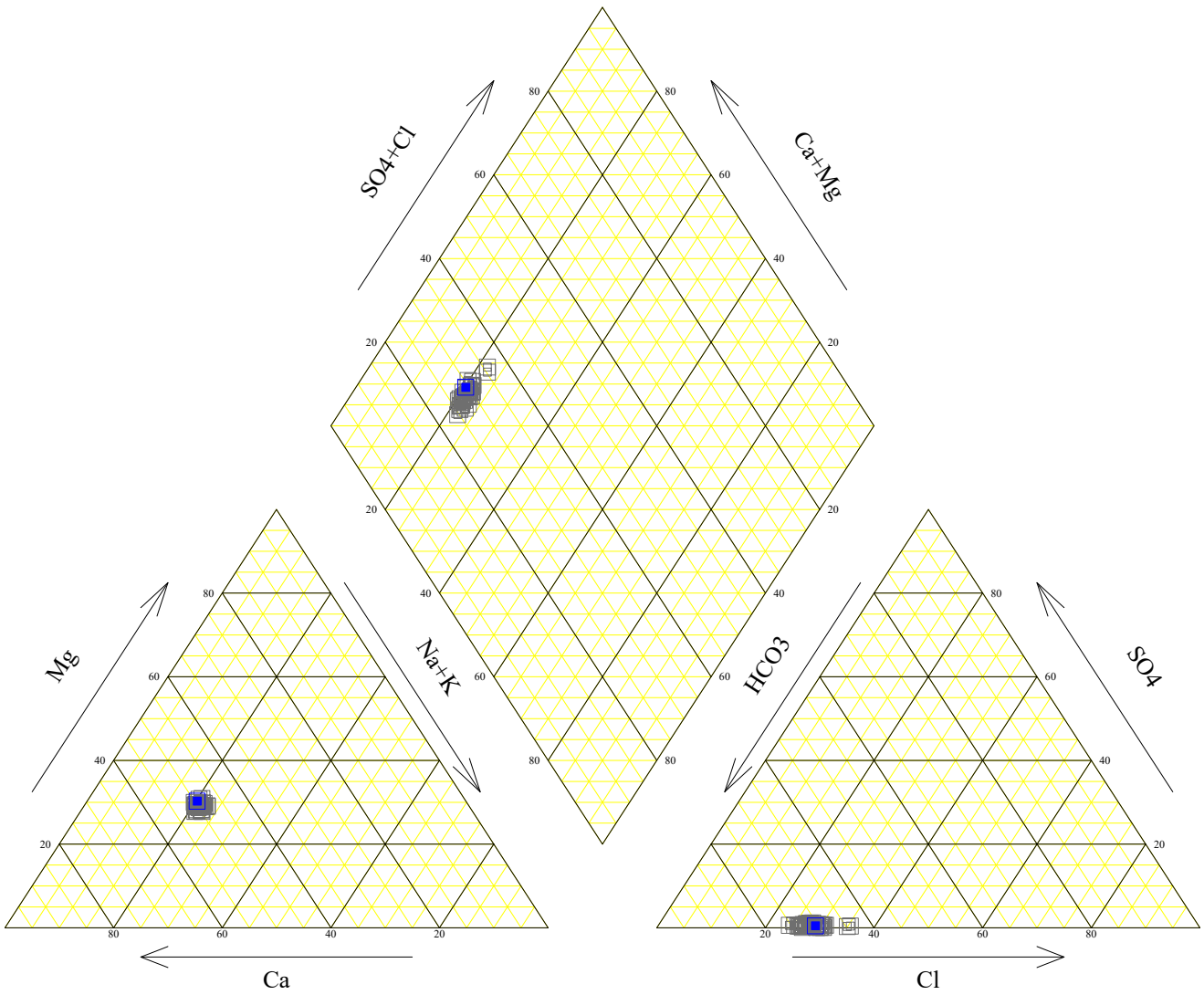
Figure F-11 MW-20B Groundwater



MW-20B	11/09/2000	MW-20B	2/26/2003	MW-20B	5/07/2009	MW-20B	5/01/2018
MW-20B	3/26/2001	MW-20B	5/15/2003	MW-20B	4/21/2010	MW-20B	4/24/2019
MW-20B	5/09/2001	MW-20B	8/21/2003	MW-20B	4/12/2011	MW-20B	4/20/2020
MW-20B	8/29/2001	MW-20B	11/20/2003	MW-20B	5/01/2012	MW-20B	4/13/2021
MW-20B	11/08/2001	MW-20B	4/22/2004	MW-20B	4/12/2013		
MW-20B	1/29/2002	MW-20B	5/27/2005	MW-20B	5/01/2014		
MW-20B	4/12/2002	MW-20B	5/11/2006	MW-20B	5/11/2015		
MW-20B	7/24/2002	MW-20B	5/10/2007	MW-20B	5/05/2016		
MW-20B	10/08/2002	MW-20B	5/21/2008	MW-20B	4/18/2017		

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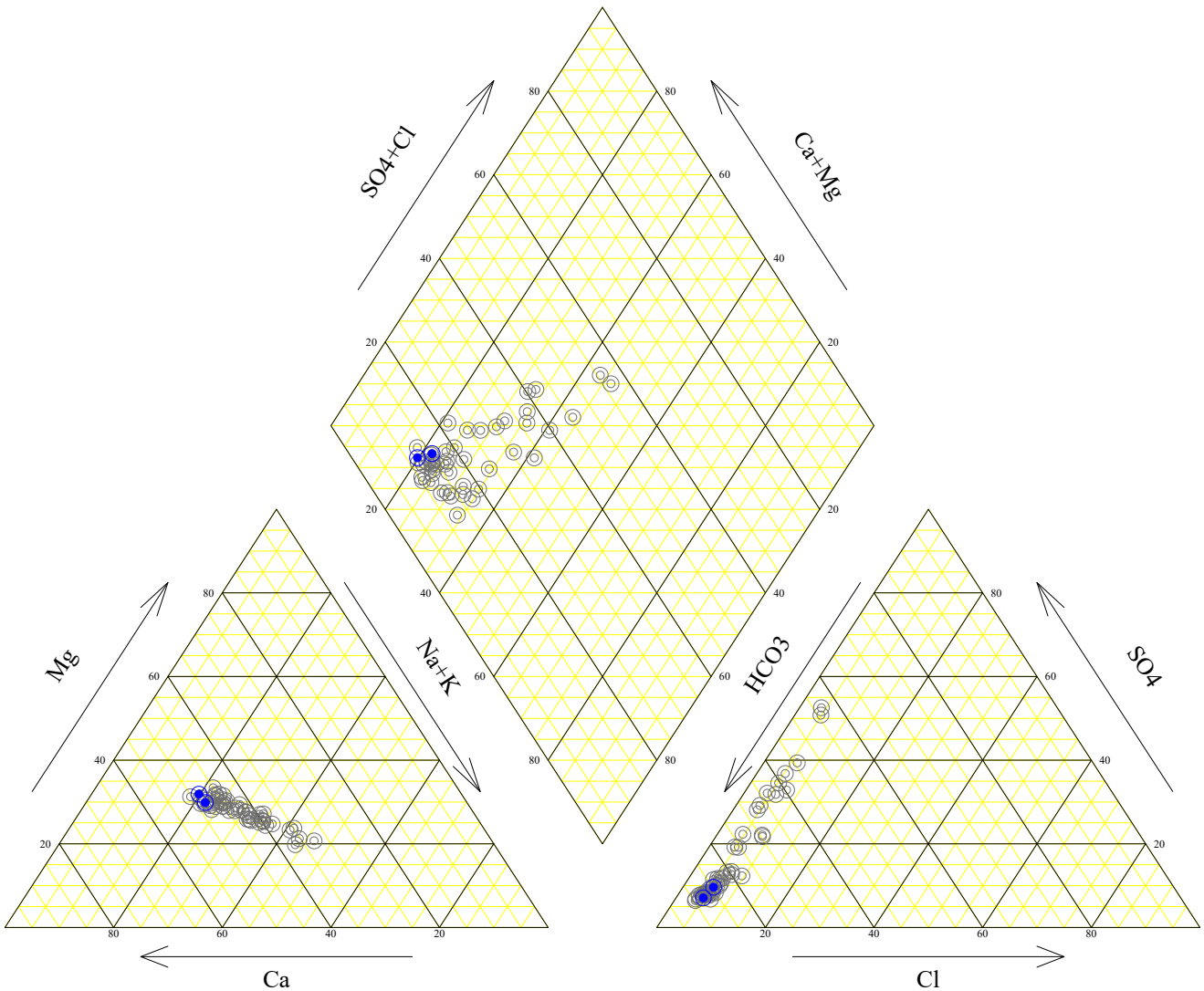
Figure F-12 MW-21A Groundwater



◎	MW-21A	1/31/2001	◎ MW-21A	4/21/2004	◎ MW-21A	4/21/2010	◎ MW-21A	11/12/2015	◉ MW-21A 4/13/2021
◎	MW-21A	4/25/2001	◎ MW-21A	5/25/2005	◎ MW-21A	11/24/2010	◎ MW-21A	5/04/2016	◉ MW-21A 11/18/2021
◎	MW-21A	8/28/2001	◎ MW-21A	10/27/2005	◎ MW-21A	4/15/2011	◎ MW-21A	11/17/2016	
◎	MW-21A	11/06/2001	◎ MW-21A	5/10/2006	◎ MW-21A	1/12/2012	◎ MW-21A	4/20/2017	
◎	MW-21A	1/30/2002	◎ MW-21A	11/22/2006	◎ MW-21A	5/01/2012	◎ MW-21A	11/08/2017	
◎	MW-21A	4/10/2002	◎ MW-21A	5/09/2007	◎ MW-21A	11/14/2012	◎ MW-21A	4/25/2018	
◎	MW-21A	7/25/2002	◎ MW-21A	11/08/2007	◎ MW-21A	4/09/2013	◎ MW-21A	12/17/2018	
◎	MW-21A	2/26/2003	◎ MW-21A	5/21/2008	◎ MW-21A	11/20/2013	◎ MW-21A	4/29/2019	
◎	MW-21A	5/14/2003	◎ MW-21A	11/12/2008	◎ MW-21A	4/29/2014	◎ MW-21A	12/26/2019	
◎	MW-21A	8/19/2003	◎ MW-21A	5/06/2009	◎ MW-21A	11/19/2014	◎ MW-21A	4/21/2020	
◎	MW-21A	11/20/2003	◎ MW-21A	11/18/2009	◎ MW-21A	5/12/2015	◎ MW-21A	1/28/2021	

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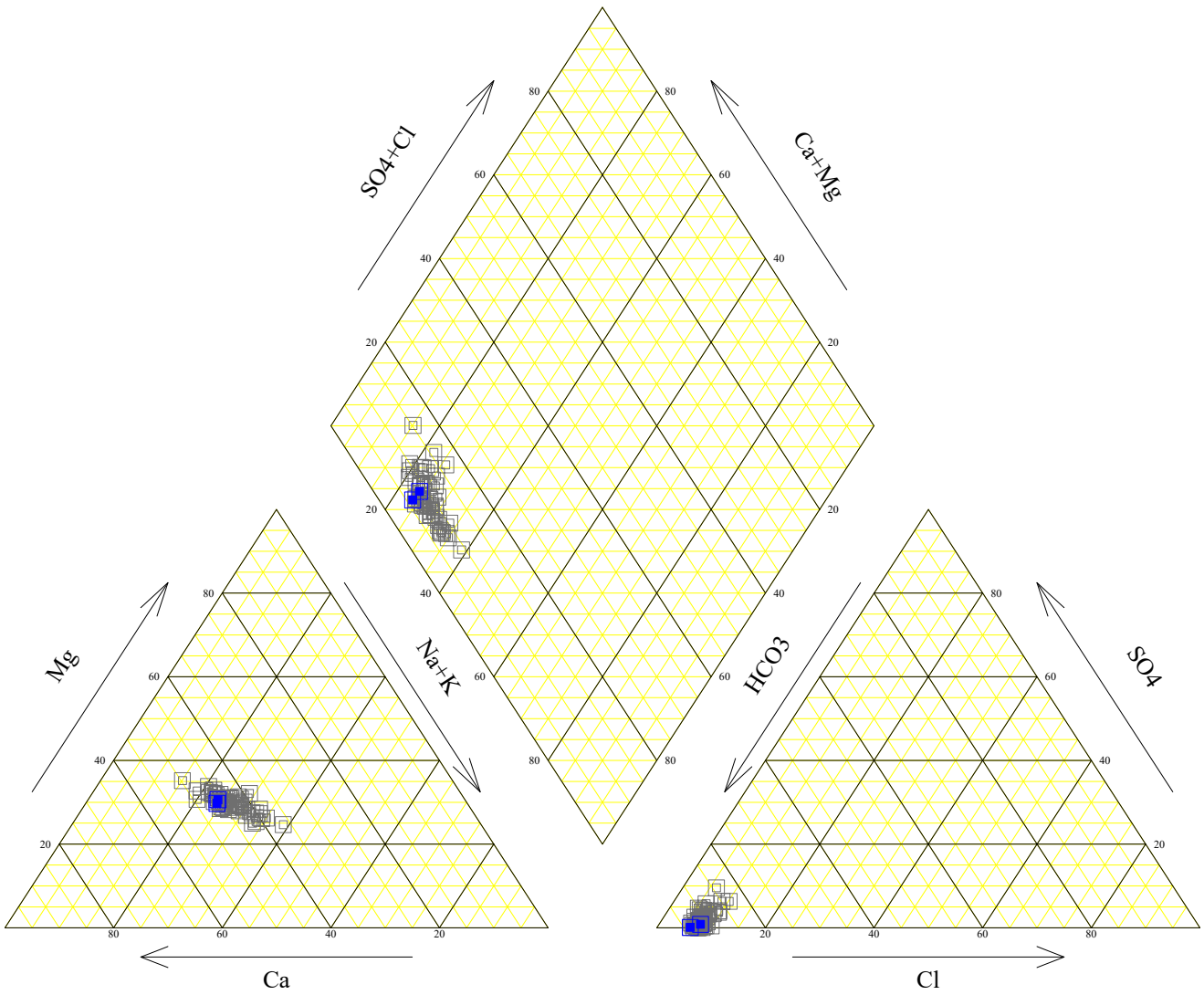
Figure F-13 MW-21B Groundwater



MW-21B	1/31/2001	MW-21B	11/19/2003	MW-21B	5/06/2009	MW-21B	11/19/2014	MW-21B	4/21/2020
MW-21B	4/25/2001	MW-21B	4/21/2004	MW-21B	11/18/2009	MW-21B	5/12/2015	MW-21B	11/10/2020
MW-21B	8/28/2001	MW-21B	11/10/2004	MW-21B	4/21/2010	MW-21B	11/12/2015	MW-21B	4/14/2021
MW-21B	11/06/2001	MW-21B	5/25/2005	MW-21B	10/06/2010	MW-21B	5/04/2016	MW-21B	11/16/2021
MW-21B	1/30/2002	MW-21B	10/26/2005	MW-21B	4/15/2011	MW-21B	11/17/2016		
MW-21B	4/10/2002	MW-21B	5/10/2006	MW-21B	11/01/2011	MW-21B	4/20/2017		
MW-21B	7/24/2002	MW-21B	10/18/2006	MW-21B	5/01/2012	MW-21B	11/08/2017		
MW-21B	10/08/2002	MW-21B	5/09/2007	MW-21B	11/14/2012	MW-21B	4/25/2018		
MW-21B	2/26/2003	MW-21B	11/08/2007	MW-21B	4/12/2013	MW-21B	11/07/2018		
MW-21B	5/14/2003	MW-21B	5/21/2008	MW-21B	11/20/2013	MW-21B	4/29/2019		
MW-21B	8/20/2003	MW-21B	11/12/2008	MW-21B	4/30/2014	MW-21B	11/19/2019		

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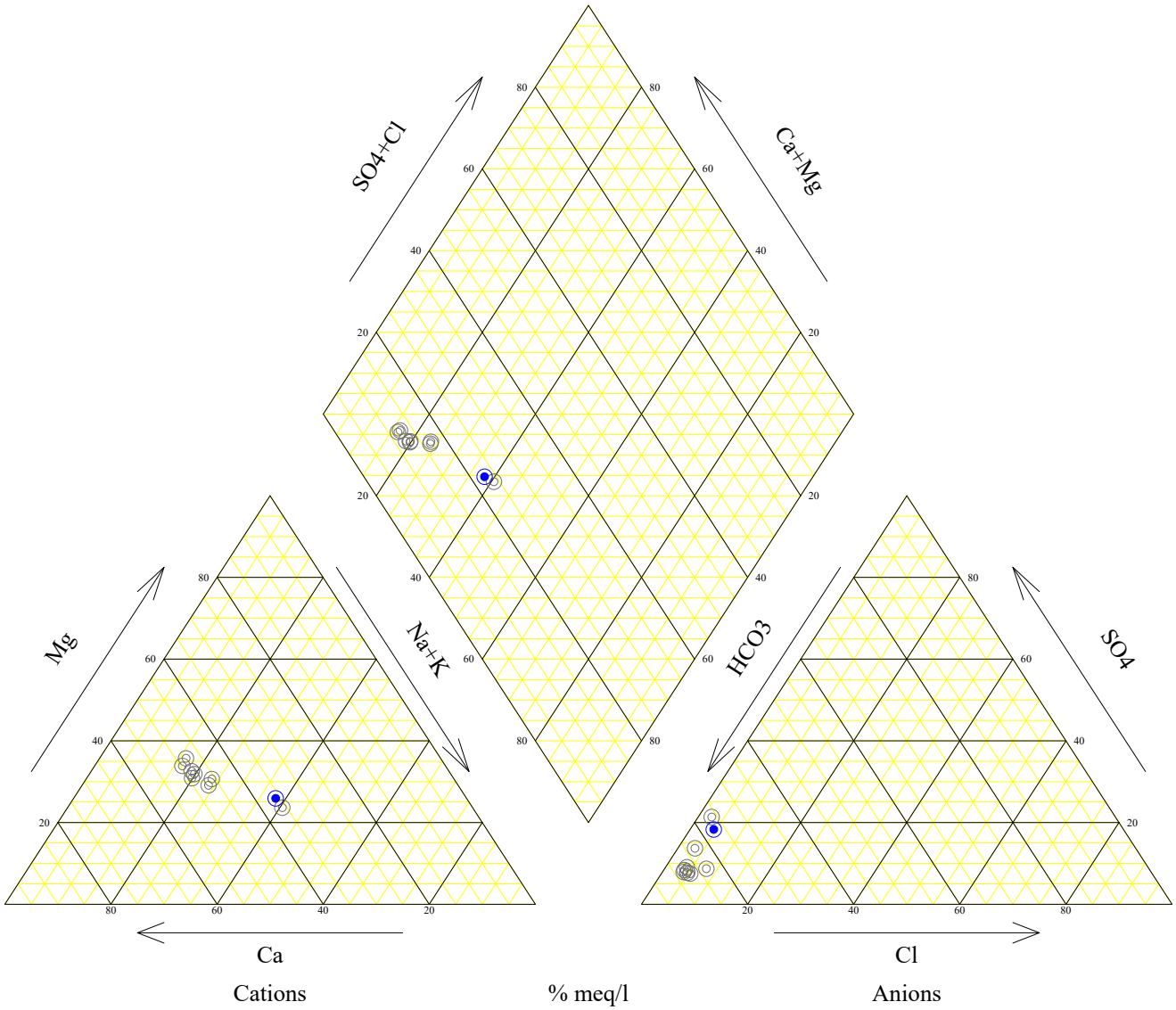
Figure F-14 MW-22A Groundwater



◎	MW-22A	4/13/2011	
◎	MW-22A	4/19/2013	
◎	MW-22A	4/30/2014	
◎	MW-22A	12/28/2015	
◎	MW-22A	12/28/2016	
◎	MW-22A	4/18/2017	
◎	MW-22A	5/01/2018	
◎	MW-22A	4/24/2019	
◉	MW-22A	11/16/2021	

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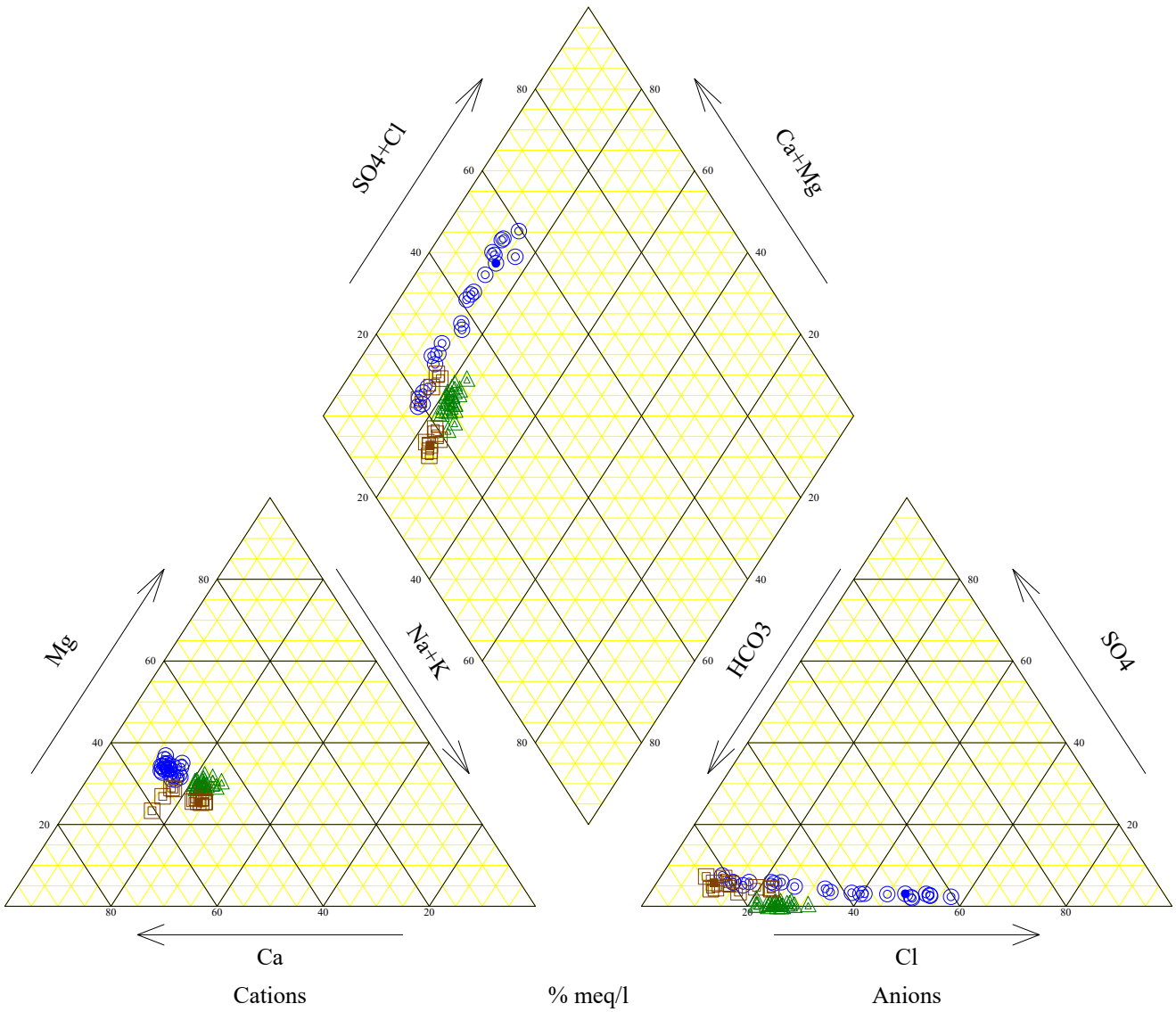
Figure F-15 P-05A, P-06A, and P-07A Groundwater



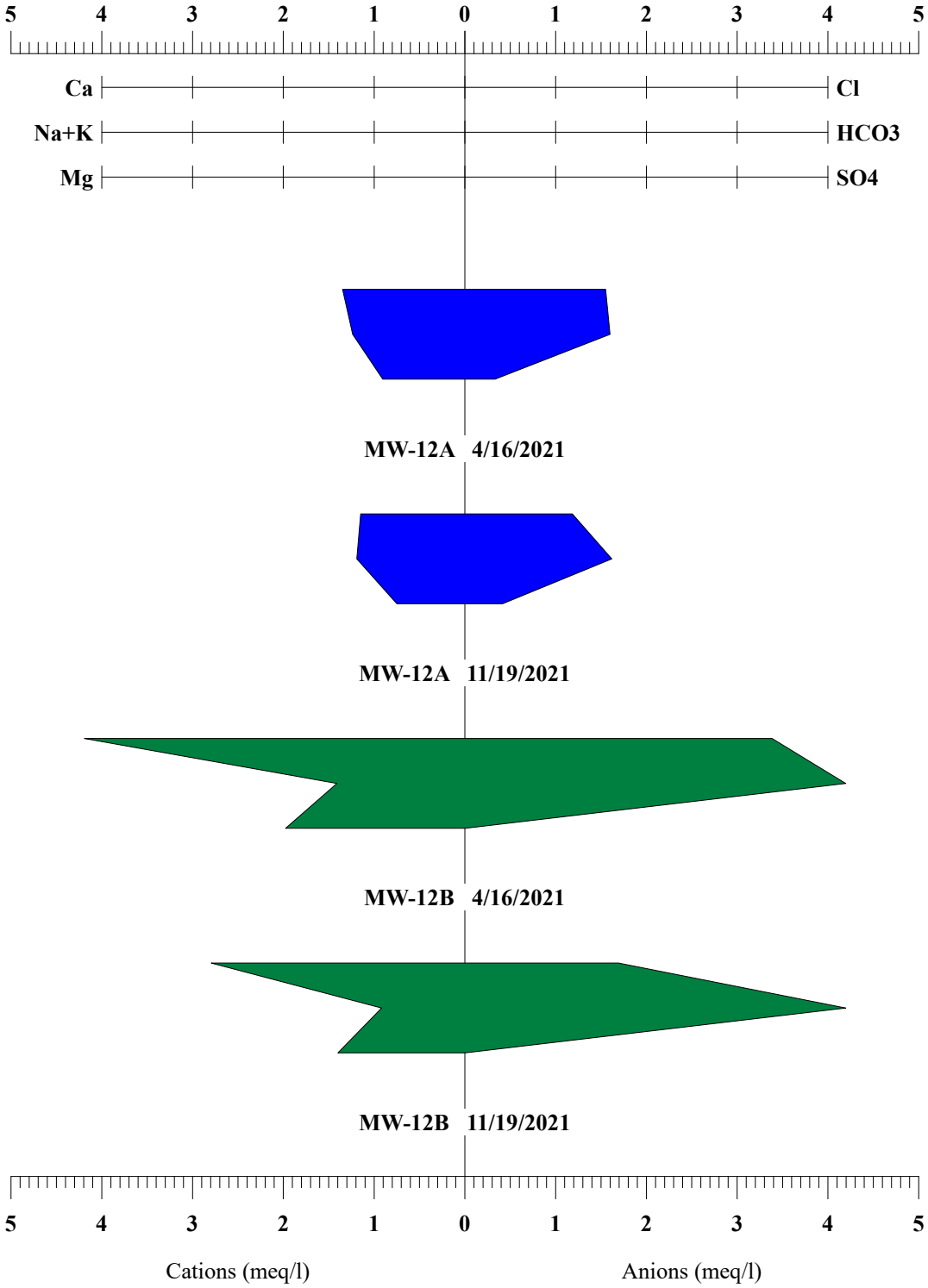
P-05A	10/27/2005	P-05A	2/09/2012	P-06A	10/27/2005	P-06A	2/09/2012	P-07A	2/09/2012
P-05A	5/12/2006	P-05A	5/03/2012	P-06A	5/12/2006	P-06A	5/03/2012	P-07A	5/03/2012
P-05A	10/19/2006	P-05A	4/09/2013	P-06A	10/19/2006	P-06A	4/10/2013	P-07A	4/09/2013
P-05A	5/10/2007	P-05A	5/02/2014	P-06A	5/10/2007	P-06A	5/02/2014	P-07A	5/01/2014
P-05A	7/24/2007	P-05A	5/06/2015	P-06A	7/24/2007	P-06A	5/06/2015	P-07A	5/06/2015
P-05A	11/07/2007	P-05A	5/05/2016	P-06A	11/07/2007	P-06A	5/06/2016	P-07A	5/05/2016
P-05A	5/22/2008	P-05A	4/18/2017	P-06A	5/22/2008	P-06A	4/19/2017	P-07A	4/18/2017
P-05A	11/14/2008	P-05A	4/30/2018	P-06A	11/14/2008	P-06A	5/01/2018	P-07A	4/30/2018
P-05A	5/07/2009	P-05A	4/23/2019	P-06A	5/08/2009	P-06A	4/24/2019	P-07A	4/24/2019
P-05A	4/23/2010	P-05A	4/23/2020	P-06A	4/28/2010	P-06A	4/28/2020	P-07A	4/23/2020
P-05A	4/12/2011	P-05A	4/13/2021	P-06A	4/12/2011	P-06A	4/14/2021	P-07A	4/13/2021

Prepared by: SCS Engineers

Stiff Plots

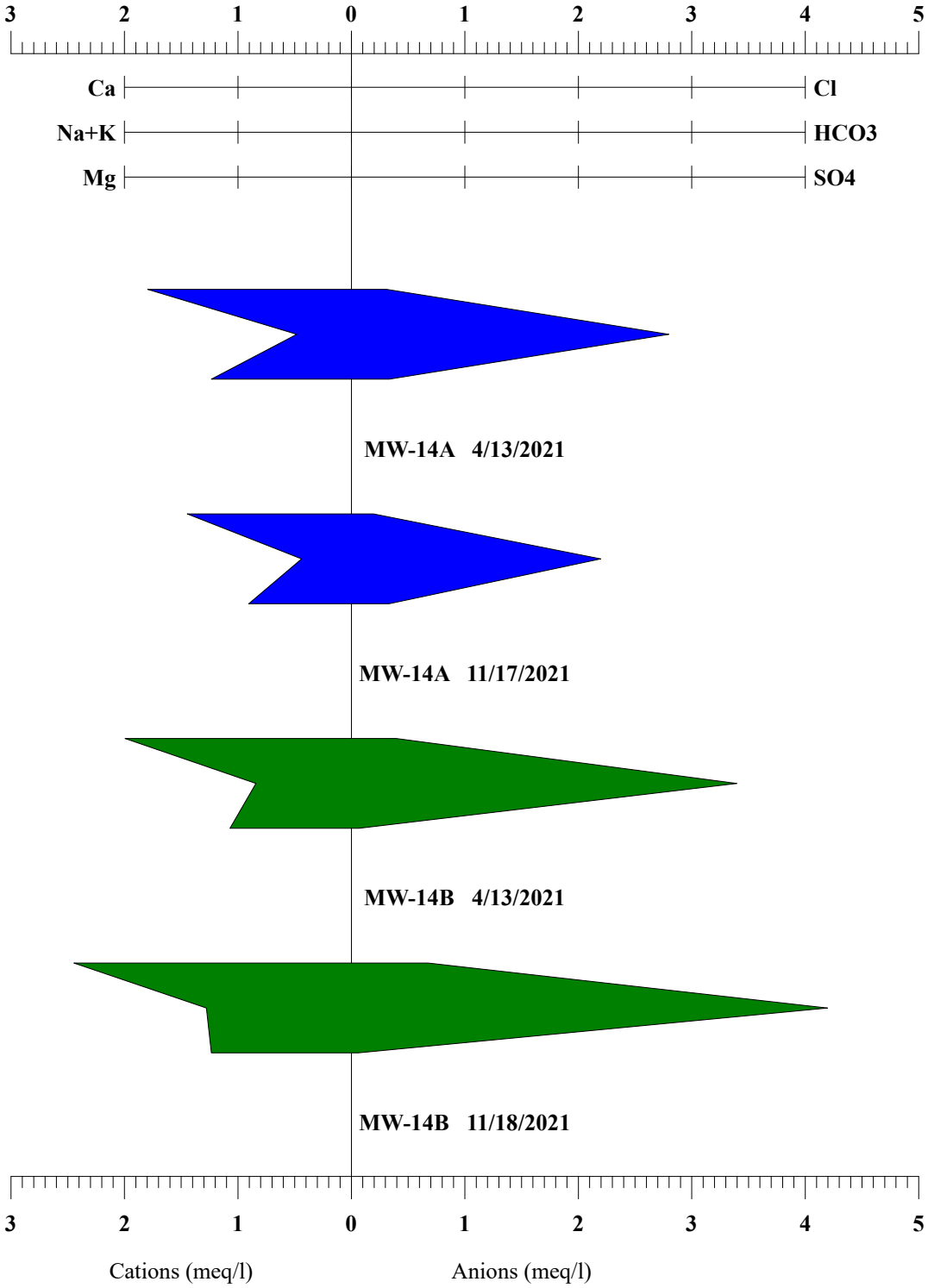
Groundwater

Figure F-16: 2021 MW-12A and MW-12B Groundwater



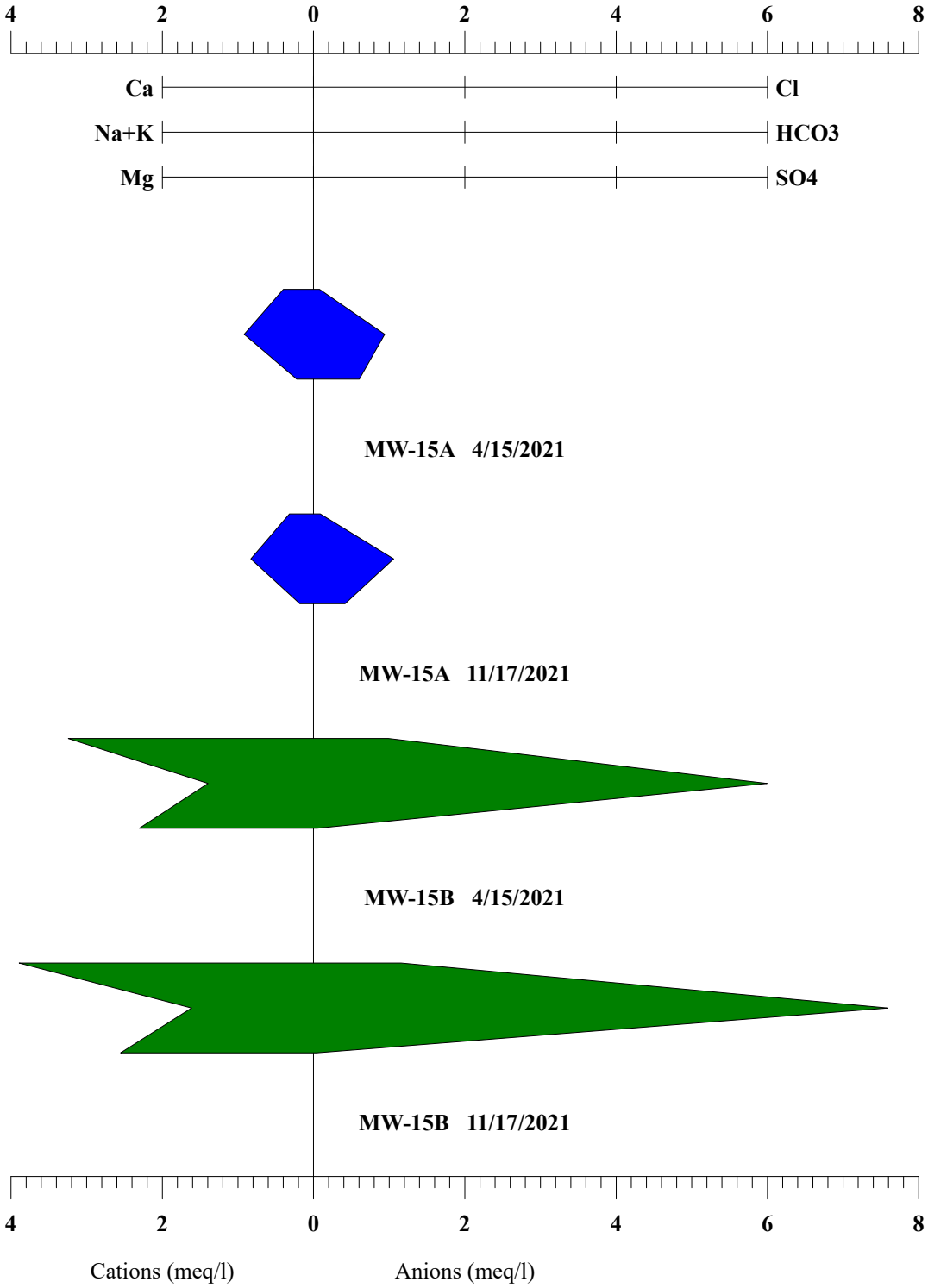
Prepared by: SCS Engineers

Figure F-17 2021 MW-14A and MW-14B Groundwater



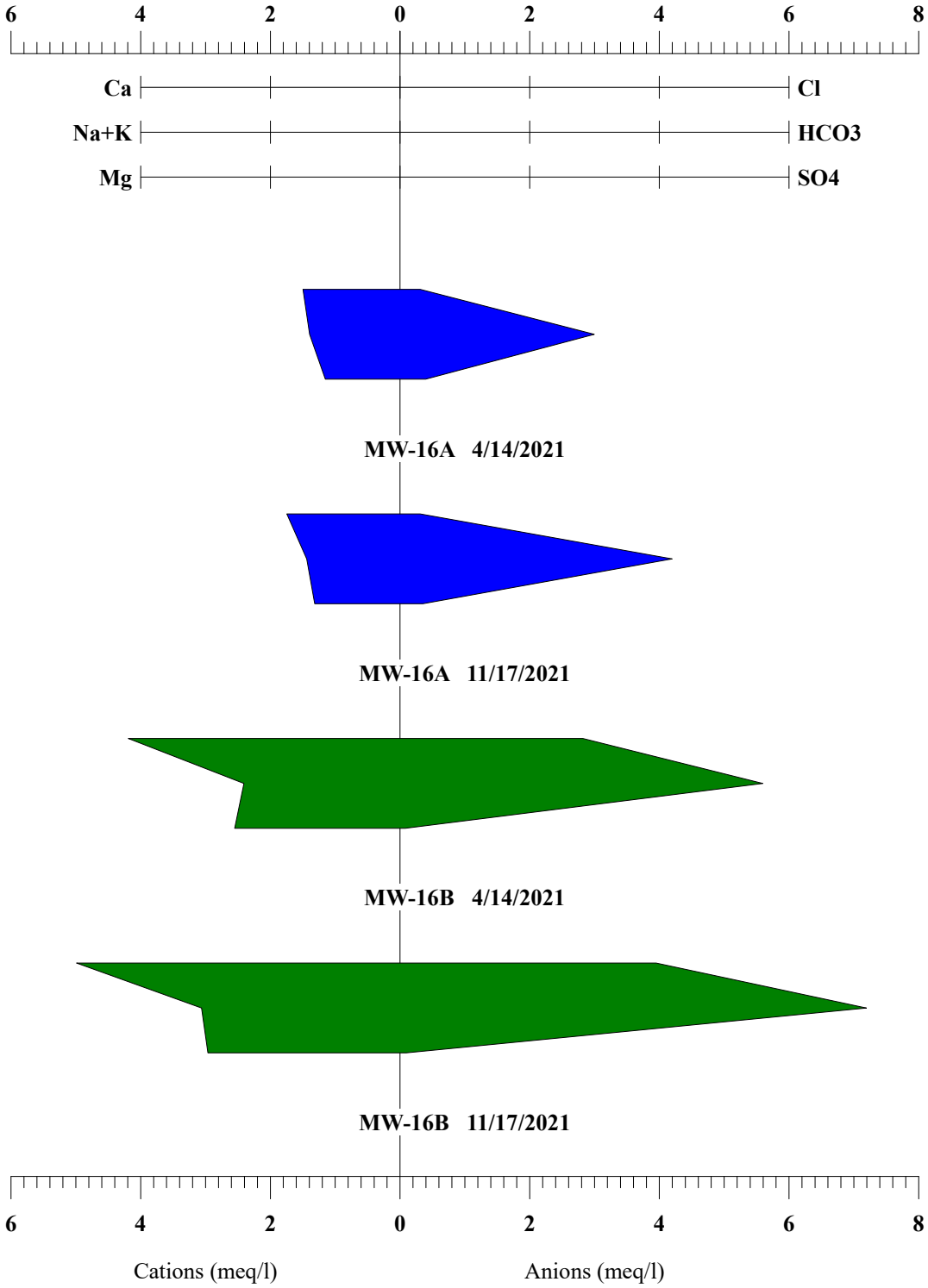
Prepared by: SCS Engineers

Figure F-18 2021 MW-15A and MW-15B Groundwater



Prepared by: SCS Engineers

Figure F-19 2021 MW-16A and MW-16B Groundwater



Prepared by: SCS Engineers

Figure F-20 MW-19A and MW-20A-B Stiff

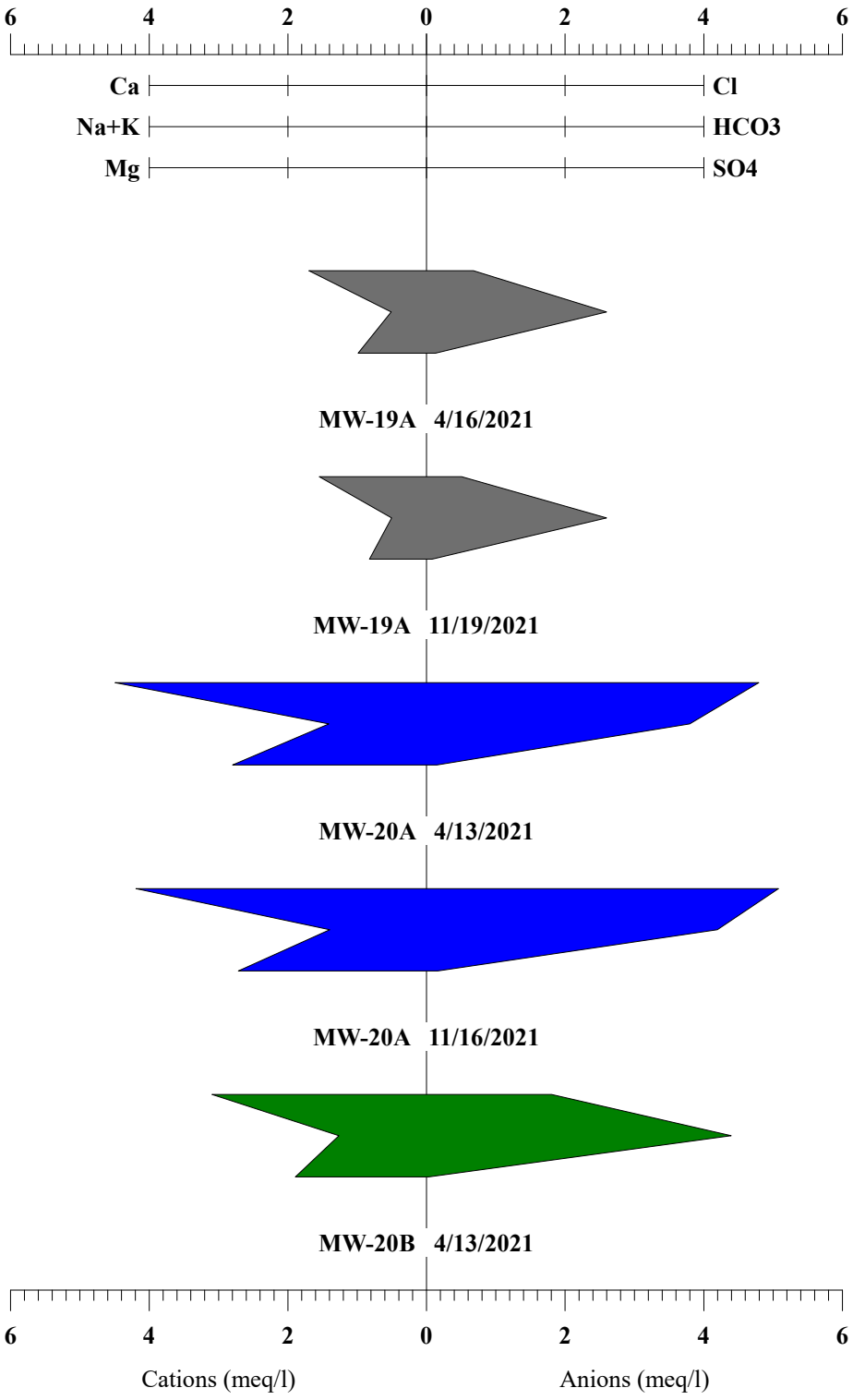
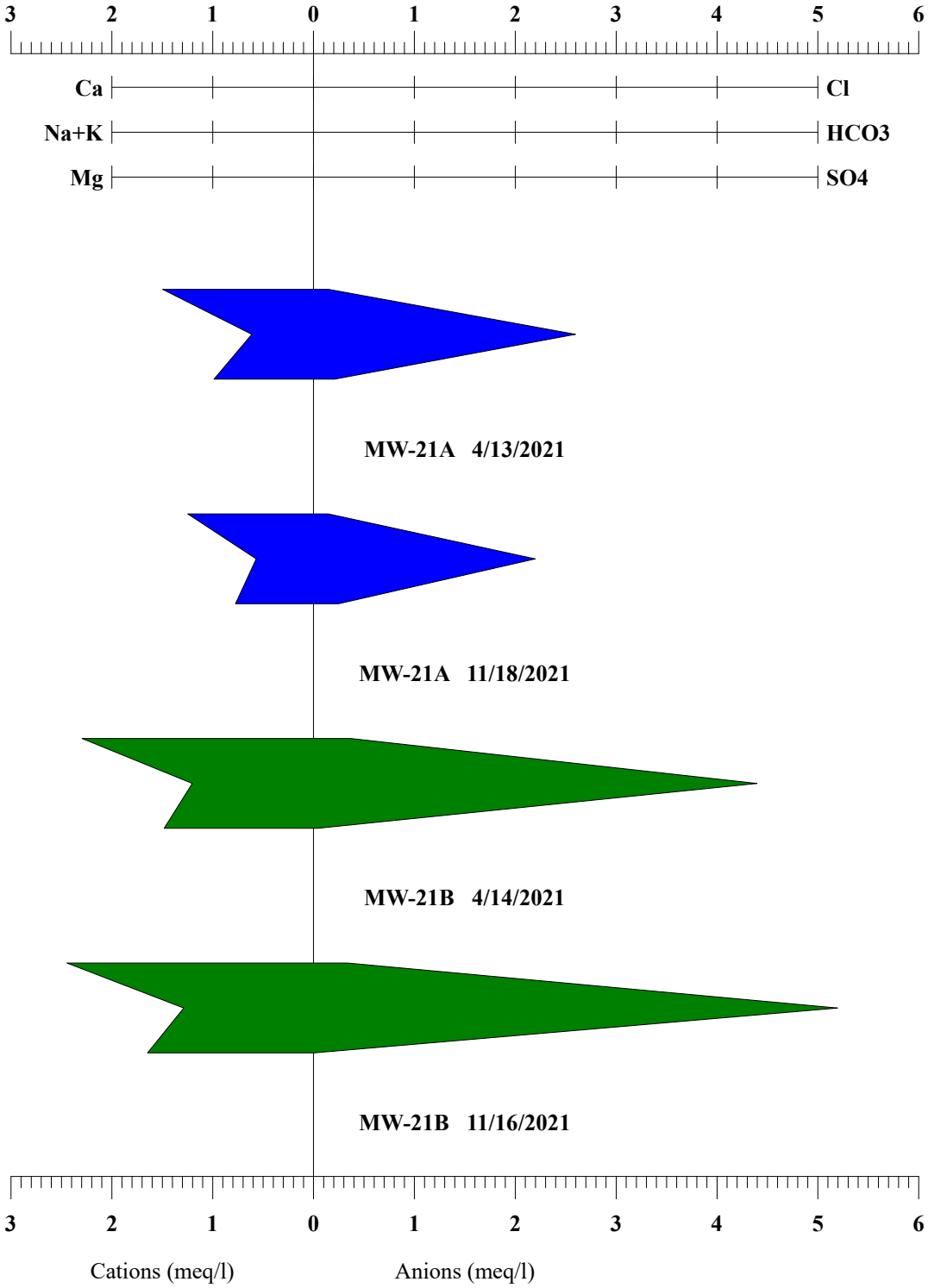
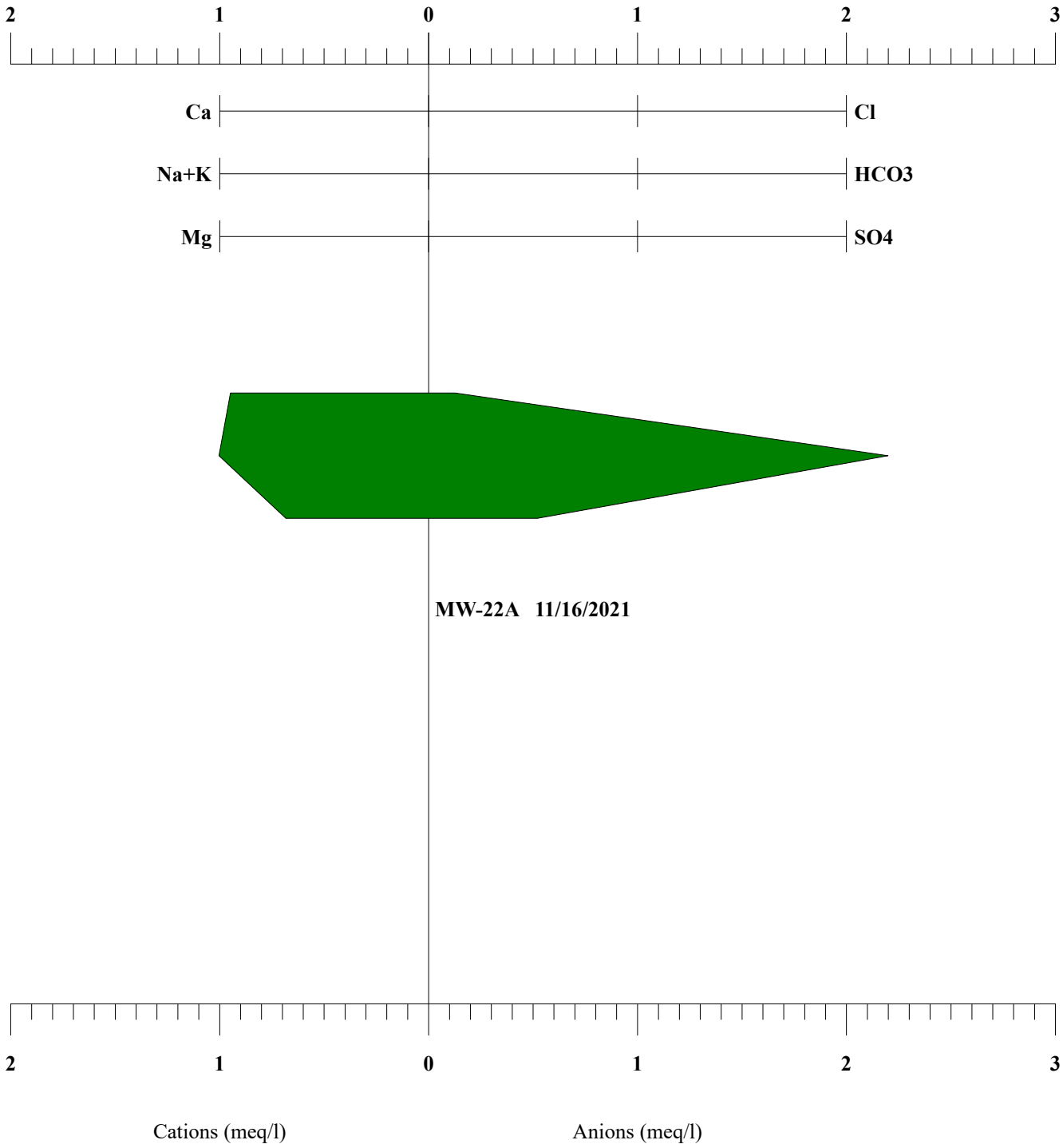


Figure F-21 2021 MW-21A and MW-21B



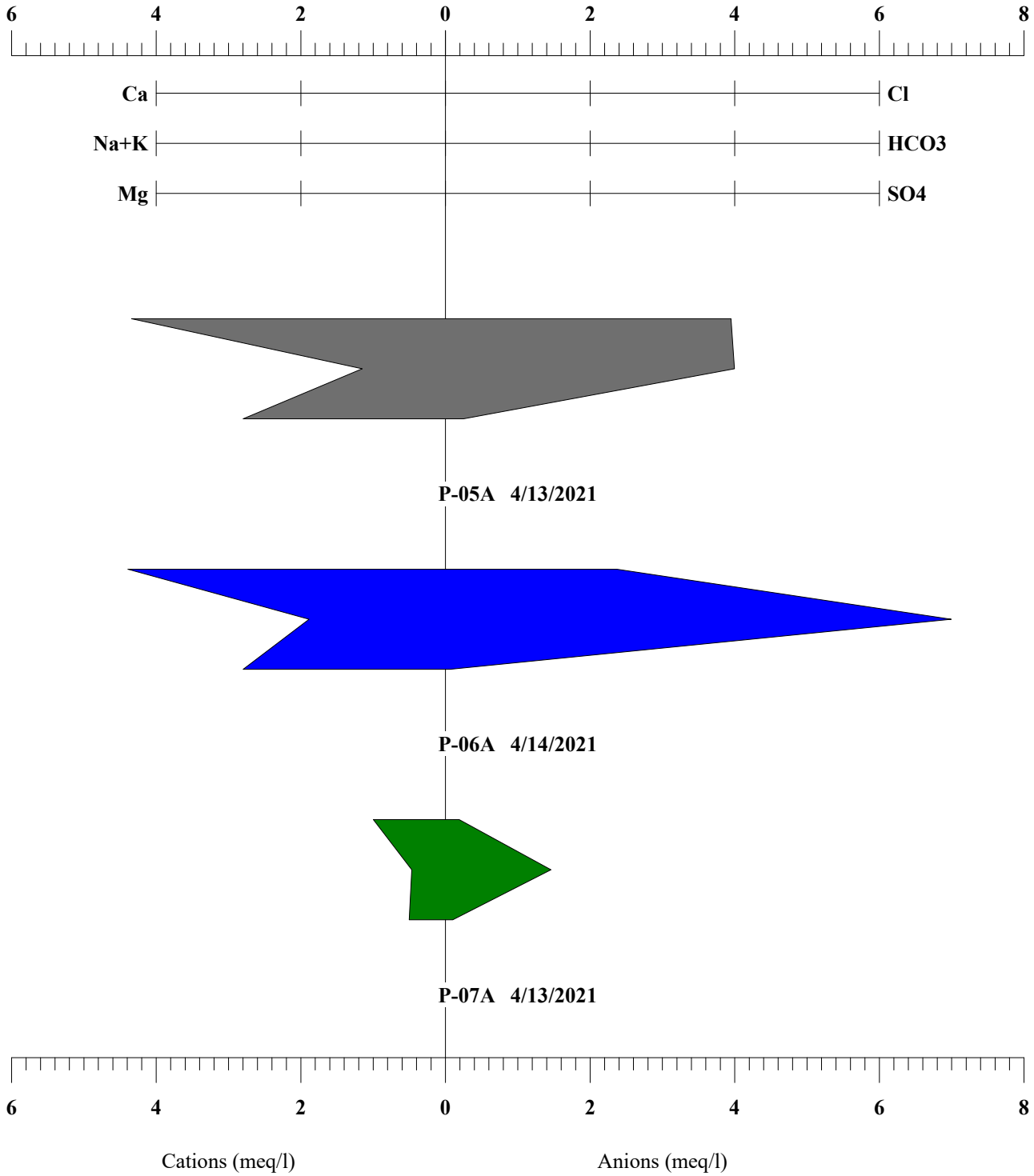
Prepared by: SCS Engineers

Figure F-22 2021 MW-22A Groundwater



Prepared by: SCS Engineers

Figure F-23 2021 P-05A, P-06A, and P-07A Groundwater

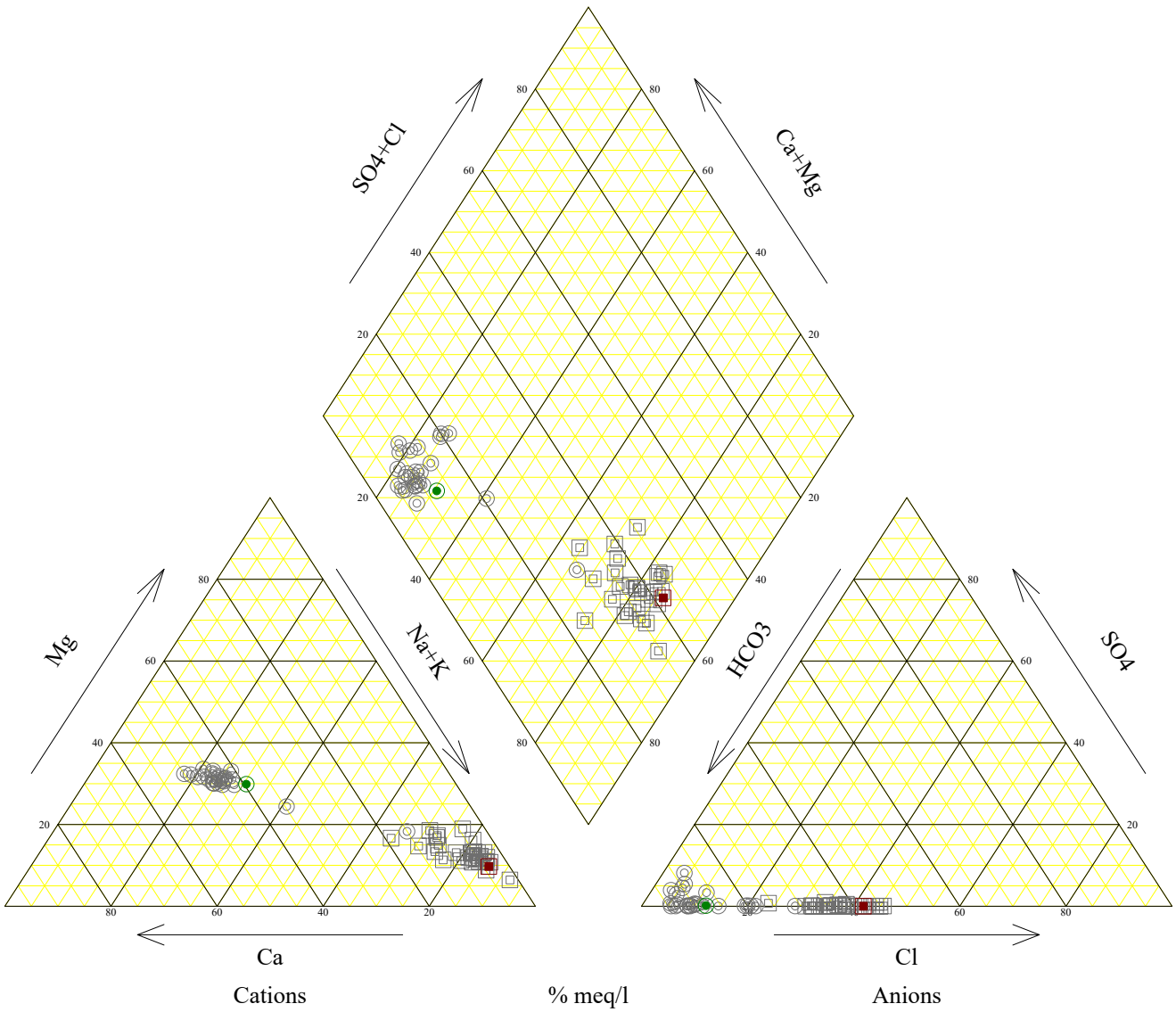


Prepared by: SCS Engineers

Trilinear Diagrams

Leachate Management Systems

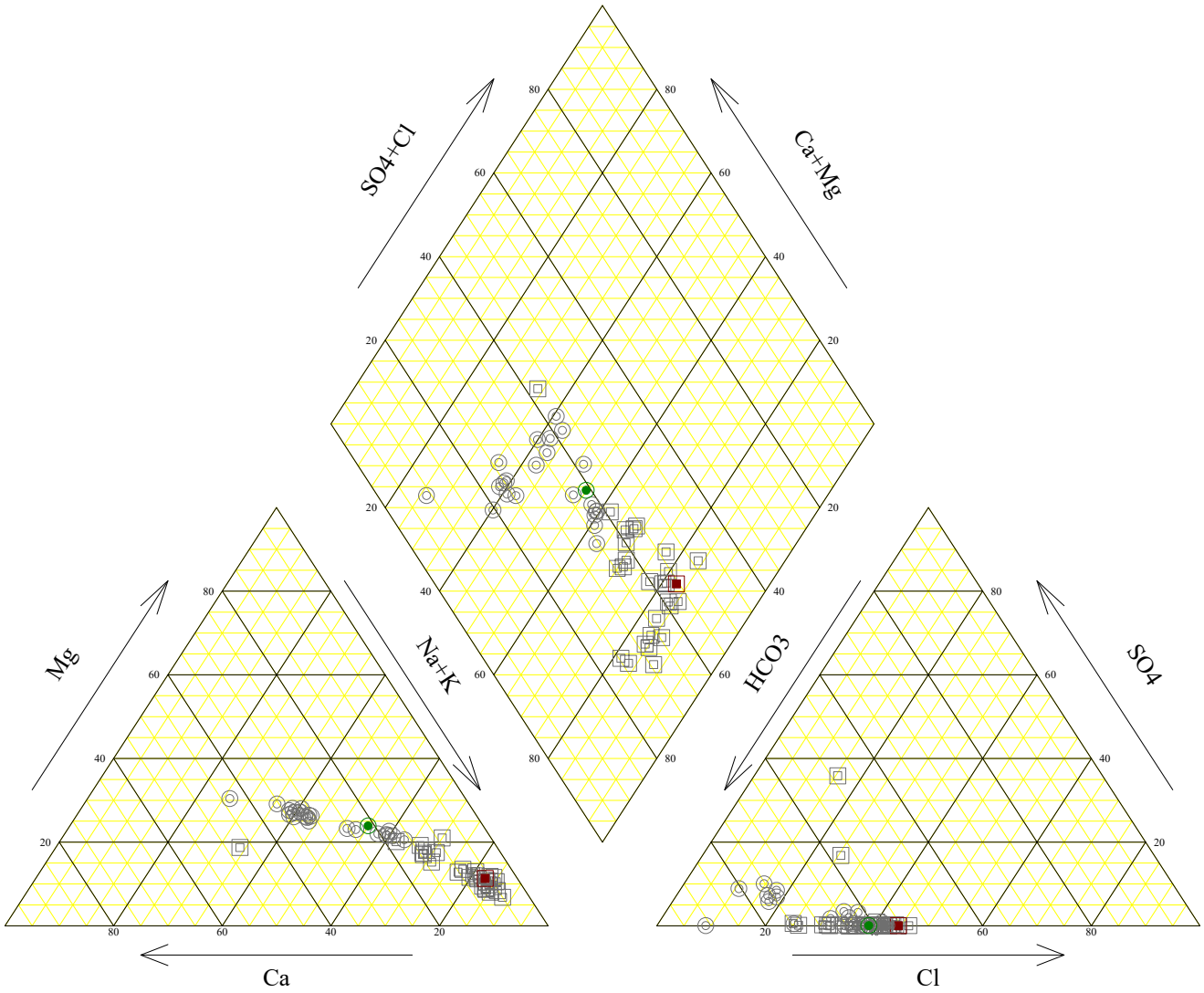
Figure F-24 Sumps 1/5 P and 4/5 S



1/5 P	12/30/1997	1/5 P	4/23/2010	1/5 P	2/08/2018	4/5 S	5/26/2005	4/5 S	8/31/2016
1/5 P	6/21/1999	1/5 P	4/11/2011	1/5 P	5/02/2018	4/5 S	5/11/2007	4/5 S	4/18/2017
1/5 P	11/08/2000	1/5 P	5/01/2012	1/5 P	4/24/2019	4/5 S	5/22/2008	4/5 S	9/12/2017
1/5 P	4/26/2001	1/5 P	4/10/2013	1/5 P	4/22/2020	4/5 S	5/08/2009	4/5 S	11/09/2017
1/5 P	4/15/2002	1/5 P	5/05/2014	1/5 P	4/15/2021	4/5 S	4/23/2010	4/5 S	2/08/2018
1/5 P	5/15/2003	1/5 P	5/08/2015	4/5 S	12/30/1997	4/5 S	4/11/2011	4/5 S	5/03/2018
1/5 P	5/26/2005	1/5 P	5/06/2016	4/5 S	6/21/1999	4/5 S	5/01/2012	4/5 S	4/24/2019
1/5 P	5/15/2006	1/5 P	8/31/2016	4/5 S	11/08/2000	4/5 S	4/11/2013	4/5 S	4/22/2020
1/5 P	5/11/2007	1/5 P	4/18/2017	4/5 S	4/26/2001	4/5 S	5/05/2014	4/5 S	4/15/2021
1/5 P	5/22/2008	1/5 P	9/12/2017	4/5 S	4/15/2002	4/5 S	5/08/2015		
1/5 P	5/08/2009	1/5 P	11/09/2017	4/5 S	5/15/2003	4/5 S	5/06/2016		

Prepared by: SCS Engineers

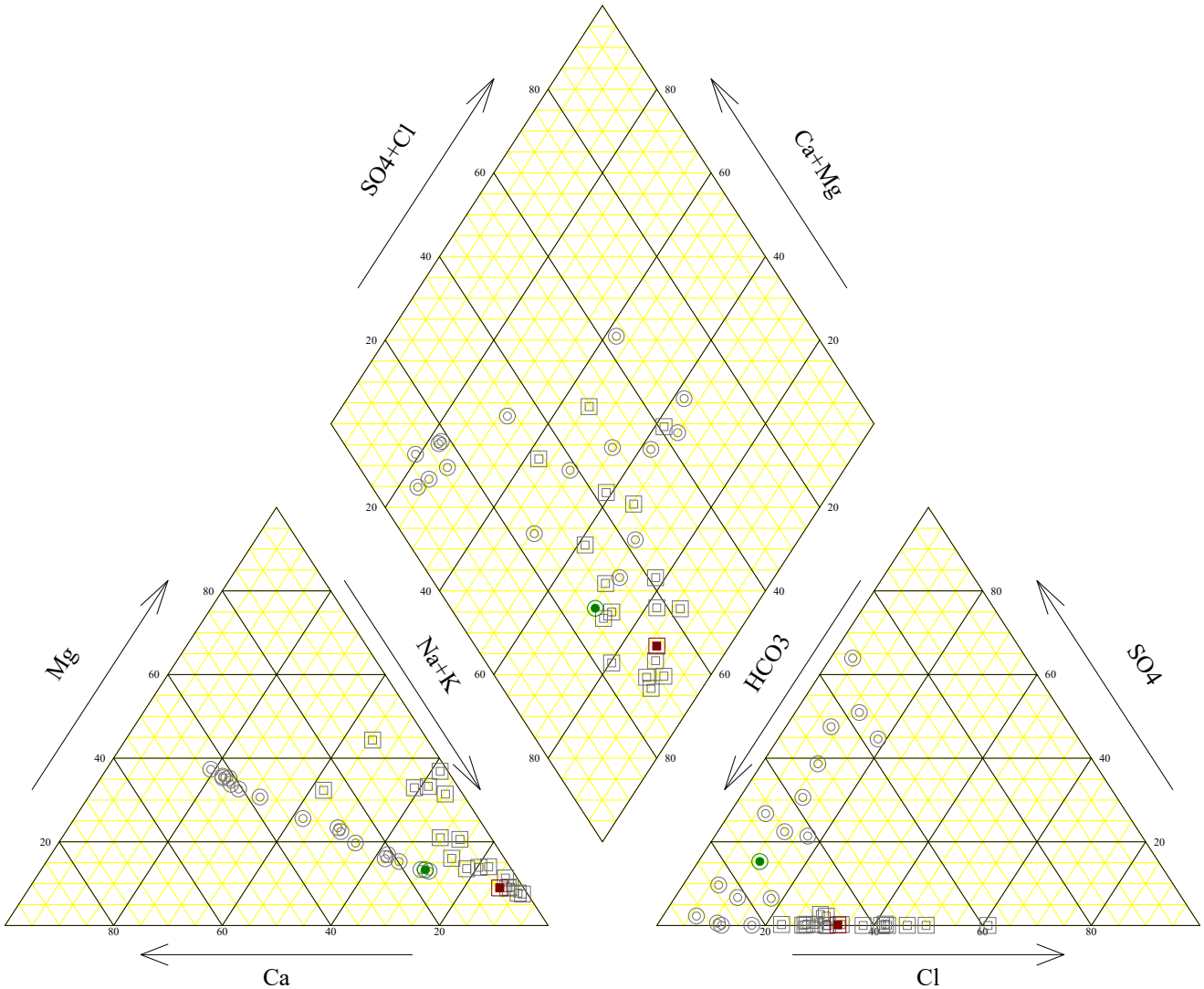
Figure F-25 Sumps 6-7P and 6-7S



6/7 P	12/30/1997	6/7 P	5/22/2008	6/7 P	9/12/2017	6/7 S	5/26/2005	6/7 S	5/08/2015
6/7 P	6/22/1999	6/7 P	5/08/2009	6/7 P	11/09/2017	6/7 S	5/12/2006	6/7 S	4/28/2016
6/7 P	11/07/2000	6/7 P	4/22/2010	6/7 P	2/07/2018	6/7 S	5/11/2007	6/7 S	4/18/2017
6/7 P	4/26/2001	6/7 P	4/11/2011	6/7 P	5/01/2018	6/7 S	5/22/2008	6/7 S	9/12/2017
6/7 P	4/15/2002	6/7 P	5/01/2012	6/7 P	4/24/2019	6/7 S	5/08/2009	6/7 S	11/09/2017
6/7 P	5/15/2003	6/7 P	4/10/2013	6/7 P	4/22/2020	6/7 S	4/28/2010	6/7 S	2/07/2018
6/7 P	4/22/2004	6/7 P	5/05/2014	6/7 P	4/15/2021	6/7 S	4/13/2011	6/7 S	5/01/2018
6/7 P	5/26/2005	6/7 P	5/08/2015	6/7 S	6/22/1999	6/7 S	5/01/2012	6/7 S	4/24/2019
6/7 P	5/12/2006	6/7 P	4/28/2016	6/7 S	4/15/2002	6/7 S	4/10/2013	6/7 S	4/22/2020
6/7 P	5/11/2007	6/7 P	4/18/2017	6/7 S	5/15/2003	6/7 S	5/05/2014	6/7 S	4/15/2021

Prepared by: SCS Engineers

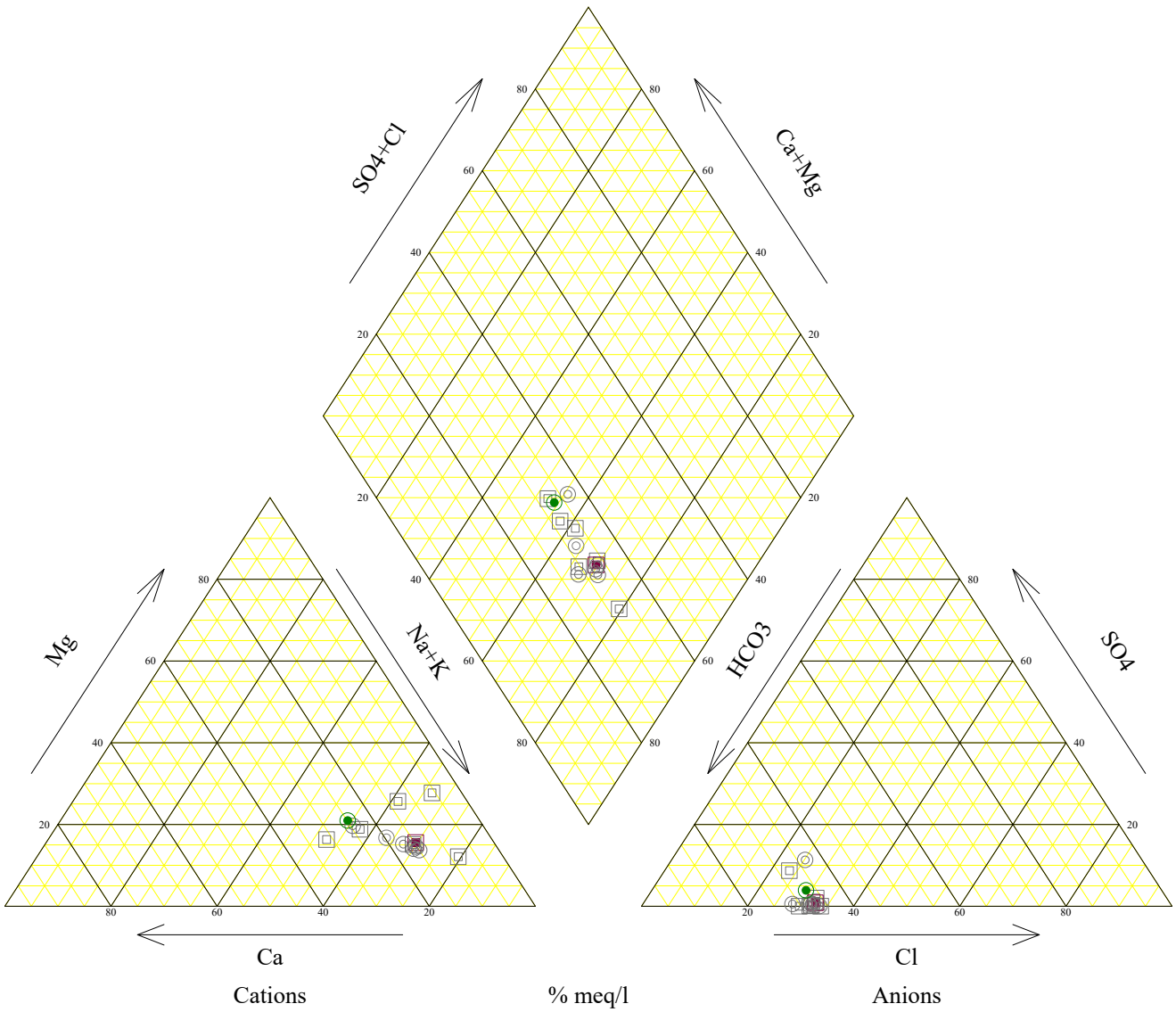
Figure F-26 Sumps 8P and 8S



8P	6/26/2003	8P	4/10/2013	8S	6/26/2003	8S	5/05/2014
8P	5/27/2005	8P	5/05/2014	8S	5/12/2006	8S	5/08/2015
8P	5/12/2006	8P	5/08/2015	8S	5/11/2007	8S	4/28/2016
8P	5/11/2007	8P	4/28/2016	8S	5/22/2008	8S	4/18/2017
8P	5/22/2008	8P	4/18/2017	8S	5/08/2009	8S	5/03/2018
8P	5/08/2009	8P	5/02/2018	8S	4/22/2010	8S	4/24/2019
8P	4/22/2010	8P	4/24/2019	8S	4/11/2011	8S	4/22/2020
8P	4/11/2011	8P	4/22/2020	8S	5/01/2012	8S	4/15/2021
8P	5/01/2012	8P	4/15/2021	8S	4/11/2013		

Prepared by: SCS Engineers

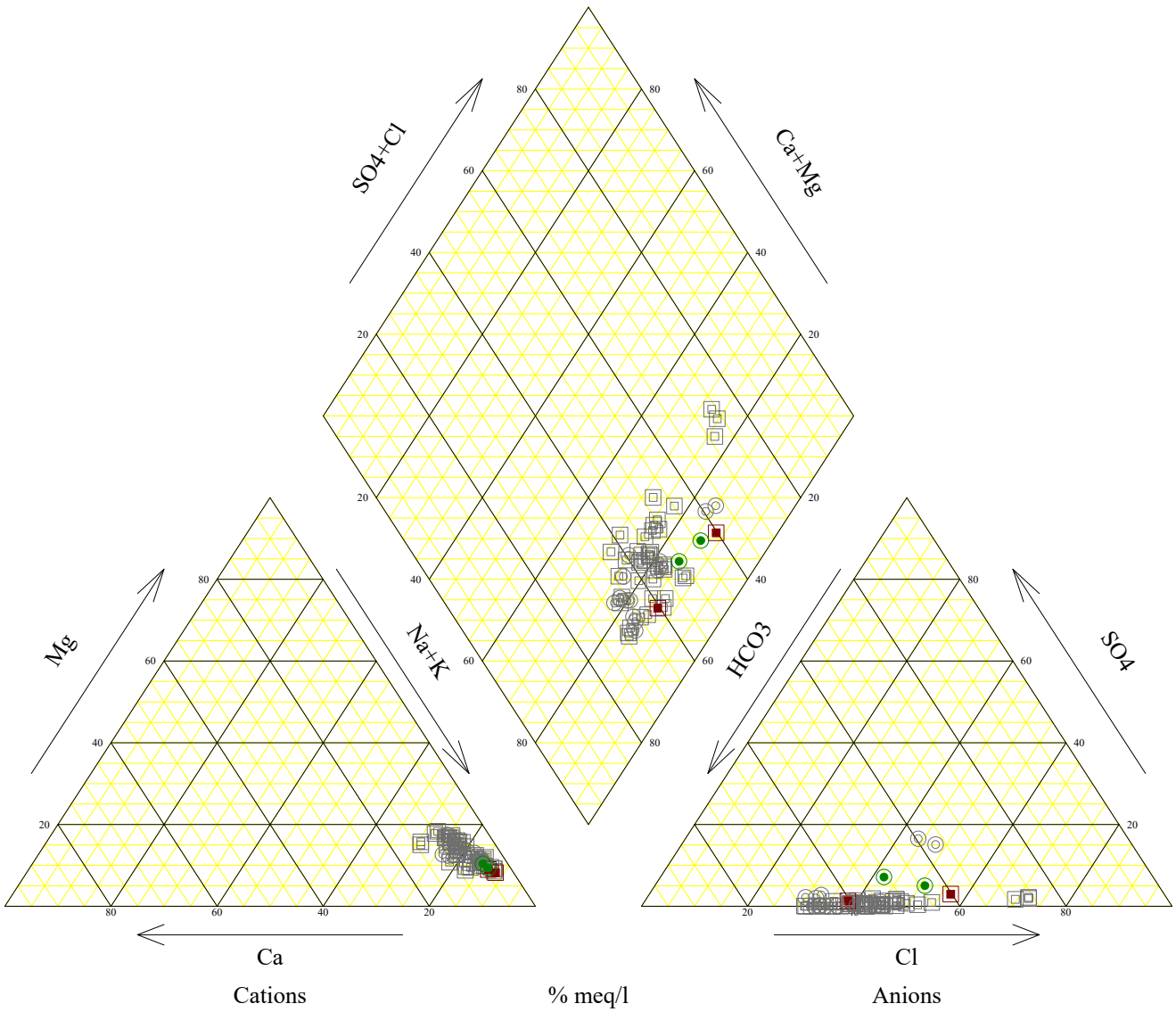
Figure F-27 Sumps 9P and 9S



□	9P	5/08/2015	◎	9S	5/06/2016
□	9P	5/06/2016	◎	9S	4/18/2017
□	9P	4/18/2017	◎	9S	5/02/2018
□	9P	5/02/2018	◎	9S	4/24/2019
□	9P	4/24/2019	◎	9S	4/22/2020
□	9P	4/22/2020	●	9S	4/15/2021
■	9P	4/15/2021			
◎	9S	5/08/2015			

Prepared by: SCS Engineers

Figure F-28 Leachate Pond and Leachate Pond LDS



LEACHATE POND	12/06/2001	LEACHATE POND	11/10/2008	LEACHATE POND	11/11/2015	LPOND LDS	11/21/2013
LEACHATE POND	4/15/2002	LEACHATE POND	5/04/2009	LEACHATE POND	4/28/2016	LPOND LDS	5/05/2014
LEACHATE POND	10/09/2002	LEACHATE POND	11/19/2009	LEACHATE POND	11/17/2016	LPOND LDS	11/20/2014
LEACHATE POND	5/14/2003	LEACHATE POND	4/22/2010	LEACHATE POND	4/18/2017	LPOND LDS	5/11/2015
LEACHATE POND	11/18/2003	LEACHATE POND	10/08/2010	LEACHATE POND	11/09/2017	LPOND LDS	11/11/2015
LEACHATE POND	4/22/2004	LEACHATE POND	4/11/2011	LEACHATE POND	5/03/2018	LPOND LDS	4/28/2016
LEACHATE POND	11/11/2004	LEACHATE POND	10/31/2011	LEACHATE POND	11/06/2018	LPOND LDS	11/17/2016
LEACHATE POND	4/01/2005	LEACHATE POND	5/01/2012	LEACHATE POND	4/25/2019	LPOND LDS	4/18/2017
LEACHATE POND	10/27/2005	LEACHATE POND	11/12/2012	LEACHATE POND	11/20/2019	LPOND LDS	11/09/2017
LEACHATE POND	5/08/2006	LEACHATE POND	4/08/2013	LEACHATE POND	4/22/2020	LPOND LDS	5/03/2018
LEACHATE POND	10/18/2006	LEACHATE POND	11/21/2013	LEACHATE POND	11/11/2020	LPOND LDS	4/28/2020
LEACHATE POND	5/07/2007	LEACHATE POND	5/05/2014	LEACHATE POND	4/15/2021	LPOND LDS	11/11/2020
LEACHATE POND	11/06/2007	LEACHATE POND	11/20/2014	LEACHATE POND	11/18/2021	LPOND LDS	4/15/2021
LEACHATE POND	5/22/2008	LEACHATE POND	5/11/2015	LPOND LDS	4/11/2013	LPOND LDS	11/18/2021

Prepared by: SCS Engineers

Stiff Plots

Leachate Management Systems

Figure F-29 2021 Leachate and LDS Sump Samples

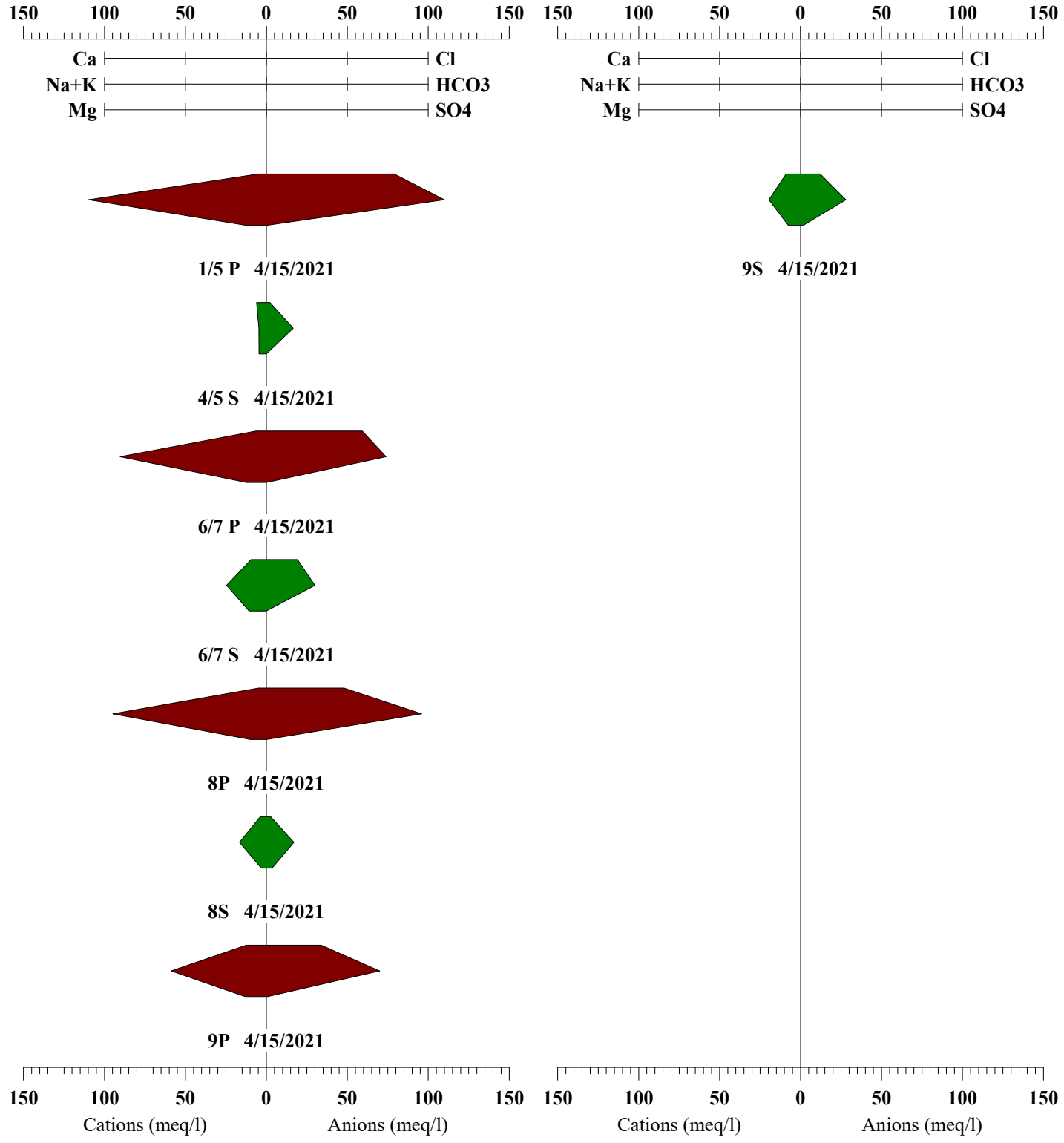


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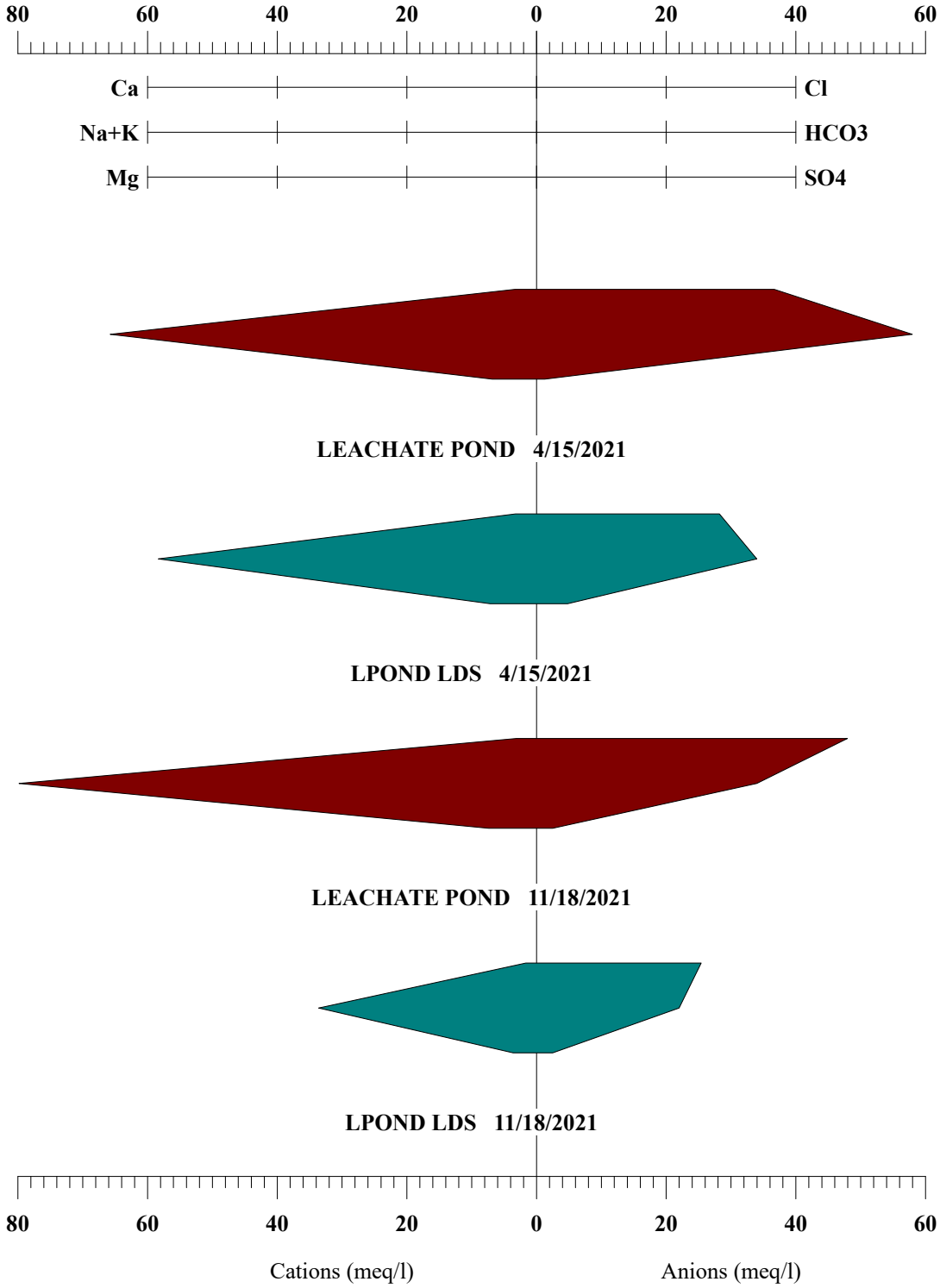
Figure F-30 2021 Leachate Pond and Leachate Pond LDS Samples



Prepared by: SCS Engineers

APPENDIX G

2021 Annual Geotechnical Monitoring Report, Riverbend Landfill, McMinnville, Oregon

Geosyntec consultants

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4 April 2022

Ms. Melody A. Adams
PNW/BC Area Project Manager
Waste Management (WM)
7227 NE 55th Avenue
Portland, Oregon 97218

Subject: 2021 Annual Geotechnical Monitoring Report
Riverbend Landfill
McMinnville, Oregon

Dear Ms. Adams:

Geosyntec is pleased to present this summary of the 2021 geotechnical monitoring program for the mechanically stabilized earth (MSE) berm at the Riverbend Landfill (the Site). Monitoring of the geotechnical instrumentation at the Site was performed in general accordance with the MSE Berm Stability Monitoring Plan (SMP, Geosyntec 2013a). This report presents a summary of the monitoring instrumentation, a summary and assessment of the geotechnical monitoring measurements in 2021, and recommendations for future monitoring.

The instrumentation readings were collected by Riverbend Landfill Co. personnel throughout 2021. The interpretation of the readings and this letter report were prepared by Pratibha Pandey (Geosyntec). The report was reviewed by Nicholas Yafrate (Geosyntec) in accordance with the quality assurance policies of Geosyntec.

SUMMARY OF MSE BERM CONSTRUCTION AND WASTE PLACEMENT

The location of the MSE Berm is shown in Figure 1. The MSE Berm was constructed in two phases. Phase 1A of MSE Berm construction, which began in November 2013 and was completed in September 2014, includes the MSE Berm between stations 9+25 and 21+18 with final elevations[1] ranging between 184 ft and 172 ft. Construction of the remainder of the MSE Berm (Phase 1B, stations 0+00 to 9+25 with final elevations ranging between 158 ft and 186 ft) began in August 2015 and was completed in October 2015.

Construction related activities occurred within the instrument influence zones in Q3 2021. No waste placement activities were performed. Construction activities consisted of minor waste and cover regrading, trenching, and landfill gas force main installation. Monitoring instrument measurements were taken once every two weeks during construction activities in the area.

[1] Elevations in this report reference the site-specific vertical datum. As-built survey of instrumentation was by Leland A. MacDonald, LLC of McMinnville, OR.

The maximum elevation of waste within the influence zone is approximately 270 ft and did not change between the two most recent topographical surveys completed on and 14 January 2021 and 27 January 2022.

SUMMARY OF GEOTECHNICAL MONITORING INSTRUMENTATION

Geotechnical monitoring instrumentation associated with the MSE Berm was installed in two phases during 2013 and 2014 at the locations shown in Figure 1. A summary of the installation information of slope inclinometers (SIs), extensometers (EXs), and vibrating wire piezometers (PZs) is presented in Table 1. The first phase of instrumentation was installed in September 2013 prior to MSE Berm construction and included the inclinometers and extensometers installed at locations I-1A and I-2A along the proposed exterior toe alignment of the MSE Berm (Geosyntec 2013b). The second phase of instrumentation was installed in June 2014 after construction of the MSE Berm was nearly complete and included the inclinometers, extensometers, and vibrating wire piezometers at locations I-1B and I-2B (Geosyntec 2014). Instrument cluster I-1B was installed through the reinforced fill zone immediately adjacent to the perimeter swale on top of the MSE Berm, and instrument cluster I-2B was installed through the engineered clay fill between the perimeter swale and the road on top of the MSE Berm. The instrumentation is sensitive to waste placement activities occurring within approximately 400-ft, as depicted in Figure 1. Monitoring began in 2013; a summary of the monitoring data is included in the attached tables.

SUMMARY OF 2021 MONITORING MEASUREMENTS

The geotechnical instrument measurement frequency in 2021 was established based on activity within the influence zone of the instruments in general accordance with the SMP and recommendations in Geosyntec's 19 April 2019 memorandum *Recommended Geotechnical Stability Monitoring Frequency*. Plots of measurements obtained in 2021 are presented in Attachment A.

Inclinometer Measurements

Inclinometer measurements represent horizontal displacements of the SI casing at 24-inch vertical intervals perpendicular (A-Direction) and parallel (B-Direction) to the MSE Berm. Measurements from each inclinometer are graphically presented in Attachment A as both incremental displacement (i.e., tilt change) and cumulative displacement (i.e., profile change) versus depth. Incremental plots compare the current reading (i.e., measurement) to the reference reading at each discrete measurement depth and indicate the strain at that depth since the reference reading. The incremental plots presented in Attachment A represent the incremental displacement that occurred in 2021 between the final readings provided in the 2020 annual report (obtained on 14 January 2021) and the final readings obtained in 2021 on 5 January 2022. The cumulative displacement plots show the sum of the incremental displacements between the initial reading, immediately after installation, and the 5 January 2022 reading, from the deepest measurement depth to the

shallowest. The cumulative plots represent the change in shape of the inclinometer since installation.

The maximum incremental displacements and strains observed in each inclinometer since inclinometer installation are presented in Table 2. The largest incremental displacement observed in 2021 was 0.007 inches in SI-1A in the A-Direction at an elevation of 124 ft, within the grey clay layer. This displacement was measured during and after construction activity within the zone of influence of SI-2B. Plots of incremental displacement (tilt change) versus time, presented for each inclinometer in Attachment A, were used to assess changes in the rate of displacement. Minor increases and decreases in displacement rate occurred throughout 2021.

Displacement rates were significantly less than those observed during periods of waste placement (e.g., in 2016). Geosyntec compared the incremental displacement rates in 2021 to the recommended alert thresholds provided in Geosyntec's 11 October 2016 memorandum *Recommendations Regarding Recent Slope Stability Measurements.* Exceedances of these thresholds would indicate elevated displacements and trigger additional monitoring or operational action. The measured displacement rates in 2021 did not exceed the thresholds, and Geosyntec did not observe significant changes in the inclinometer displacement rates.

Cumulative (total) strains were calculated as the incremental displacement relative to the initial reading (i.e., since the inclinometer installation) for each measurement interval. Strain at the elevations with the largest incremental displacement since installation is presented for each inclinometer in Table 2. The total magnitude of strain presented in Table 2 ranges from 0.07% in SI-2A (B-direction) at an elevation of 117 ft to 1.72% in SI-1A (A-direction) at an elevation of 124 ft. The calculated maximum change in strain in 2021 ranged from 0.00% in SI-2B (B-direction) at an elevation of 160 ft to 0.03%, which was observed at two locations: (i) SI-1A (A-direction) at an elevation of 124 ft, (ii) SI-2A (B-direction) at elevation 117 ft.

As shown in the tilt change versus time plots in Attachment A, the rate of displacement measured by the inclinometers did not increase significantly throughout 2021. There was a minor increase uptick in the displacement at SI-2B (A and B-direction) measured in July 2021. However, subsequent readings indicate that this was a measurement fluctuation rather than actual displacement.

Throughout the monitoring period, minor instances of measurement fluctuation were observed. Most notably several measurements on 5 January 2022 have fluctuating data. The measurement fluctuation may be due to aging equipment (e.g., inclinometer casings, inclinometer probe, etc.), dirt or other debris in the inclinometer casing grooves, and/or changes in monitoring technicians performing the events. These fluctuations are not indicative of actual soil or MSE Berm displacement.

Extensometer Measurements

Extensometer measurements, presented in Attachment A, show the vertical displacement of the soil around each inclinometer at 10-foot vertical intervals. Maximum vertical displacements, calculated relative to the initial sensing ring elevation measured after installation, are provided in Table 3 for each extensometer; the initial sensing ring elevation survey was performed on 27 September 2013 for EX-1A and EX-2A, and on 23 and 24 June 2014 for EX-1B and EX-2B, respectively.

Positive displacement values represent downward displacement (i.e., settlement). The magnitude of vertical displacements since the extensometer installation range from 0.6 inch of upward displacement at EX-1A to 6.1 inches of downward displacement at EX-1B. The magnitude of vertical displacements in 2021 ranged from -0.5 inches at EX-1B to 0.3 inch at EX-2B.

Piezometer Measurements

Vibrating wire piezometers were installed between 19 June and 23 June 2014 in the foundation soils at instrument clusters I-1B and I-2B. Piezometer measurements are presented in Attachment A. Three piezometers were installed at each location: (i) one piezometer was installed at the mid clay depth (PZ-1B-1 and PZ-2B-1) to assess consolidation induced pore pressures; (ii) one piezometer was installed (PZ-1B-2, and PZ-2B-2) to assess possible shear induced pore pressures in the underlying clay layer; and (iii) one piezometer was installed in the sand layer (PZ-1B-3 and PZ-2B-3) to assess changes in the phreatic groundwater elevation. Consolidation and shear-induced pore pressure cannot be distinguished directly through pore pressure measurements; however, in combination with the extensometer and inclinometer measurements, an assessment of the cause of the pore pressures can be made. Piezometers in the sand beneath the clay can be used to assess whether pore pressure changes measured in the clay are the result of loading or are due to changes in the groundwater table elevation. Piezometer measurements at I-1B and I-2B indicate fluctuations in pore water pressures in the clay and sand layers that are consistent with historic seasonal fluctuations observed at the Site.

SUMMARY AND CONCLUSIONS

Instrumentation monitoring activities at the Riverbend Landfill in 2021 were initially performed quarterly and the frequency was later increased between May to late September, when the construction activities occurred within the influence zone. Significant changes in displacement rate were not observed in the inclinometers. Extensometer and piezometer measurements obtained throughout 2021 indicated minor settlement and small changes in pore pressure.

The results of monitoring performed in 2021 do not indicate stability concerns. Geosyntec recommends that monitoring continue according to the recommendations of the SMP and the April 2019 memorandum. If waste placement activities resume within the instrument influence zones, Geosyntec should be notified, and activity monitoring should be performed according to the above-referenced documents.

Sincerely,

Pratibha Pandey
Sr. Staff Professional

Nicholas Yafrate, P.E.
Licensed in AL, LA, MA, ME, MS, NH, OR

Principal Engineer

REGISTERED PROFESSIONAL ENGINEER
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SEP 10, 2019
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EXPIRES: 30 June 2022

Attachments:
Tables
Figure 1
Attachment A – Monitoring Plots

CC: Nicholas Godfrey, WM

REFERENCES

Geosyntec (2012a). *Phase 1 MSE Berm Updated Permit Design Report*, Riverbend Landfill Co., 22 March 2012.

Geosyntec (2012b). *Response to 18 December 2012 Comments by Mr. Doug Lindquist (Hart Crowser)*, Riverbend Landfill Co., 26 December 2012

Geosyntec (2013a). *Phase 1 MSE Berm Stability Monitoring Plan (SMP)*, Riverbend Landfill Co., July 2013.

Geosyntec (2013b). *2013 MSE Berm Instrumentation Installation Summary*, Riverbend Landfill Co., 20 November 2013.

Geosyntec (2014). *2014 MSE Berm Instrumentation Installation Summary*, Riverbend Landfill Co., 8 October 2014.

Geosyntec (2016). *Recommendations Regarding Recent Slope Stability Measurements* [Memorandum], Waste Management, 11 October 2016.

Geosyntec (2019). *Recommended Geotechnical Stability Monitoring Frequency* [Memorandum], Waste Management, 19 April 2019.

Table 1: Summary of Inclinometers, Extensometers and Piezometers
Riverbend Landfill- McMinnville, Oregon

Instrument Cluster	Location		Inclinometer			Extensometer			Vibrating Wire Piezometers		
	Northing, Easting (ft)	Ground Surface Elevation (ft MSL)	Instrument	Depth[(1)] (ft)	Bottom Elevation (ft MSL)	Instrument	Depth[(1)] (ft)	Bottom Elevation (ft MSL)	Instrument	Tip Elevation (ft MSL)	Depth (ft)
I-1A	N 3100.4, E 3921.1	149.9	SI-1A	105.0	44.9	EX-1A	103.3	46.6	N/A		
I-1B	N 3094.8, E 3972.7	179.2	SI-1B	140.0	39.2	EX-1B	138.3	40.9	PZ-I1B-1	119.7	59.5
									PZ-I1B-2	108.2	71.0
									PZ-I1B-3	93.2	86.0
I-2A	N 2583.2, E 3940.6	138.5	SI-2A	79.7	58.8	EX-2A	78.2	60.3	N/A		
I-2B	N 2688.4, E 3989.6	171.9	SI-2B	112.5	59.4	EX-2B	110.7	61.2	PZ-I2B-1	129.4	42.5
									PZ-I2B-2	119.4	52.5
									PZ-I2B-3	86.9	85.0

Note:

(1) Depth is the depth below ground surface.

(2) Elevations in this report reference the site specific vertical datum used to design and construct the Phase 1A MSE Berm. Elevations are from the time of installation.

Table 2: Inclinometer Maximum Total Incremental Displacement and Strain
Riverbend Landfill- McMinnville, Oregon

Inclinometer	Ground Surface Elevation (ft)	Elevation of Maximum Displacement[1] (ft)	Incremental Displacement from Time of Installation to December 2020 [5] (in.)	Incremental Displacement from Time of Installation through December 2021[6] (in.)	Incremental Displacement in 2021[2,7] (in.)	Total Strain from Time of Installation through December 2021[3] (%)	Change in Strain in 2021[3,6] (%)	Geotechnical Layer (Stratum)
SI-1A: A-Direction	149.9	124	0.407	0.414	0.007	1.72	0.03	Grey Clay
SI-1A: B-Direction	149.9	76	0.021	0.024	0.003	0.10	0.01	Sand
SI-1B: A-Direction	179.2	111	0.371	0.376	0.005	1.57	0.02	Grey Clay
SI-1B: B-Direction	179.2	167	0.054	0.054	0.000	0.23	0.00	Engineered Fill
SI-2A: A-Direction	138.5	117	0.065	0.066	0.001	0.27	0.00	Brown Clay
SI-2A: B-Direction	138.5	117	0.023	0.017	-0.006	0.07	0.03	Brown Clay
SI-2B: A-Direction	171.9	122	0.064	0.068	0.003	0.28	0.01	Brown Clay
SI-2B: B-Direction	171.9	160	0.080	0.080	0.000	0.33	0.00	Engineered Fill

Notes:

(1) Elevations presented are the elevations at which the most incremental displacement has occurred since installation of the inclinometer.

(2) Incremental displacement in this column corresponds to the incremental displacement on the tilt change versus time plots presented in Attachment A.

(3) Strain is calculated as the incremental displacement between any two points divided by the vertical distance between those two points (i.e. 2 vertical feet).

(4) Measurements within the top 10 to 12 feet of the inclinometers are generally disregarded because they are influenced by surface effects (e.g. construction equipment, freeze thaw, etc.) and therefore are not included in the above table.

(5) Measurement errors occurred during the 22 December 2020 measurement round and the instruments were therefore reread on 14 January 2021. Measurements presented on this table are from 14 January 2021.

(6) The measurements presented on this table are from 5 January 2022. The calculated incremental displacement in 2021 therefore represents the displacement observed from 14 January 2021 to 5 January 2022

(7) Elevations in this report reference the site specific vertical datum used to design and construct the Phase 1A MSE Berm. Elevations are from the time of installation.

Table 3: Extensometer Maximum Vertical Displacement Since Installation
Riverbend Landfill- McMinnville, Oregon

Extensometer	Initial Ground Surface Elevation (ft) [2]	Sensing Ring (No.)	Elevation of Ring Installation (ft)	Elevation as of December 2020 (ft)	Elevation as of December 2021 (ft)[4]	Maximum Vertical Displacement Since Installation (in)[1]	Maximum Vertical Displacement in 2021 (in)
EX-1A	149.9	3	75.14	75.21	75.19	-0.6	0.2
EX-1B	179.2	13	172.26	171.71	171.75	6.1	-0.5
EX-2A	138.5	8	139.31	139.16	139.19	1.5	-0.3
EX-2B	171.9	10	162.08	161.89	161.87	2.5	0.3

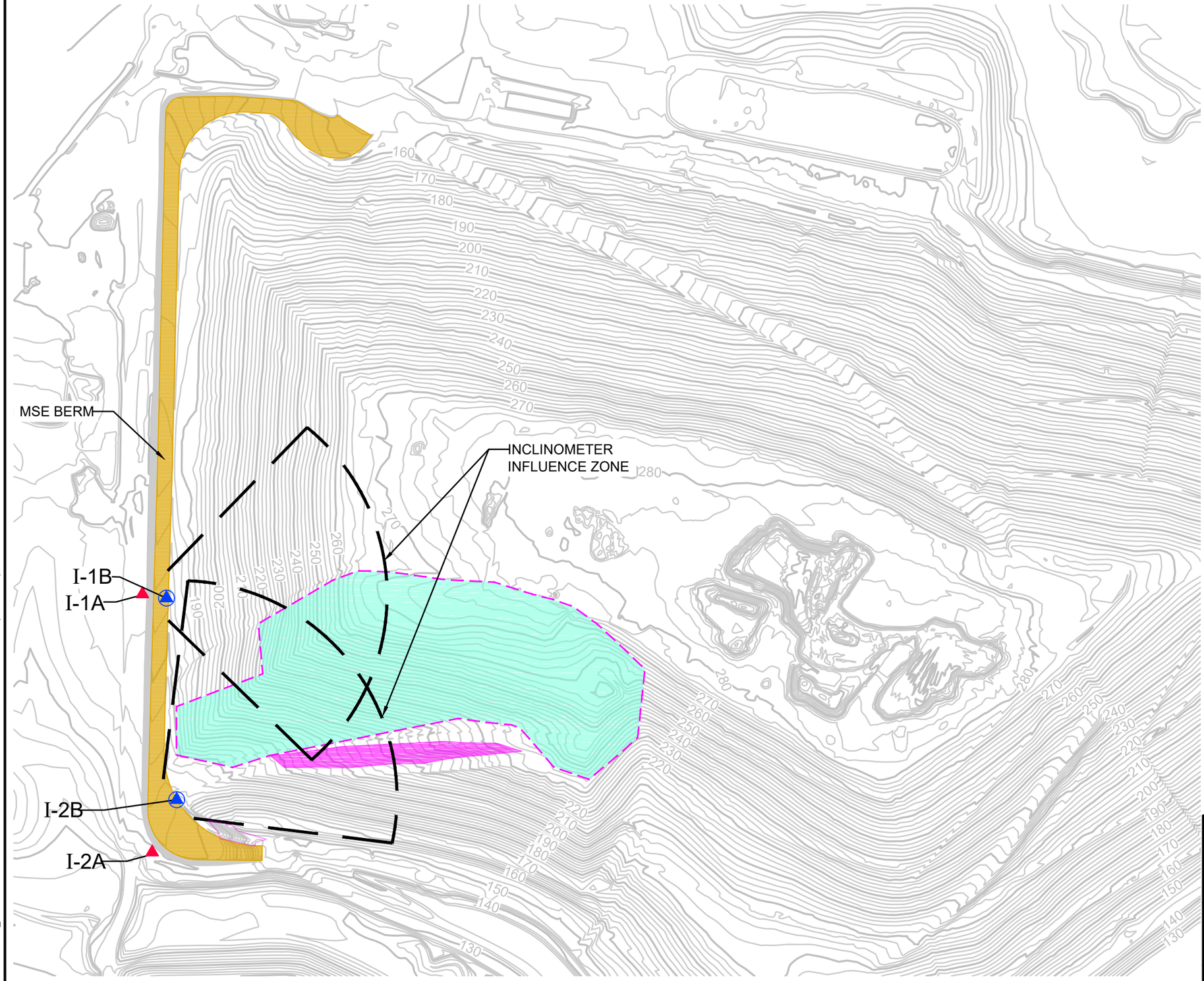
Note:

(1) Vertical displacement is calculated as the difference between the initial elevation and the current elevation reading. Positive values represent downward displacement (settlement) and negative values represent upward displacement.

(2) Elevations in this report reference the site specific vertical datum used to design and construct the Phase 1A MSE Berm. Initial ground surface elevations are from the time of installation.

(3) The initial sensing ring elevation survey was performed on 27 September 2013 for EX-1A and EX-2A, and on 23 and 24 June 2014 for EX-1B and EX-2B, respectively

(4) The calculated maximum vertical displacement in 2021 represents the displacement observed from December 2020 to early January 2022.



N

0 200' 400'

SCALE IN FEET

LEGEND

- 230 — EXISTING GRADE 10 FT CONTOUR
- EXISTING GRADE 2 FT CONTOUR
- INCLINOMETER AND EXTENSOMETER
- INCLINOMETER AND EXTENSOMETER AND PIEZOMETER
- APPROXIMATE EXTENT OF WASTE RELOCATION AND INTERMEDIATE SOIL COVER PLACEMENT IN 2021
- APPROXIMATE EXTENT OF SOIL PLACEMENT FOR ROAD RELOCATION IN 2021

NOTES:

1. I-1A AND I-2A WERE INSTALLED BETWEEN 21 SEPTEMBER 2013 AND 26 SEPTEMBER 2013, AND I-1B AND I-2B WERE INSTALLED BETWEEN 16 JUNE 2014 AND 23 JUNE 2014 BY GEOSYNTEC CONSULTANTS AND HARDCORE DRILLING.
2. THE EXISTING GRADES SHOWN ARE BASED ON AN AUTOCAD SURFACE GENERATED FROM A FIELD SURVEY PERFORMED 27 JANUARY 2022 AND PROVIDED TO GEOSYNTEC ON 02 MARCH 2022. AS THE SITE IS AN ACTIVE LANDFILL, TOPOGRAPHY MAY HAVE CHANGED SINCE THE SURVEY.

2021 ANNUAL GEOTECHNICAL MONITORING REPORT
MONITORING INSTRUMENT LOCATIONS
AND LANDFILL ACTIVITY
RIVERBEND LANDFILL
MCMINNVILLE, OREGON

Geosyntec consultants

Acton, MA | APRIL 2022

Figure: 1

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ATTACHMENT A
STABILITY MONITORING PLOTS

Geosyntec consultants

WASTE MANAGEMENT

Summary of Geotechnical Monitoring Measurements
2021
Riverbend Landfill, McMinnville, Oregon
Riverbend Landfill Incorporated / Waste Management

I-1A		I-2A		I-1B		I-2B	
Reading Date	Comment	Reading Date	Comment	Reading Date	Comment	Reading Date	Comment
14-Jan-2021	Reference Reading	14-Jan-2021	Reference Reading	14-Jan-2021	Reference Reading	14-Jan-2021	Reference Reading
30-Mar-2021	Activity Monitoring	30-Mar-2021	Activity Monitoring	30-Mar-2021	Activity Monitoring	30-Mar-2021	Activity Monitoring
28-May-2021	Activity Monitoring	28-May-2021	Activity Monitoring	26-May-2021	Activity Monitoring	26-May-2021	Activity Monitoring
10-Jun-2021	Activity Monitoring	10-Jun-2021	Activity Monitoring	10-Jun-2021	Activity Monitoring	10-Jun-2021	Activity Monitoring
25-Jun-2021	Activity Monitoring	25-Jun-2021	Activity Monitoring	25-Jun-2021	Activity Monitoring	25-Jun-2021	Activity Monitoring
8-Jul-2021	Activity Monitoring	8-Jul-2021	Activity Monitoring	8-Jul-2021	Activity Monitoring	8-Jul-2021	Activity Monitoring
9-Jul-2021	See Note 5	9-Jul-2021	Activity Monitoring	9-Jul-2021	Activity Monitoring	9-Jul-2021	Activity Monitoring
30-Jul-2021	Activity Monitoring	30-Jul-2021	Activity Monitoring	30-Jul-2021	Activity Monitoring	30-Jul-2021	Activity Monitoring
13-Aug-2021	Activity Monitoring	13-Aug-2021	Activity Monitoring	13-Aug-2021	Activity Monitoring	12-Aug-2021	Activity Monitoring
1-Sep-2021	Activity Monitoring	1-Sep-2021	Activity Monitoring	1-Sep-2021	Activity Monitoring	1-Sep-2021	Activity Monitoring
29-Sep-2021	Activity Monitoring	29-Sep-2021	Activity Monitoring	29-Sep-2021	Activity Monitoring	29-Sep-2021	Activity Monitoring
9-Nov-2021	Post Activity Monitoring	9-Nov-2021	Post Activity Monitoring	9-Nov-2021	Post Activity Monitoring	9-Nov-2021	Post Activity Monitoring
5-Jan-2022	Post Activity Monitoring	5-Jan-2022	Post Activity Monitoring	5-Jan-2022	Post Activity Monitoring	5-Jan-2022	Post Activity Monitoring

Notes:

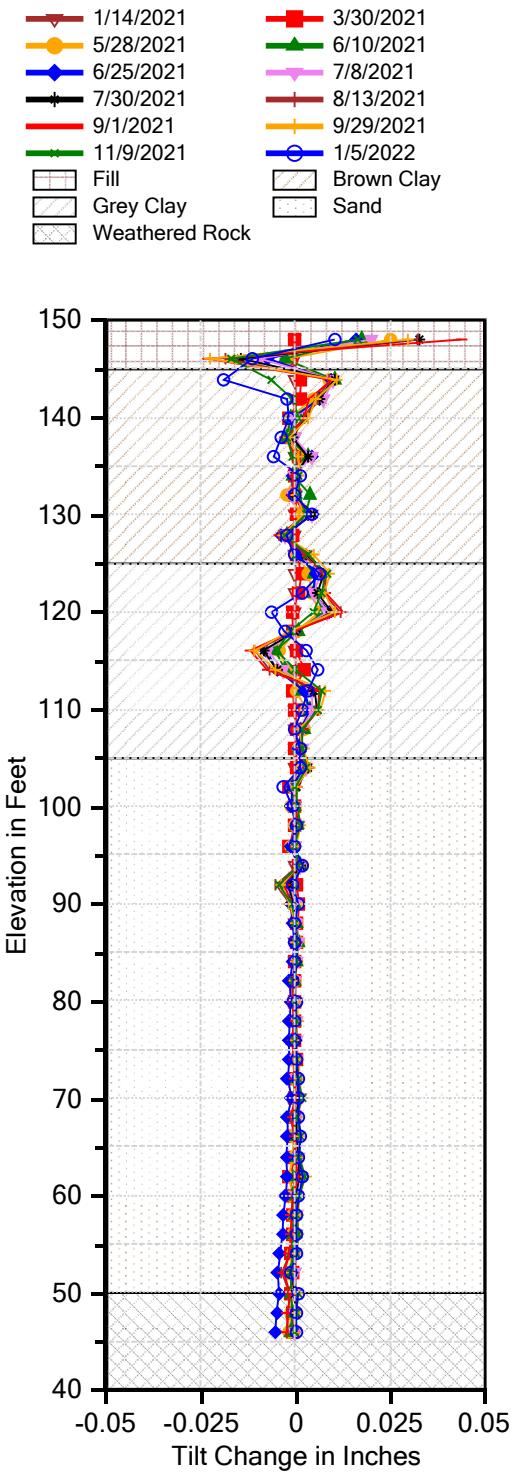
1. Incremental (Tilt) and cumulative (Profile) displacement plots are presented on the following pages. Incremental tilt readings are calculated from the reference reading at each discrete measurement depth. The reference reading is defined as the most recent reading of the previous reporting period. Cumulative profile plots represent the sum of the incremental displacements between the current reading and the initial reading from the bottom of the inclinometer up to each discrete depth.
2. Instrument cluster I-1A was installed on 24 September 2013 adjacent to (west of) the toe of the MSE Berm. Instrument cluster I-2A was installed on 26 September 2013 adjacent to (southwest of) the toe of the MSE Berm. Initial readings for SI-1A and SI-2A were taken on 27 September 2013.
3. Instrument cluster I-1B was installed on 23 June 2014 adjacent to liner anchor trench along the east side of the MSE Berm. Instrument cluster I-2B was installed on 23 June 2014 adjacent to the liner anchor trench along the inner (east) side of the MSE Berm. Initial readings for SI-1B and SI-2B were taken on 23 June 2014.
4. Directions 'A' and 'B' noted on the plots indicate the axis (i.e., plane) of measurement from which readings are taken. The 'A-Direction' measurements indicate displacements perpendicular to the MSE Berm. The 'B-Direction' measurements indicate displacements parallel to the MSE Berm.
5. Instrument readings were obtained by WM on 9 July 2021 to corroborate readings at I-2A, I-1B, and I-2B obtained by WM on 8 July 2021.

RIVERBEND LANDFILL

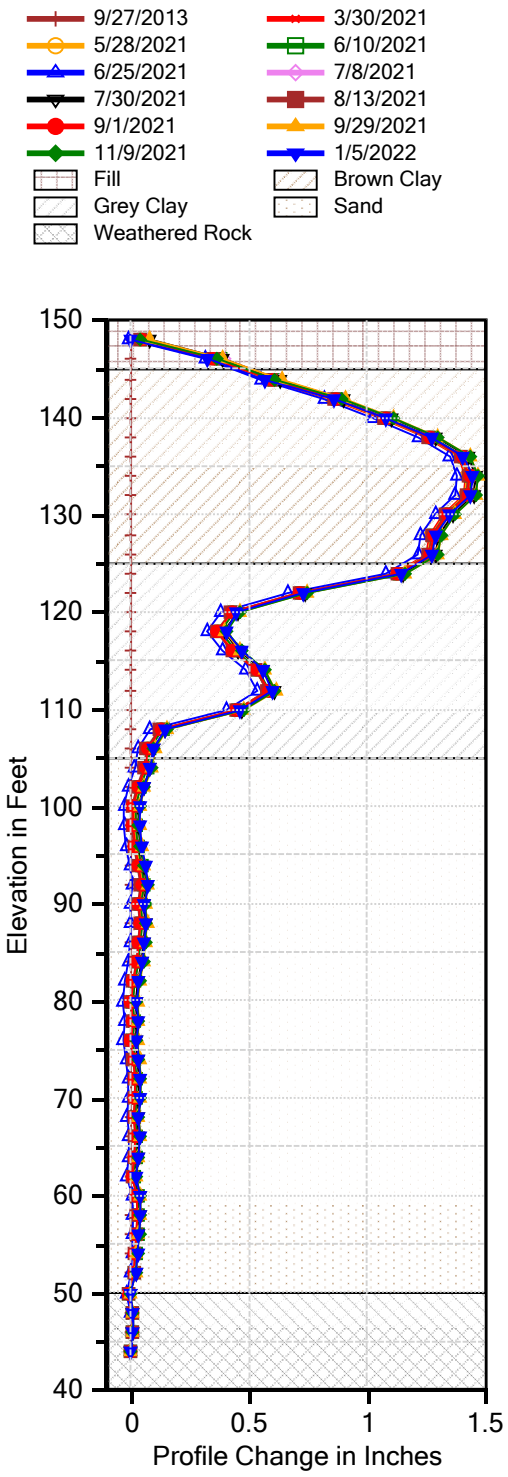
INCLINOMETER SI-1A

Riverbend Landfill
Inclinometer Measurements

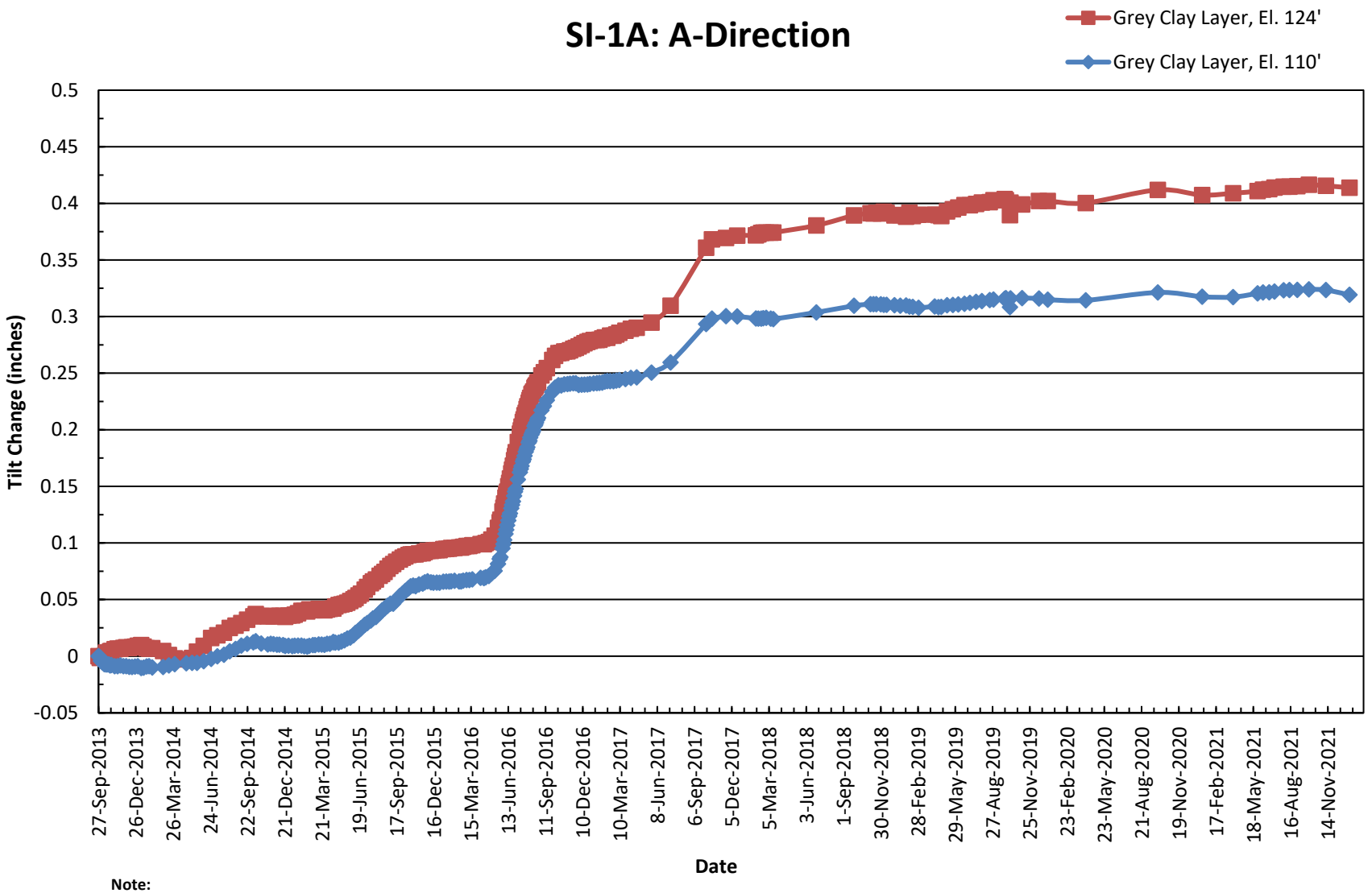
I-1A:A-Direction Incremental Tilt



I-1A:A-Direction Cumulative Profile



Riverbend Landfill
Inclinometer Measurements
SI-1A: A-Direction

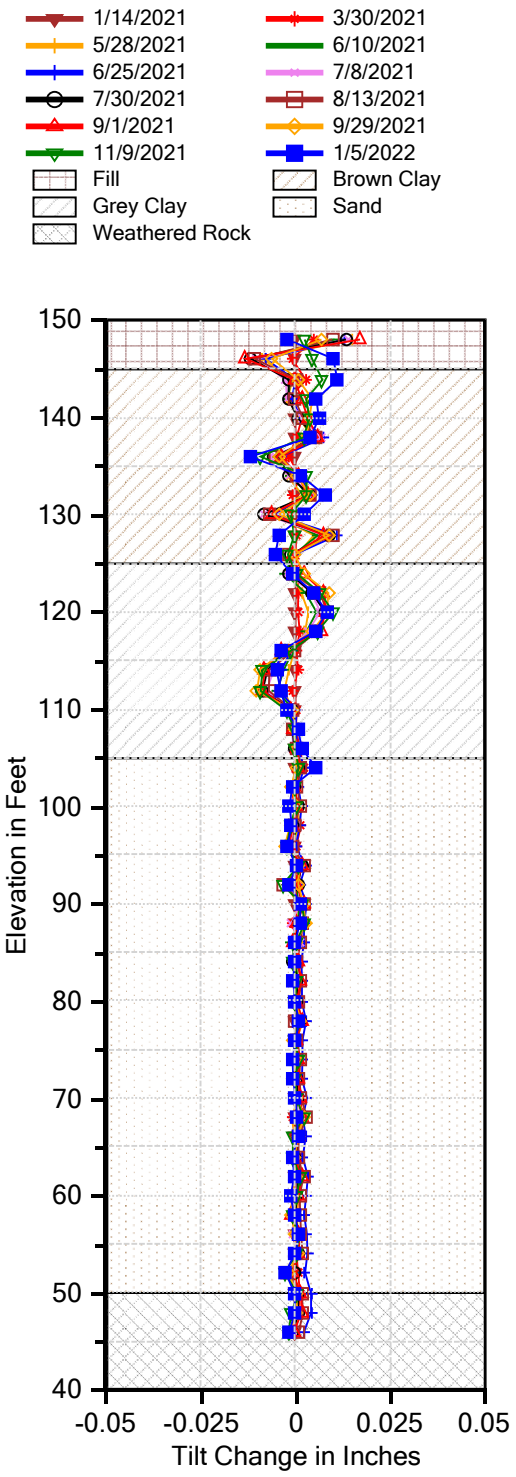


Note:

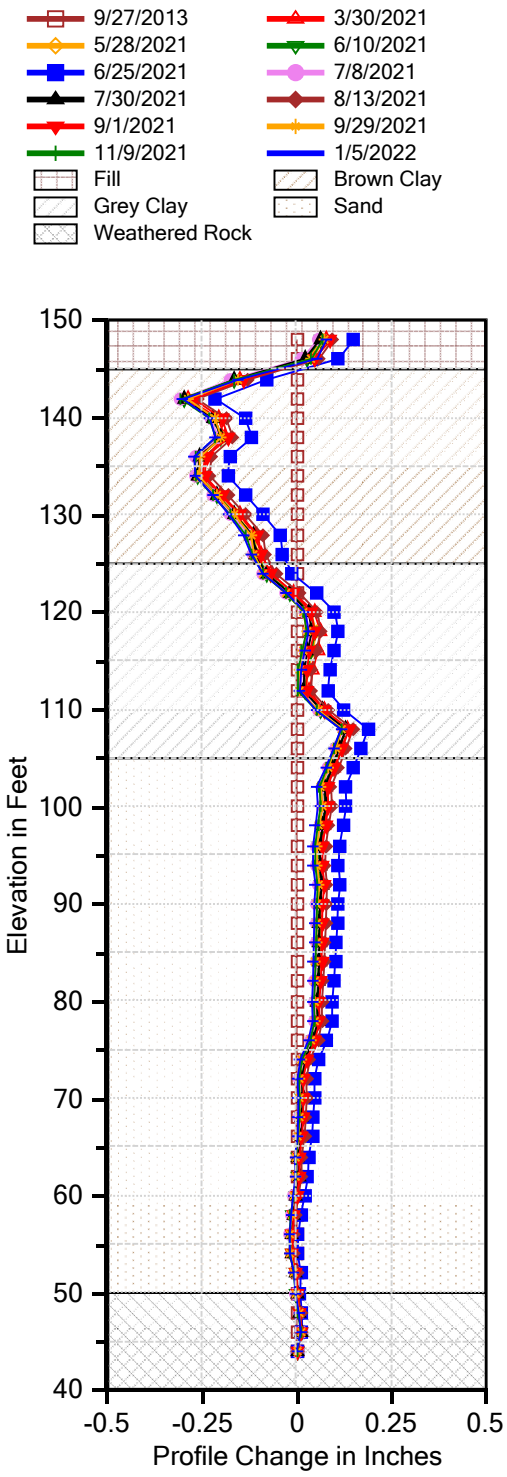
1. Selected elevations of tilt change represent locations at which maximum tilt change was measured since installation of the inclinometer.

Riverbend Landfill
Inclinometer Measurements

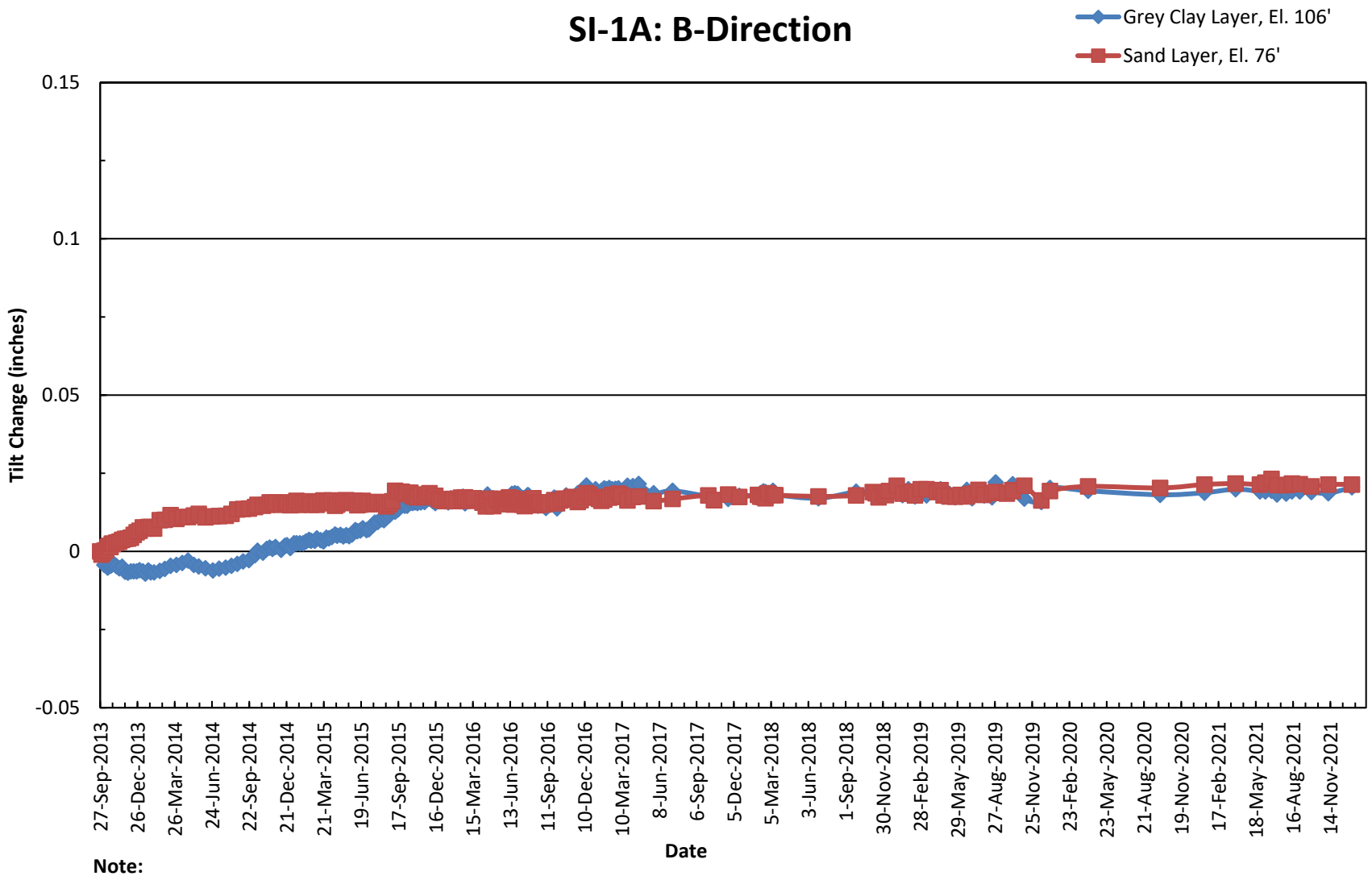
I-1A:B-Direction Incremental Tilt



I-1A:B-Direction Cumulative Profile



Riverbend Landfill
Inclinometer Measurements
SI-1A: B-Direction



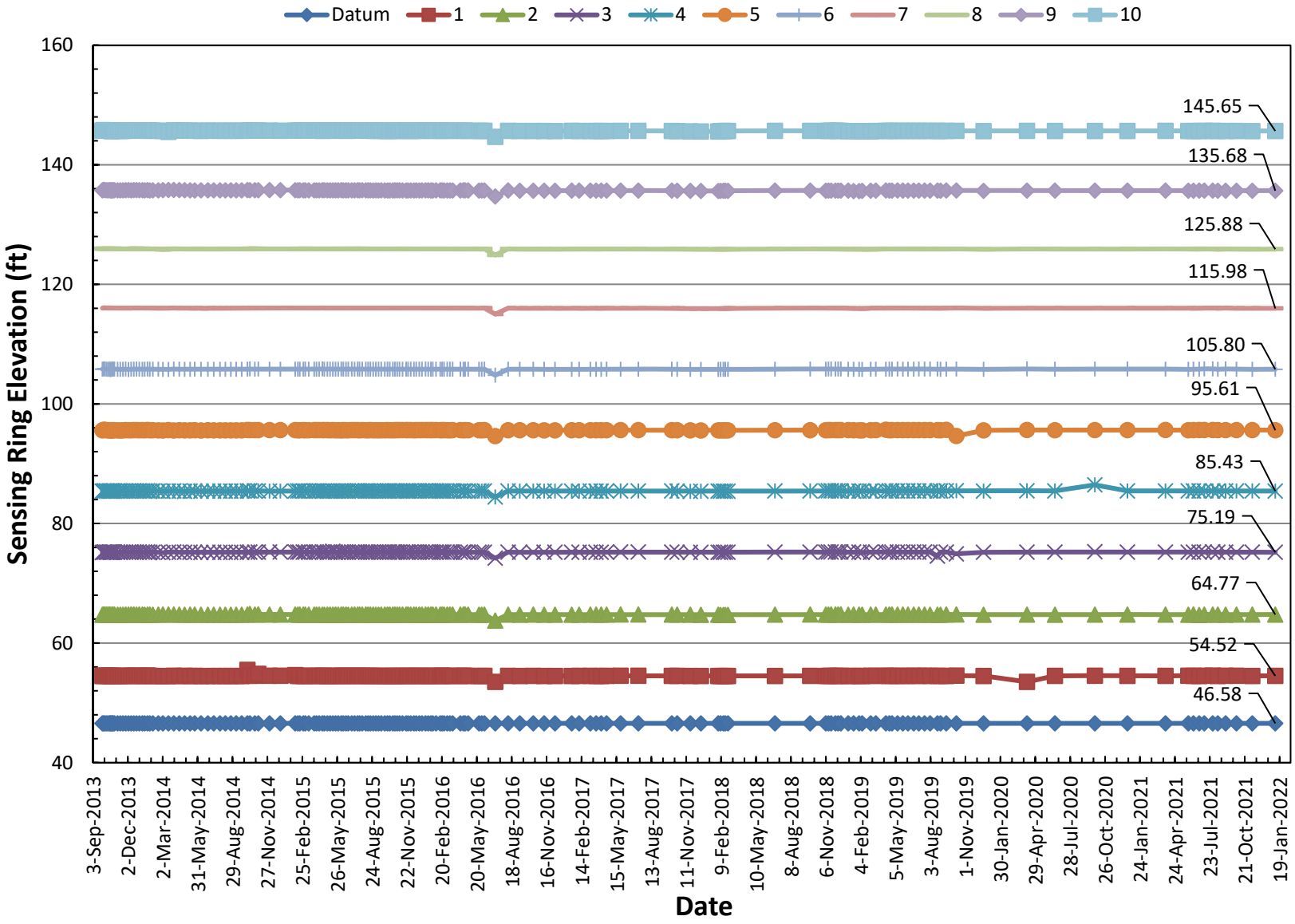
Note:

1. Selected elevations of tilt change represent locations at which maximum tilt change was measured since installation of the inclinometer.

RIVERBEND LANDFILL

EXTENSOMETER EX-1A

Riverbend Landfill
EX-1A Extensometer Measurements

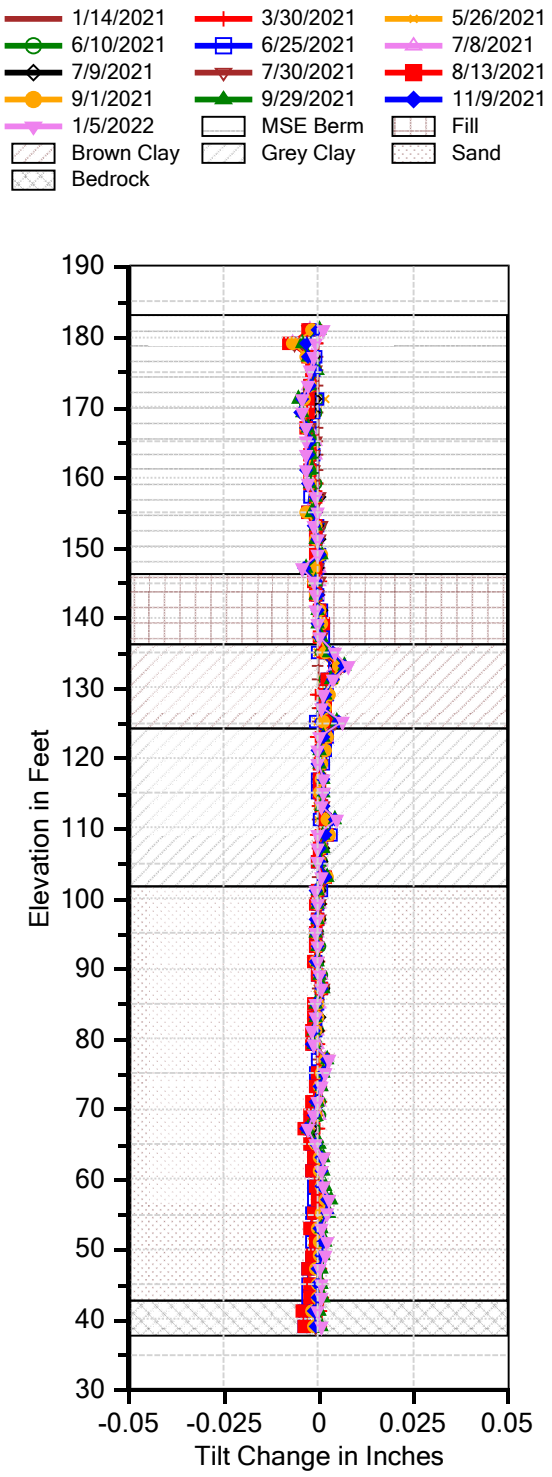


RIVERBEND LANDFILL

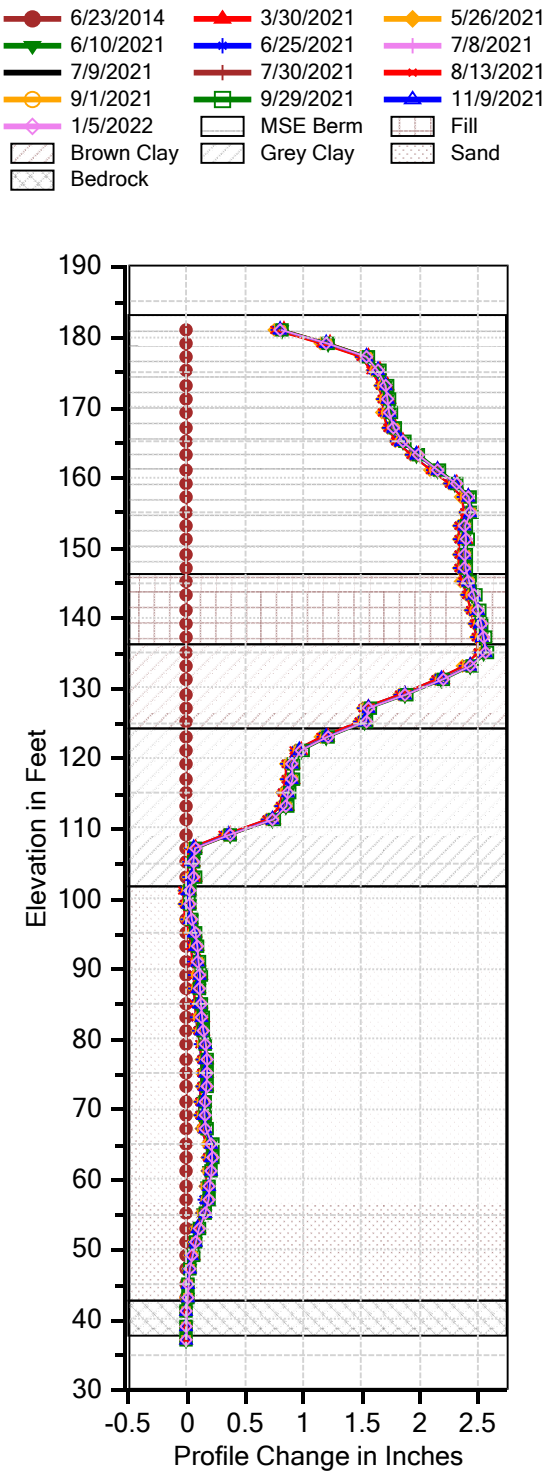
INCLINOMETER SI-1B

Riverbend Landfill
Inclinometer Measurements

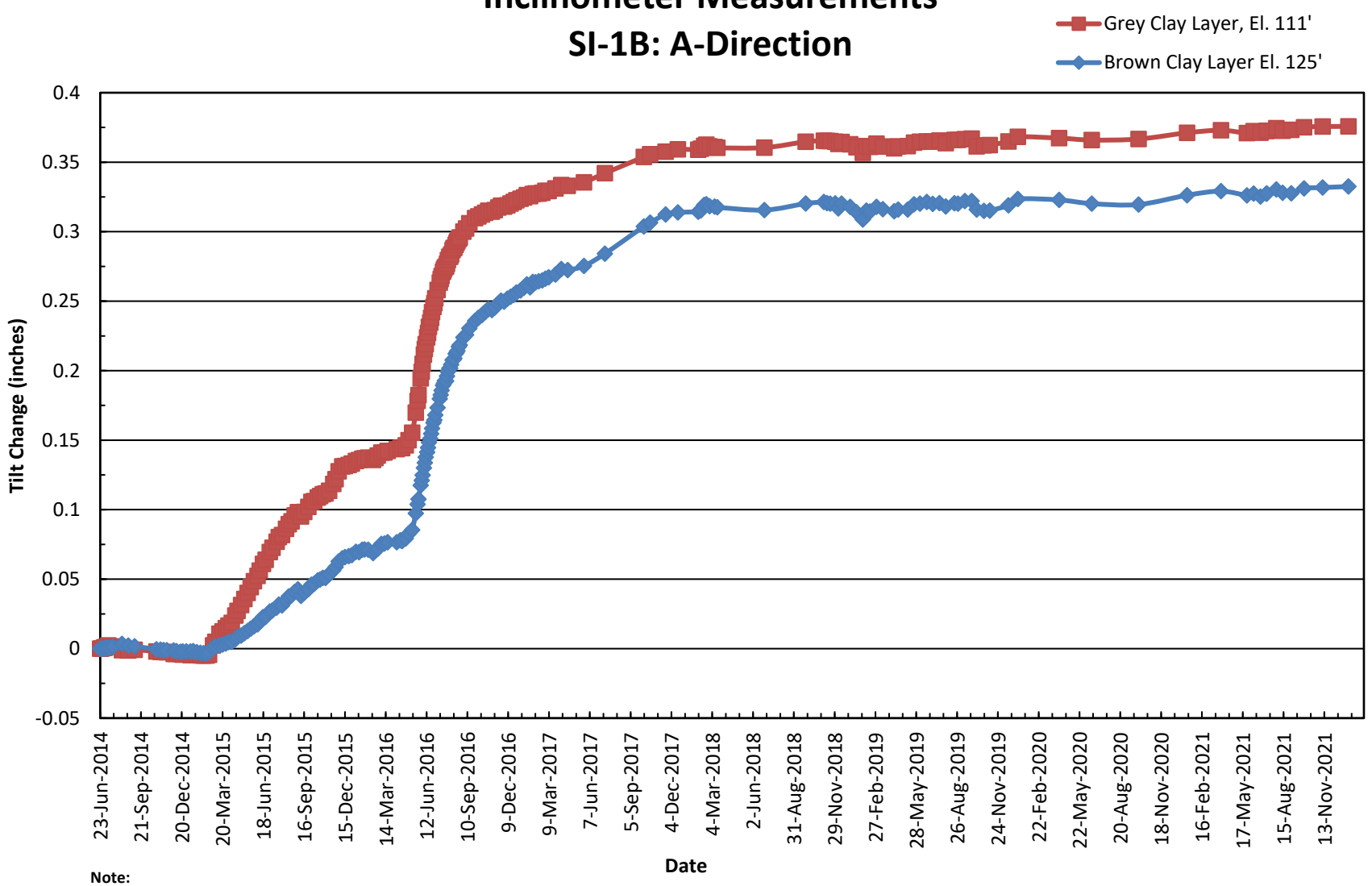
I-1B:A-Direction Incremental Tilt



I-1B:A-Direction Cumulative Profile



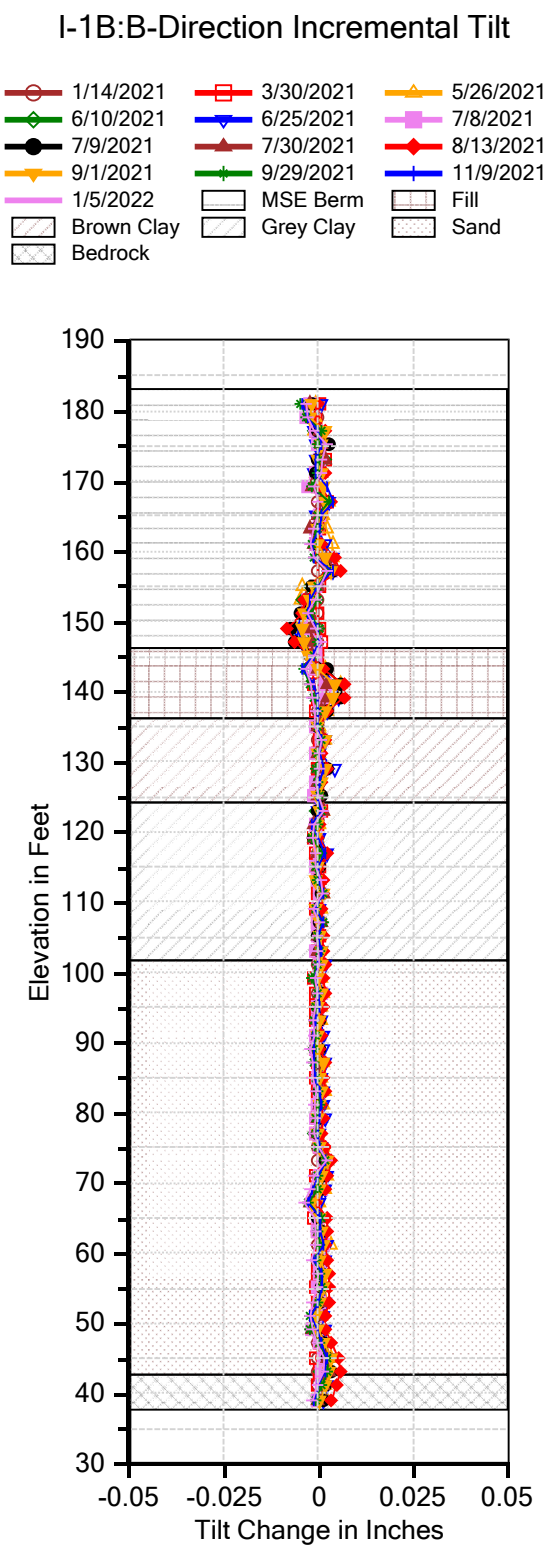
Riverbend Landfill
Inclinometer Measurements
SI-1B: A-Direction

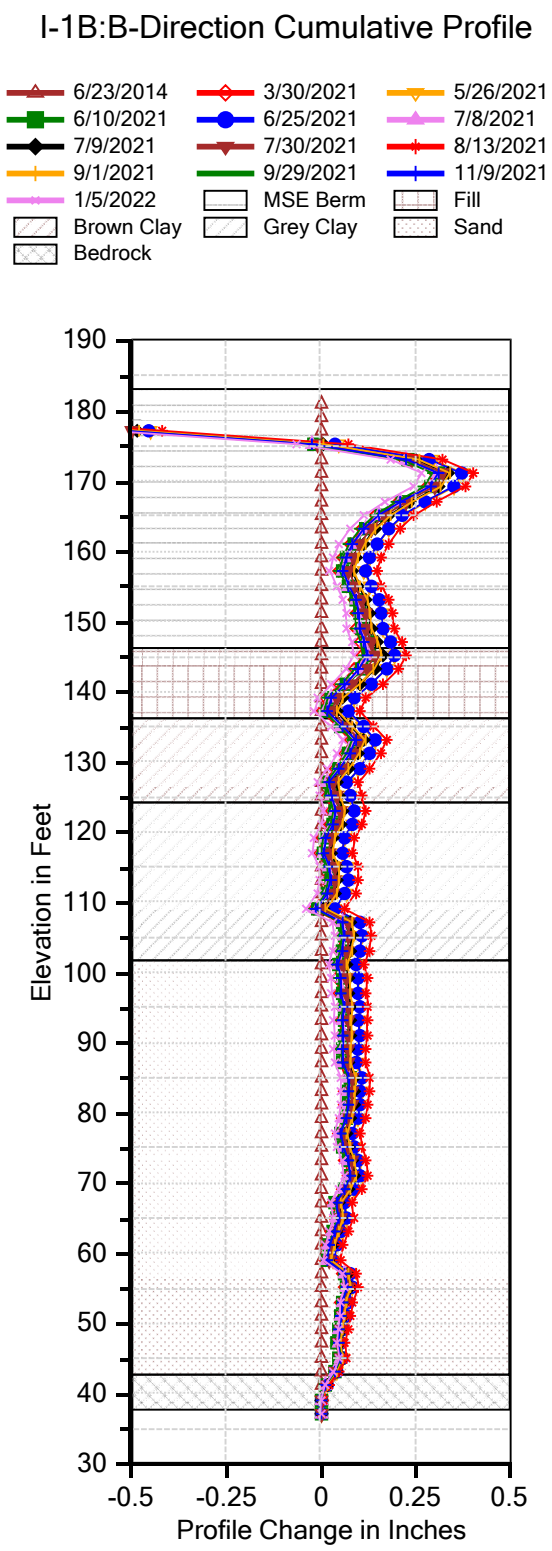


Note:

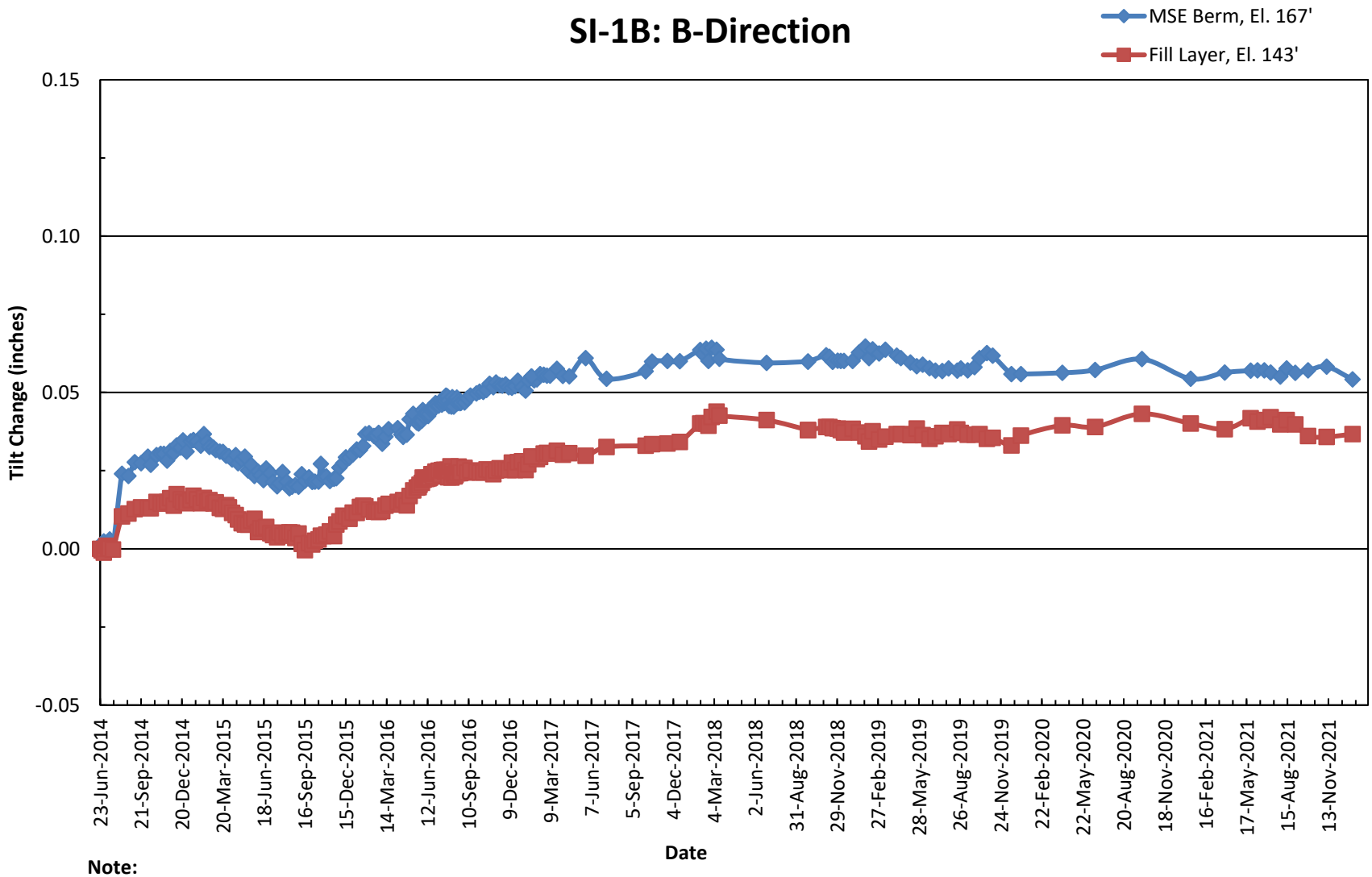
1. Selected elevations of tilt change represent locations at which maximum tilt change was measured since installation of the inclinometer.

Riverbend Landfill
Inclinometer Measurements





Riverbend Landfill
Inclinometer Measurements
SI-1B: B-Direction



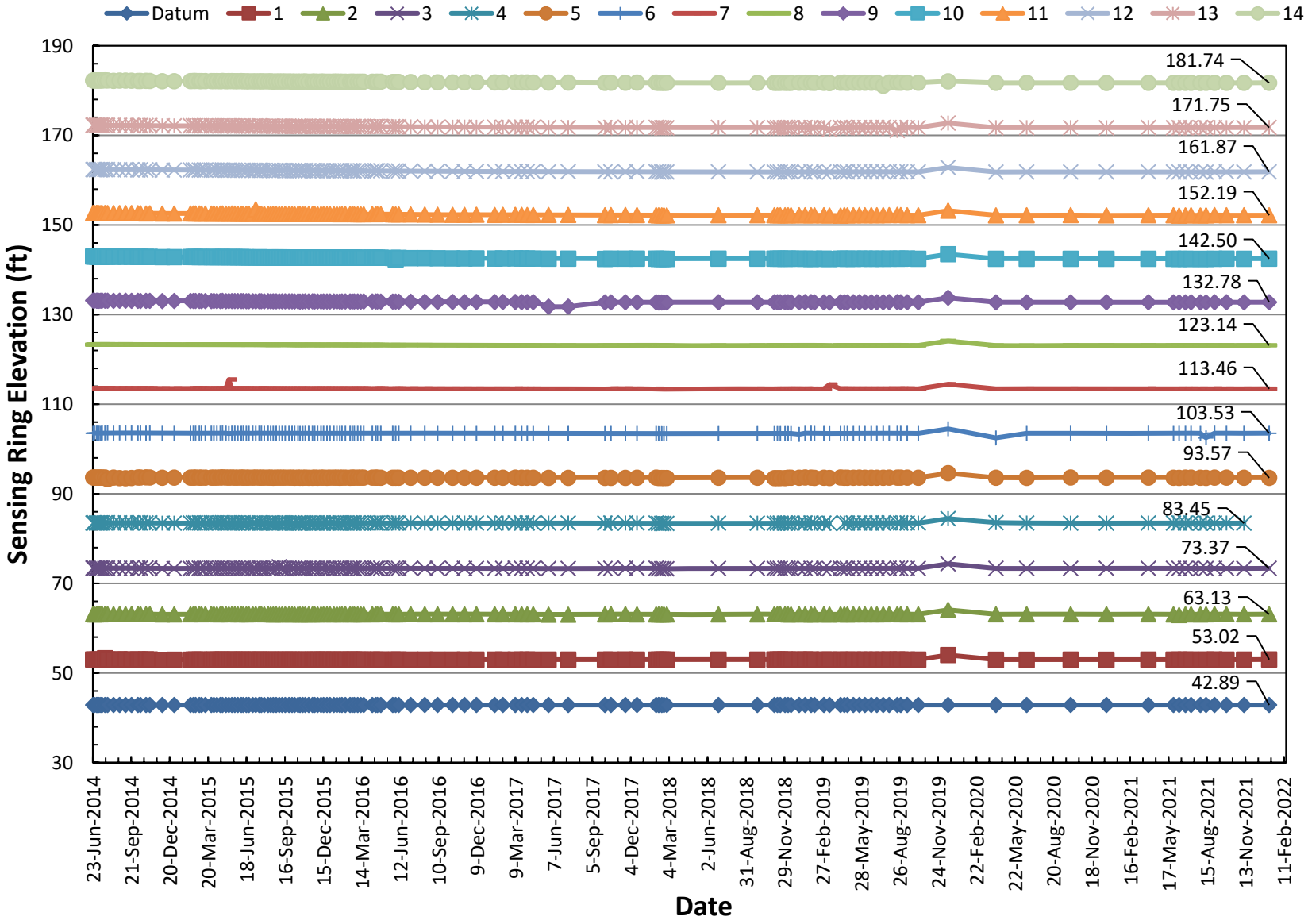
Note:

1. Selected elevations of tilt change represent locations at which maximum tilt change was measured since installation of the inclinometer.

RIVERBEND LANDFILL

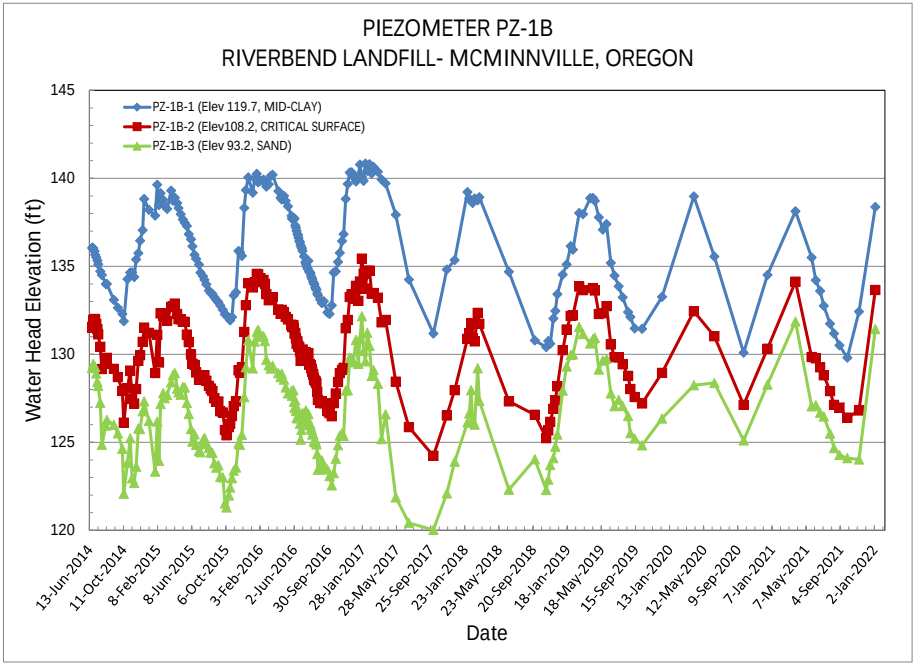
EXTENSOMETER EX-1B

Riverbend Landfill
EX-1B Extensometer Measurements



RIVERBEND LANDFILL

PIEZOMETER PZ-1B

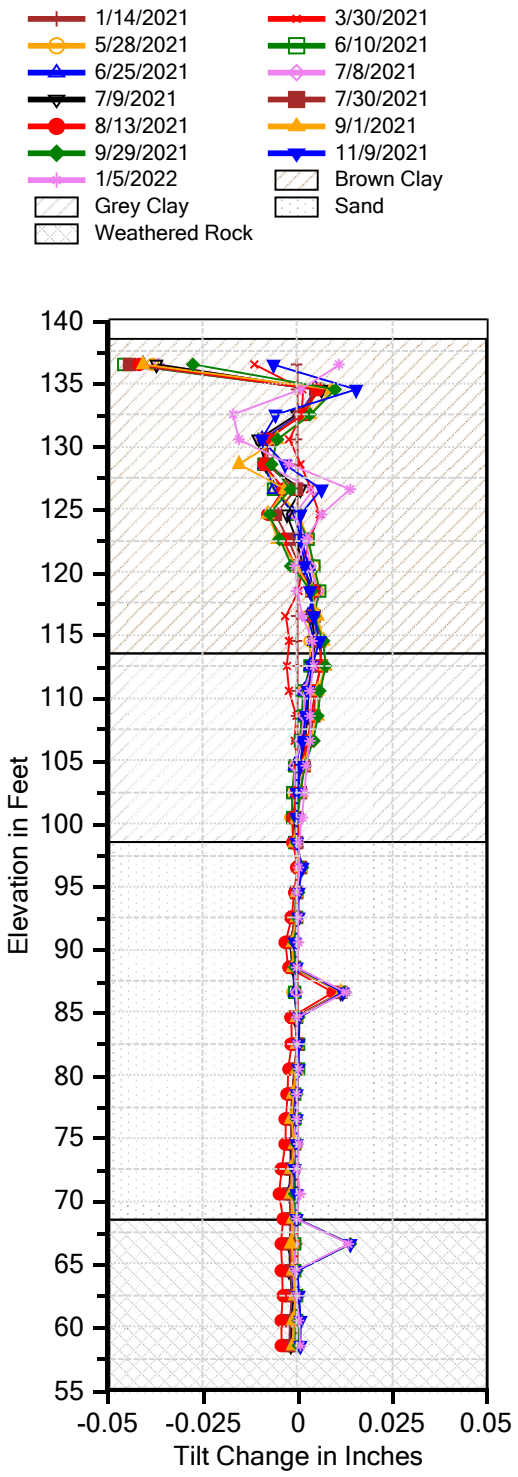

PIEZOMETER PZ-1B
RIVERBEND LANDFILL- MCMINNVILLE, OREGON
PZ-1B-1 (Elev 119.7, MID-CLAY)
PZ-1B-2 (Elev108.2, CRITICAL SURFACE)
PZ-1B-3 (Elev 93.2, SAND)
Water Head Elevation (ft)
145
140
135
130
125
120
13-Jun-2014
11-Oct-2014
8-Feb-2015
8-Jun-2015
6-Oct-2015
3-Feb-2016
2-Jun-2016
30-Sep-2016
28-Jan-2017
28-May-2017
25-Sep-2017
23-Jan-2018
23-May-2018
20-Sep-2018
18-Jan-2019
18-May-2019
15-Sep-2019
13-Jan-2020
12-May-2020
9-Sep-2020
7-Jan-2021
7-May-2021
4-Sep-2021
2-Jan-2022
Date

RIVERBEND LANDFILL

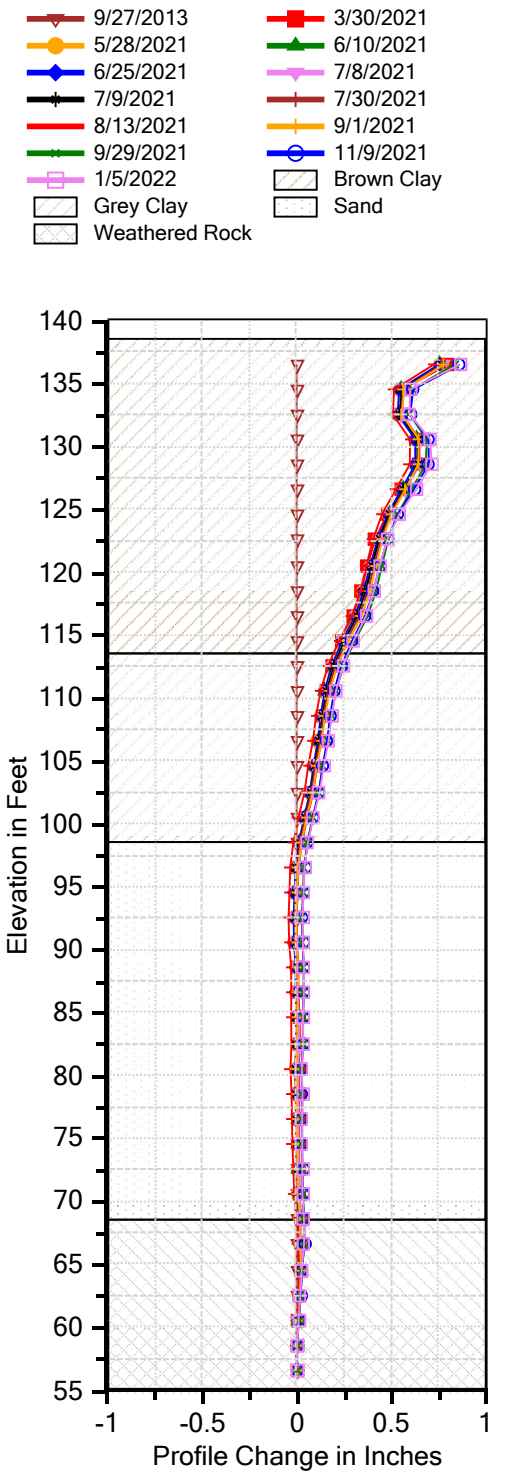
INCLINOMETER SI-2A

Riverbend Landfill
Inclinometer Measurements

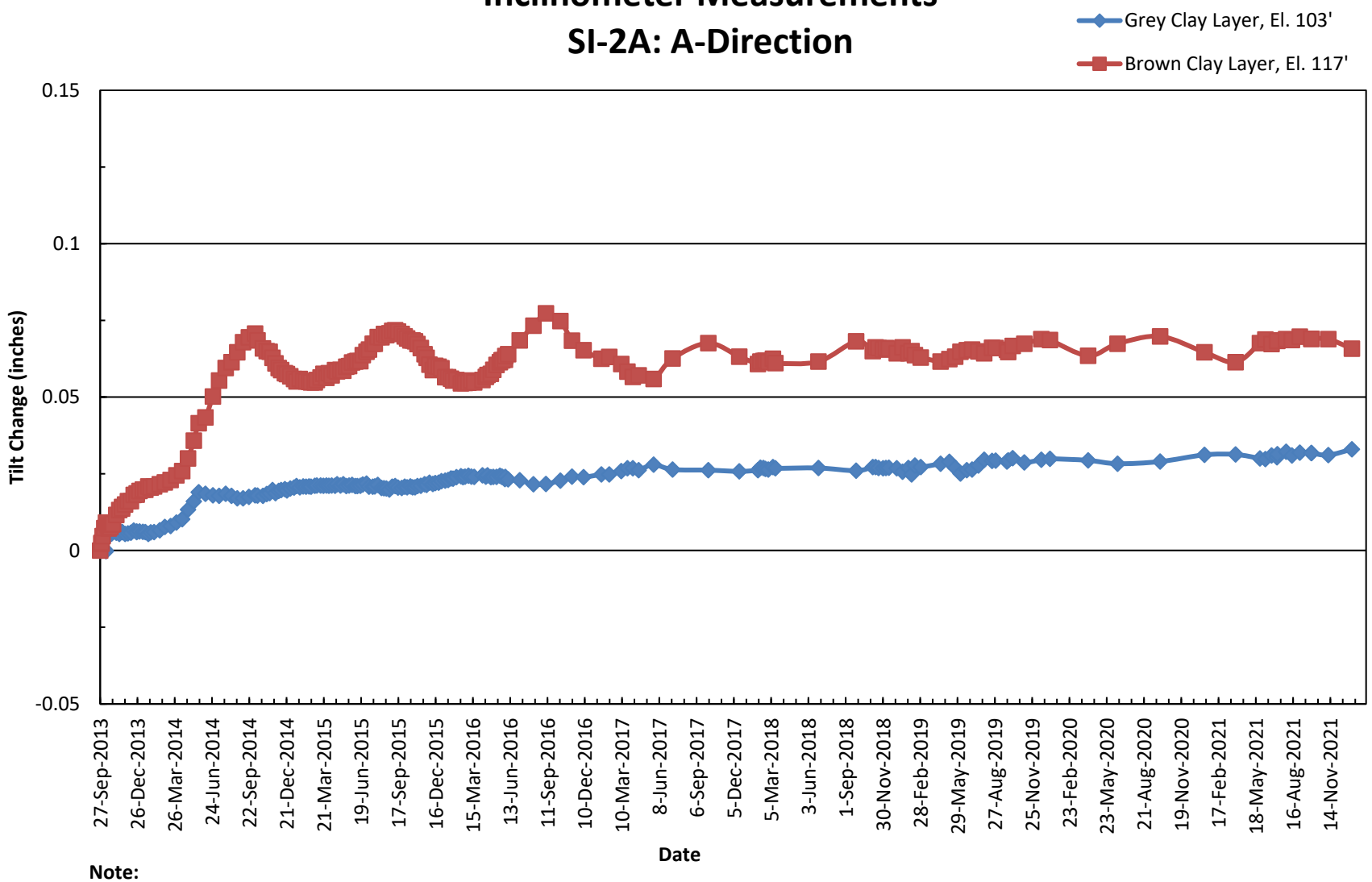
I-2A:A-Direction Incremental Tilt



I-2A:A-Direction Cumulative Profile



Riverbend Landfill
Inclinometer Measurements
SI-2A: A-Direction

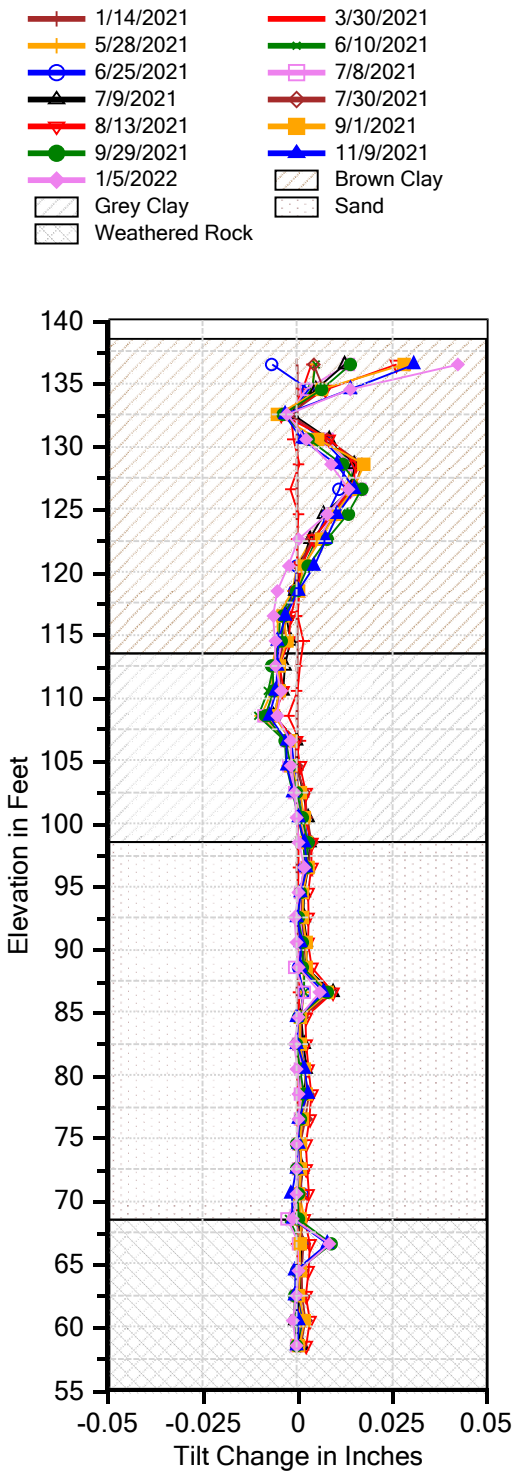


Note:

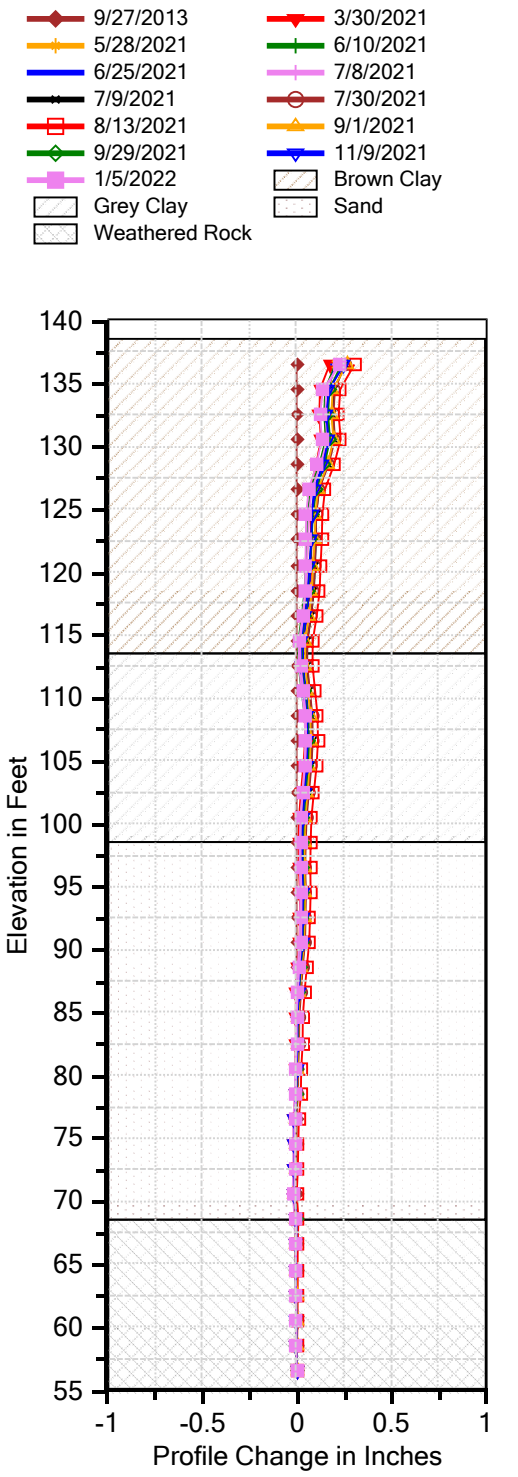
1. Selected elevations of tilt change represent locations at which maximum tilt change was measured since installation of the inclinometer.

Riverbend Landfill
Inclinometer Measurements

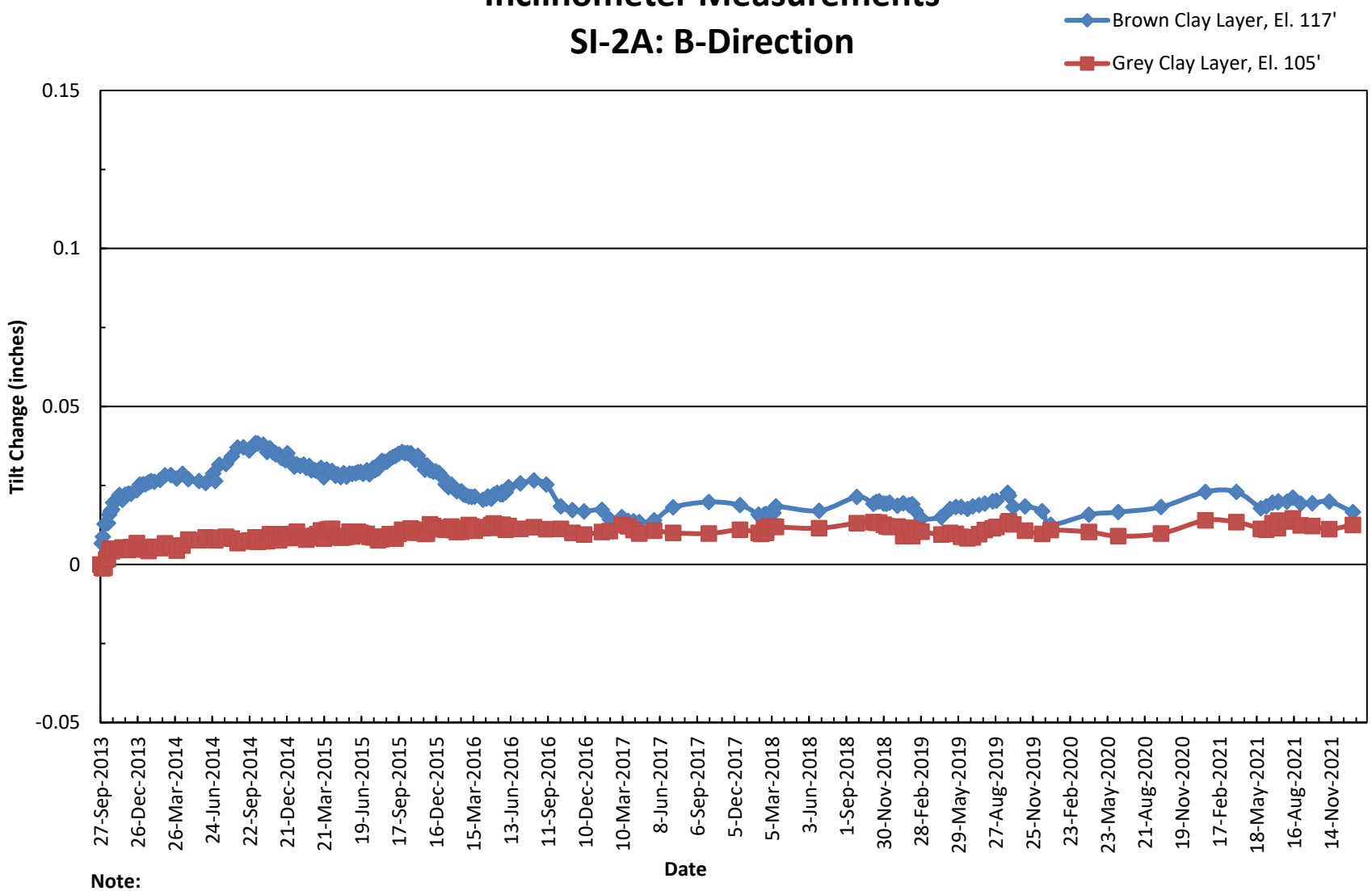
I-2A:B-Direction Incremental Tilt



I-2A:B-Direction Cumulative Profile



Riverbend Landfill
Inclinometer Measurements
SI-2A: B-Direction

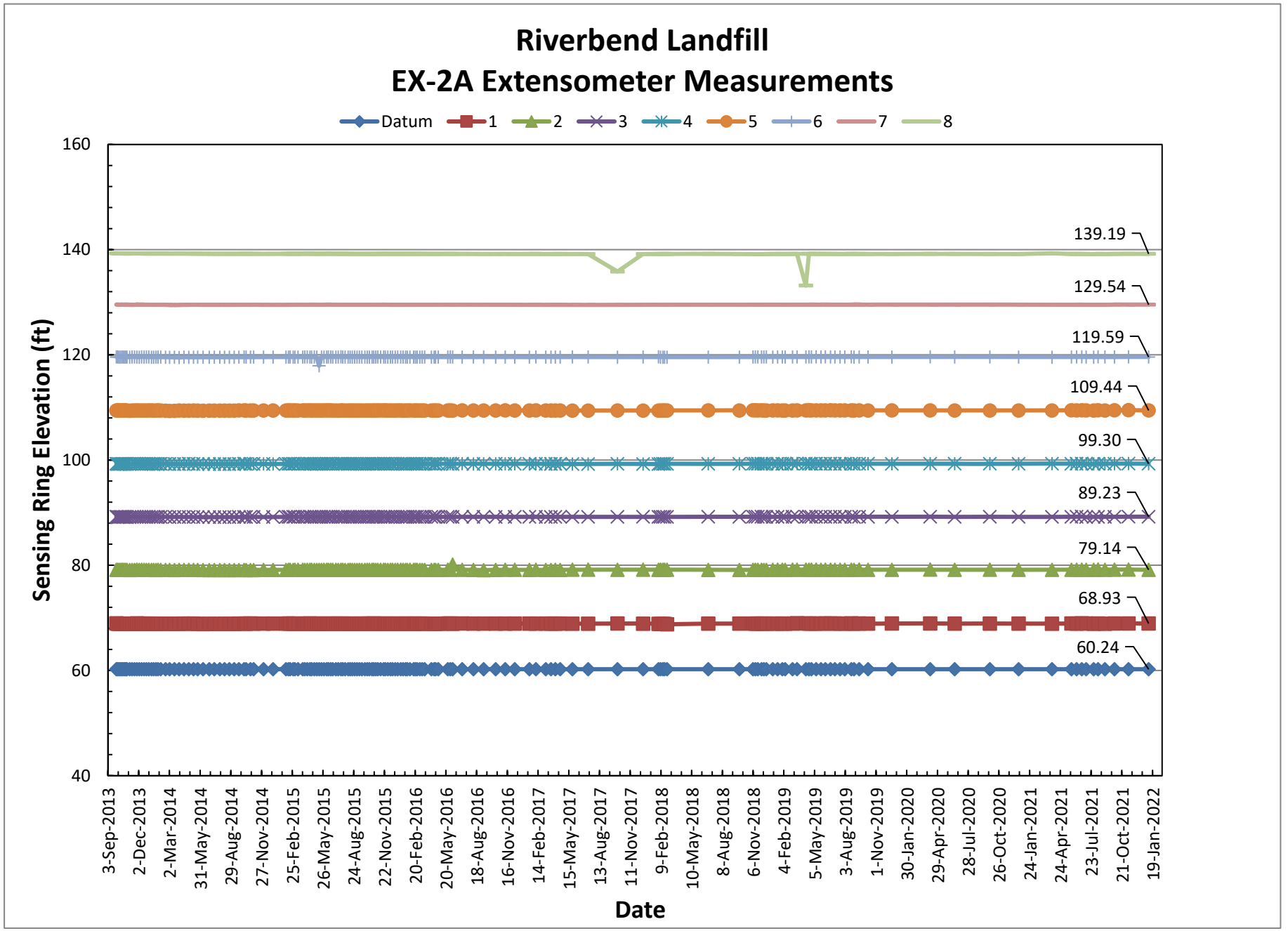


Note:

1. Selected elevations of tilt change represent locations at which maximum tilt change was measured since installation of the inclinometer.

RIVERBEND LANDFILL

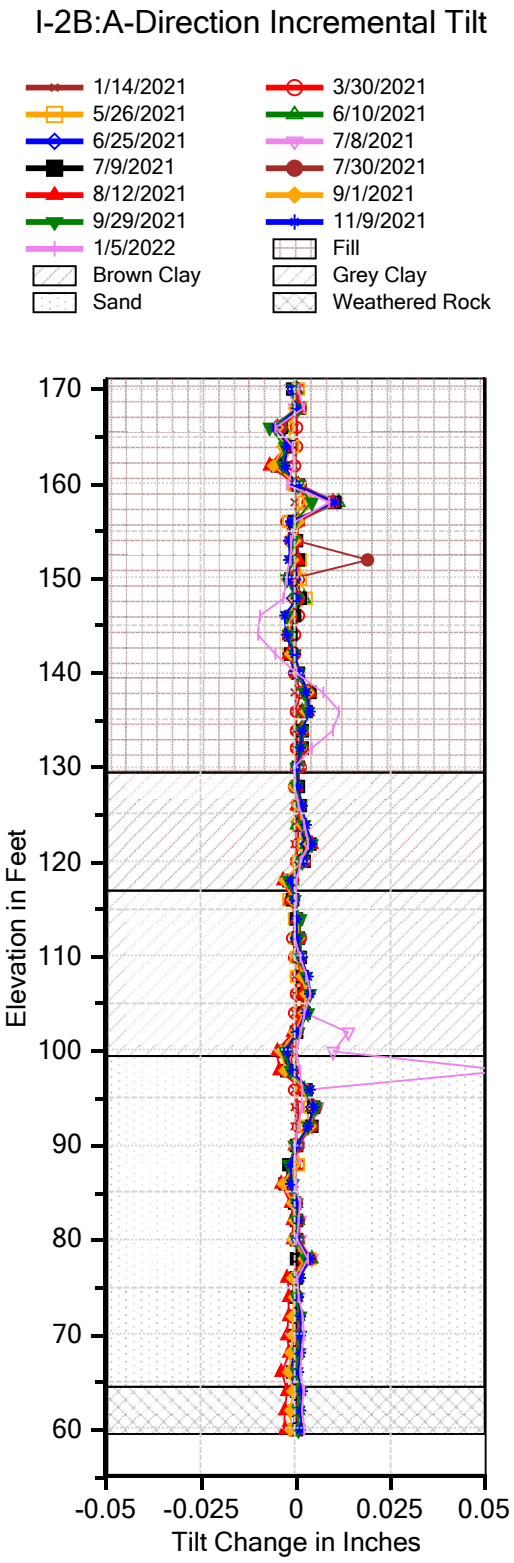
EXTENSOMETER EX-2A

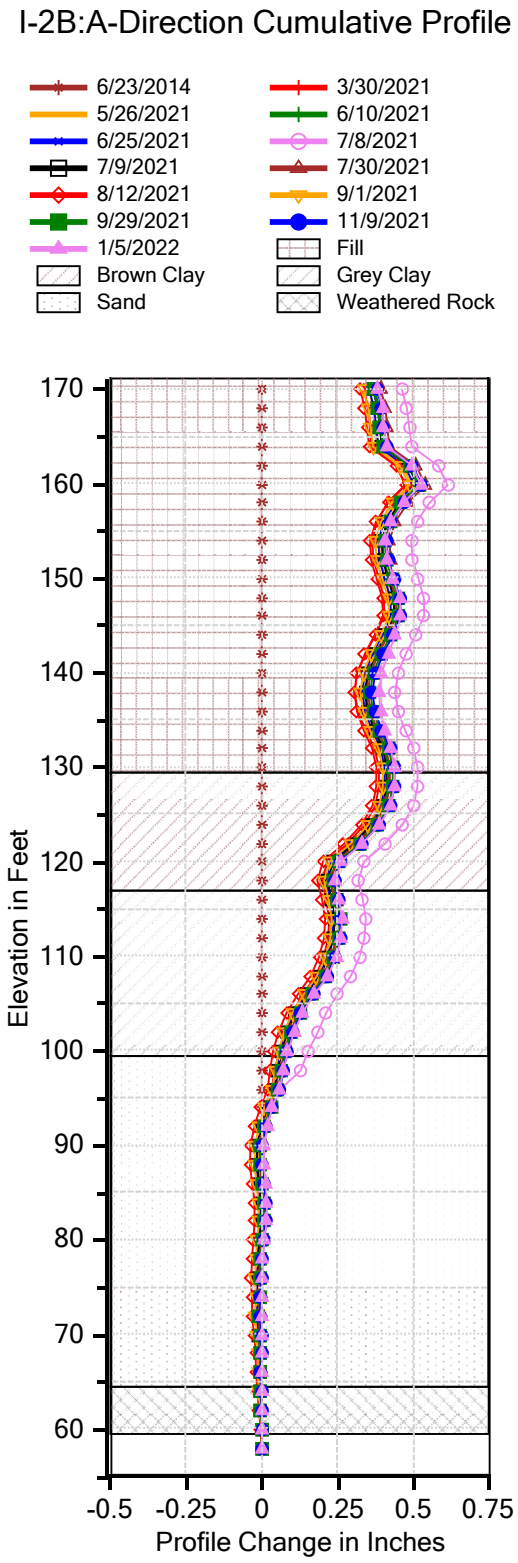

Riverbend Landfill
EX-2A Extensometer Measurements
Datum
1
2
3
4
5
6
7
8
Sensing Ring Elevation (ft)
160
140
120
100
80
60
40
139.19
129.54
119.59
109.44
99.30
89.23
79.14
68.93
60.24
3-Sep-2013
2-Dec-2013
2-Mar-2014
31-May-2014
29-Aug-2014
27-Nov-2014
25-Feb-2015
26-May-2015
24-Aug-2015
22-Nov-2015
20-Feb-2016
20-May-2016
18-Aug-2016
16-Nov-2016
14-Feb-2017
15-May-2017
13-Aug-2017
11-Nov-2017
9-Feb-2018
10-May-2018
8-Aug-2018
6-Nov-2018
4-Feb-2019
5-May-2019
3-Aug-2019
1-Nov-2019
30-Jan-2020
29-Apr-2020
28-Jul-2020
26-Oct-2020
24-Jan-2021
24-Apr-2021
23-Jul-2021
21-Oct-2021
19-Jan-2022
Date

RIVERBEND LANDFILL

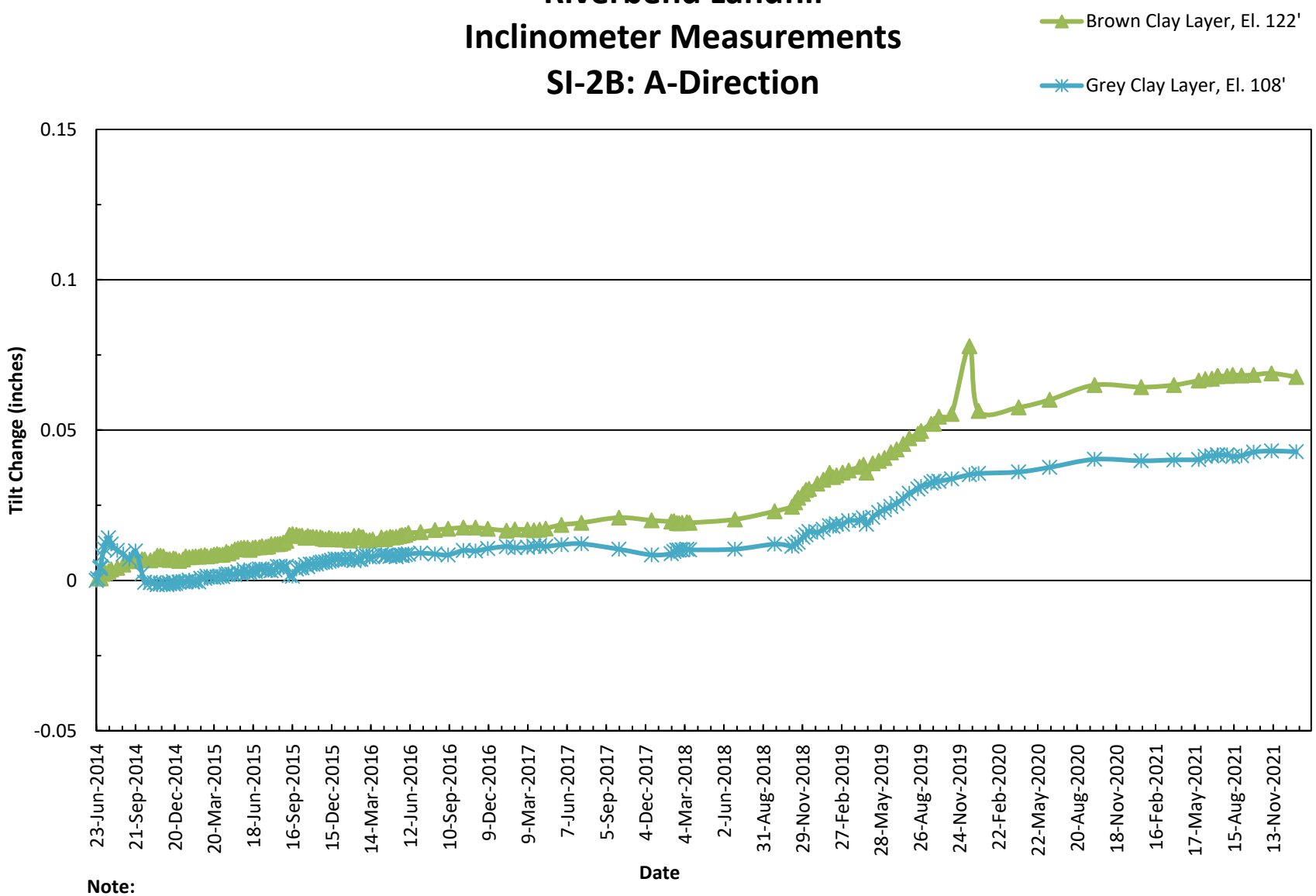
INCLINOMETER SI-2B

Riverbend Landfill
Inclinometer Measurements





Riverbend Landfill
Inclinometer Measurements
SI-2B: A-Direction

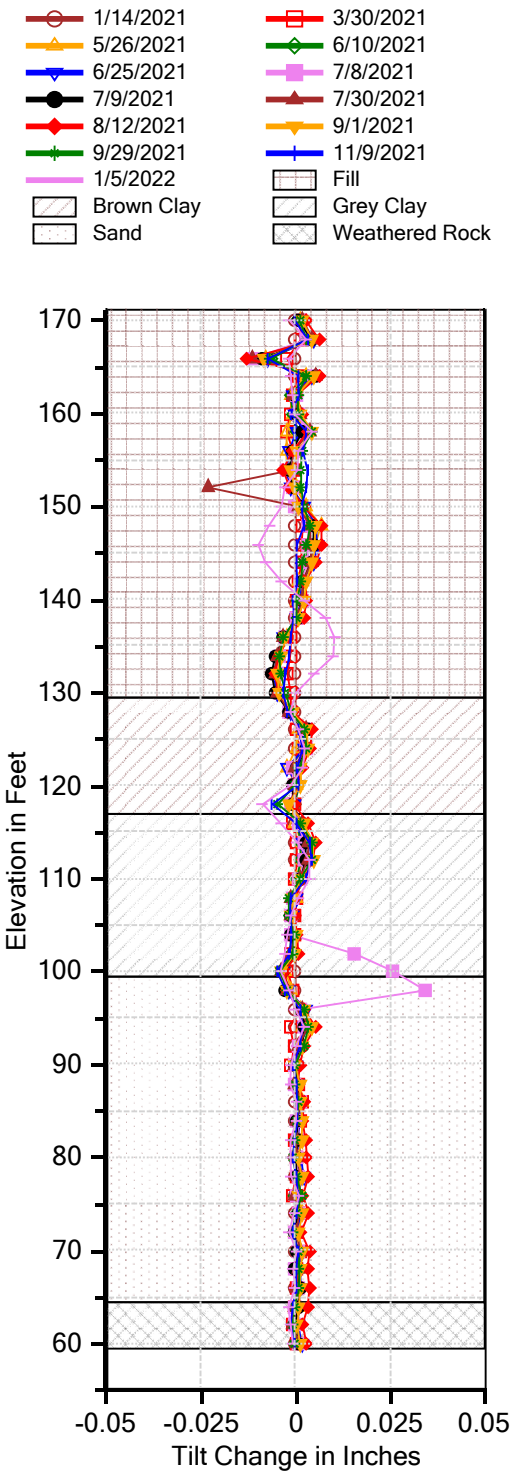


Note:

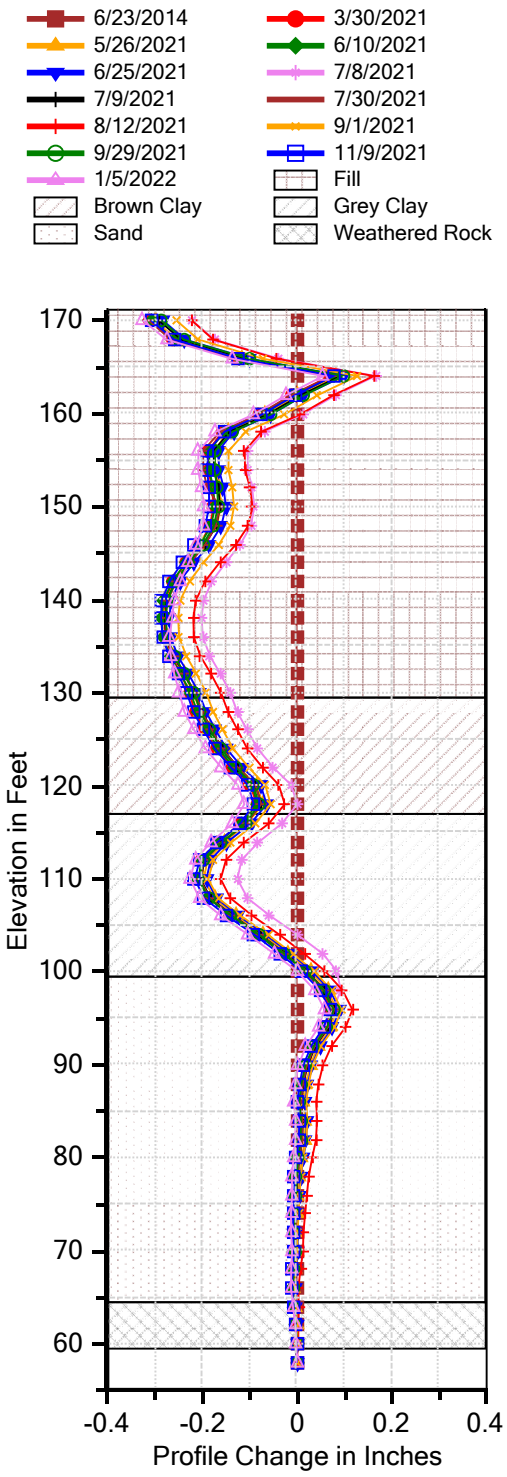
1. Selected elevations of tilt change represent locations at which maximum tilt change was measured since installation of the inclinometer.

Riverbend Landfill
Inclinometer Measurements

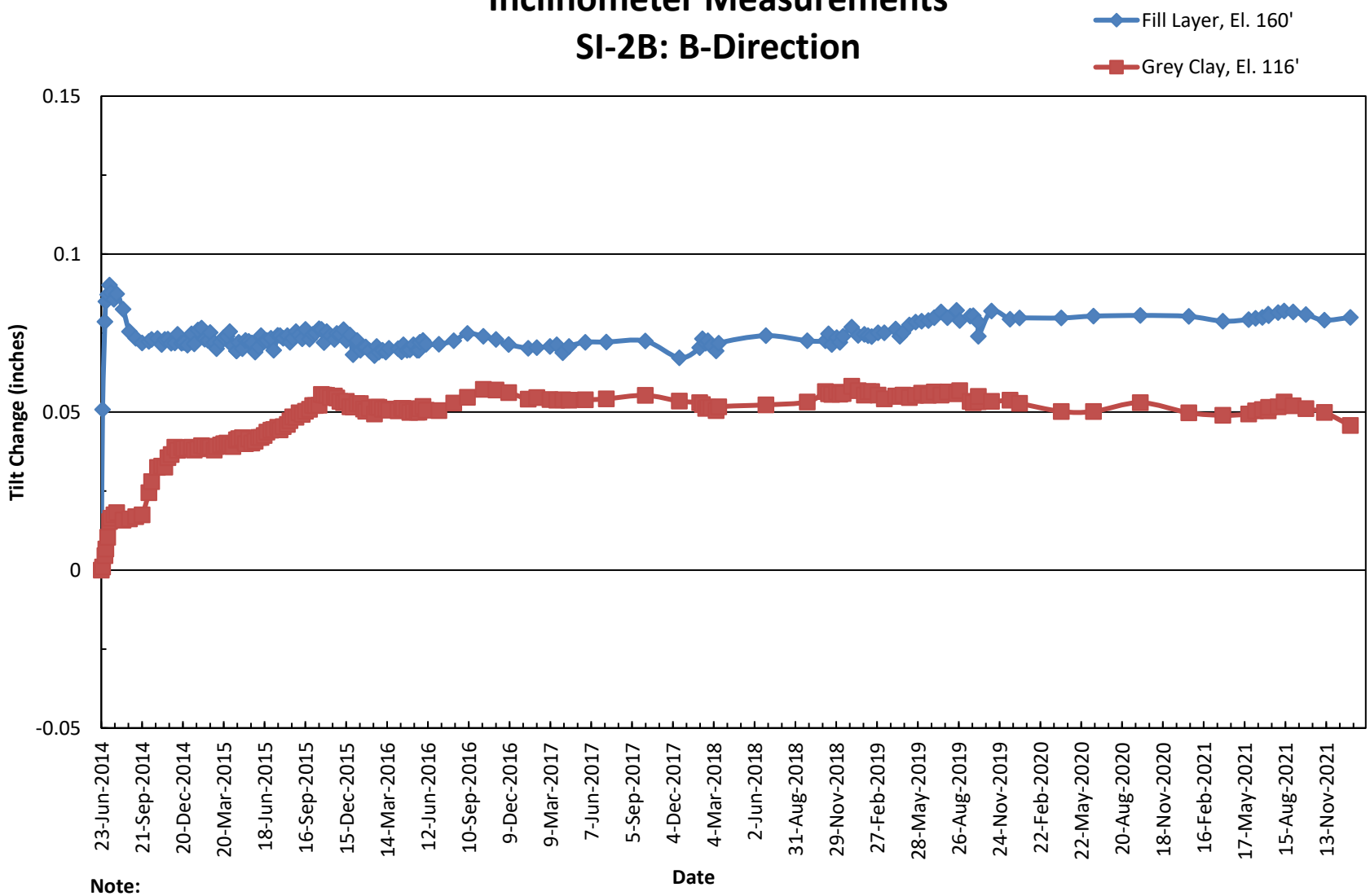
I-2B:B-Direction Incremental Tilt



I-2B:B-Direction Cumulative Profile



Riverbend Landfill
Inclinometer Measurements
SI-2B: B-Direction

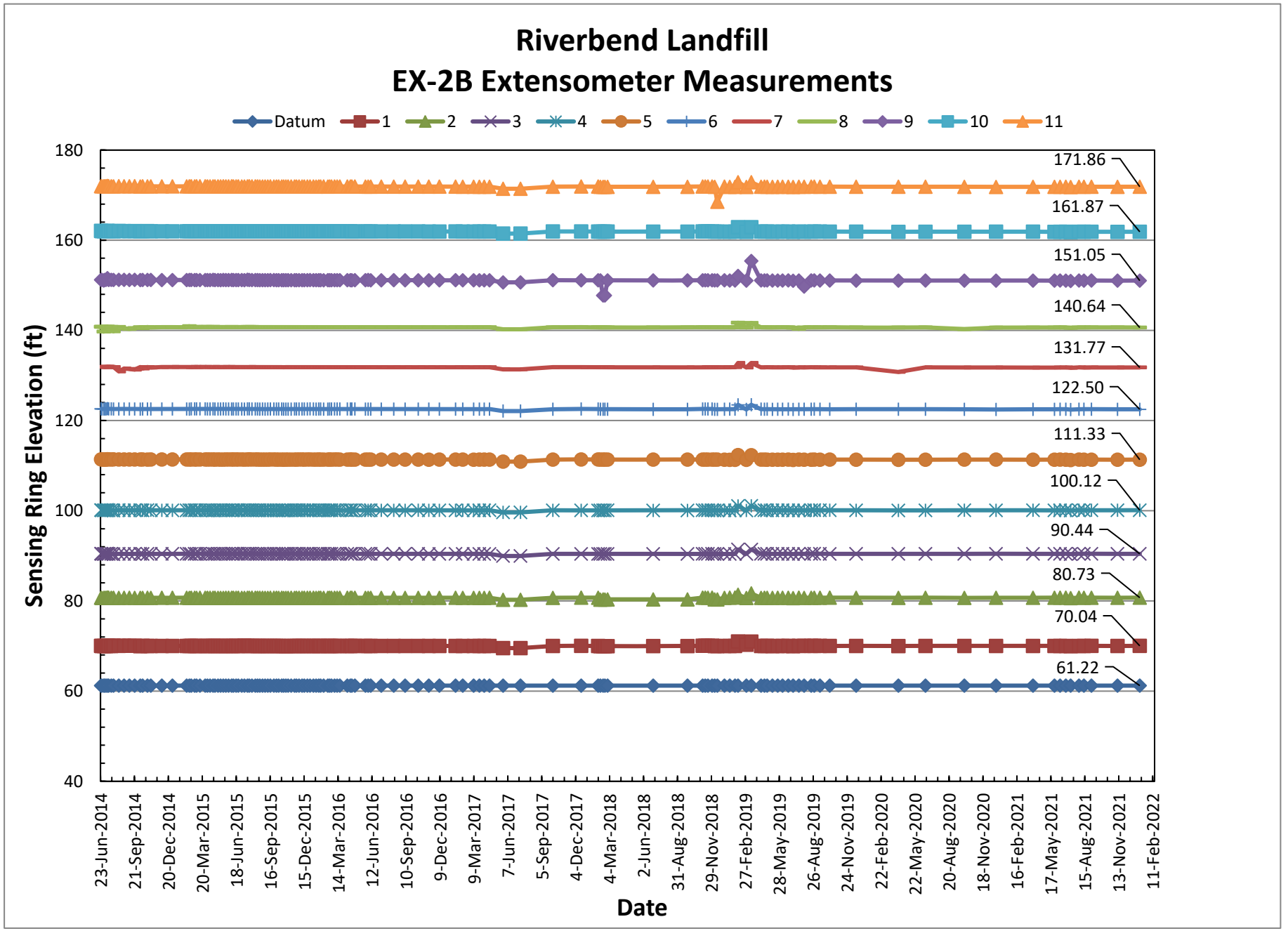


Note:

1. Selected elevations of tilt change represent locations at which maximum tilt change was measured since installation of the inclinometer.

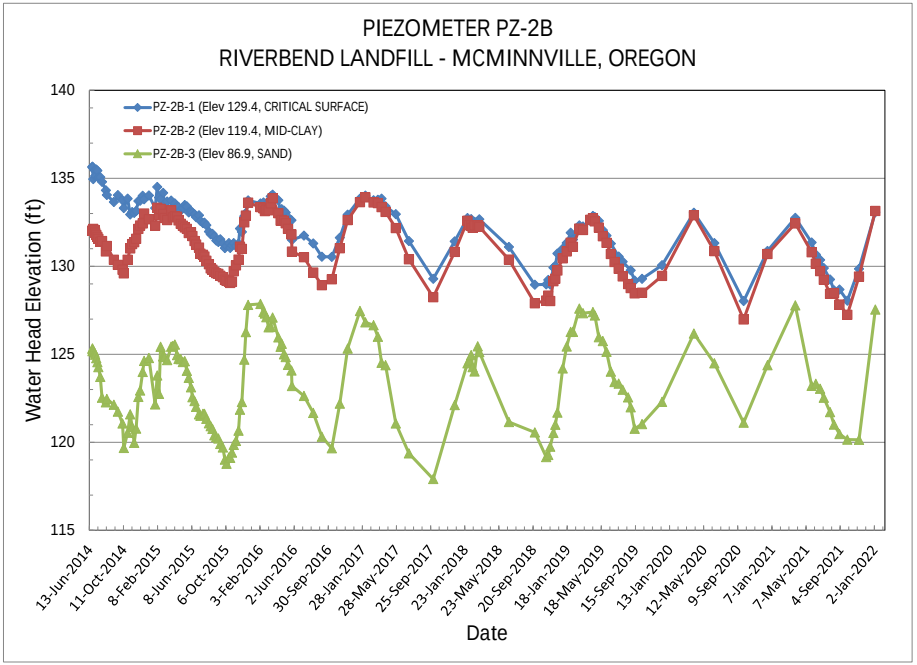
RIVERBEND LANDFILL

EXTENSOMETER EX-2B


Riverbend Landfill
EX-2B Extensometer Measurements
Datum
1
2
3
4
5
6
7
8
9
10
11
Sensing Ring Elevation (ft)
180
160
140
120
100
80
60
40
171.86
161.87
151.05
140.64
131.77
122.50
111.33
100.12
90.44
80.73
70.04
61.22
23-Jun-2014
21-Sep-2014
20-Dec-2014
20-Mar-2015
18-Jun-2015
16-Sep-2015
15-Dec-2015
14-Mar-2016
12-Jun-2016
10-Sep-2016
9-Dec-2016
9-Mar-2017
7-Jun-2017
5-Sep-2017
4-Dec-2017
4-Mar-2018
2-Jun-2018
31-Aug-2018
29-Nov-2018
27-Feb-2019
28-May-2019
26-Aug-2019
24-Nov-2019
22-Feb-2020
22-May-2020
20-Aug-2020
18-Nov-2020
16-Feb-2021
17-May-2021
15-Aug-2021
13-Nov-2021
11-Feb-2022
Date

RIVERBEND LANDFILL

PIEZOMETER PZ-2B


PIEZOMETER PZ-2B
RIVERBEND LANDFILL - MCMINNVILLE, OREGON
PZ-2B-1 (Elev 129.4, CRITICAL SURFACE)
PZ-2B-2 (Elev 119.4, MID-CLAY)
PZ-2B-3 (Elev 86.9, SAND)
Water Head Elevation (ft)
140
135
130
125
120
115
13-Jun-2014
11-Oct-2014
8-Feb-2015
8-Jun-2015
6-Oct-2015
3-Feb-2016
2-Jun-2016
30-Sep-2016
28-Jan-2017
28-May-2017
25-Sep-2017
23-Jan-2018
23-May-2018
20-Sep-2018
18-Jan-2019
18-May-2019
15-Sep-2019
13-Jan-2020
12-May-2020
9-Sep-2020
7-Jan-2021
7-May-2021
4-Sep-2021
2-Jan-2022
Date